Exploring Mental Health Patterns: A Survey Study on Stress, Anxiety, and Access to Resources

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***Abstract*—Mental health issues, including depression, anxiety, low self-esteem, and stress, are common across [10] different age groups and genders. Nonetheless, it is essential to be aware of mental health resources and to be to seeking assistance in order to tackle these problems effectively.This paper presents the results of a survey analysing mental health conditions and barriers in accessing mental health support. We utilized Power BI's DAX formulas to highlight important indicators such as persistent stress, thoughts of self-harm, difficulties in decision-making, and inadequate access to mental health resources. The results indicate that, although many people are open to seeking help, there is a notable lack of awareness and access to the necessary mental health resources. This research emphasizes the necessity for enhanced education on mental health and improved availability of resources to bridge this gap and provide timely assistance to those in need.**

***Index Terms*—Mental Health, Willingness to Seek Help, Depression, Self-Harm, Anxiety, Decision-Making, Stress, Judgment Fear, Mental Health Resources, Survey, DAX**

I. Introduction

Mental health plays a crucial role in overall wellness, affecting emotional, psychological, and social dimensions of life. Across the world, disorders like, anxiety, and suicidal thoughts are becoming prevalent [11] . In light of this, there is a growing focus on recognizing the obstacles that hinder people from obtaining the help they require. Even with mental health services available, many do not pursue assistance, often because they lack awareness, fear being judged, or are burdened by the stigma surrounding mental illness.

This paper to explore how willing individuals are to seek mental health assistance and to identify the barriers in their way, such as limited access to mental health resources. By analyzing survey data from various age groups, the study highlights essential mental health issues, including stress, difficulties in decision-making, and concerns about judgment. Employing DAX-based analyses of the survey results, we examine trends across different genders and age groups and offer practical recommendations to enhance mental health support.

This is in contrast with taking a behavioral approached aimed at achieving set goals and objectives, like my survey, which seeks to identify the user needs so that the requirements of a mental health companion robot can be well understood[4]. This work is therefore central to develop the right robot that meets the needs of each age brackets as they have different psychological problems that they bear.

Subsequent study is required to examine the effects of humanoid robots on the quality of life of the specific age group of citizens. More similar studies should be carried out to enhance the efficiency of these robots so that they are socially intelligent and indeed helpful to their end-users. This continuous study shall therefore smoothly push towards improving the quality of life of people by owning them comfortable robotic companionship.

II. Literature Survey

In recent years, the field of human–robot companionship (HRC) has gained significant attention, particularly in mental health applications. Research has shown that humans tend to form strong emotional bonds with zoomorphic or Anthropomorphic robots due to their animal-like, Human - like appearance and behavior, which mirrors the natural attachment people have with pets [1]. This attachment is particularly effective in providing emotional support and alleviating feelings of loneliness, especially in vulnerable populations such as the elderly or individuals with mental health challenges. Building on these findings, we propose "Robopet," a zoomorphic or Anthropomorphic robotic companion designed to simulate the benefits of human-animal interaction. Robopet will act as a supportive companion by offering emotional engagement and monitoring users' mental health indicators, making it a promising solution for improving emotional well-being through technology. This approach is informed by the growing body of literature that emphasizes the effectiveness of animal-like or human -like robots in fostering emotional connections and promoting mental health [1].

A large scale quantitative study was performed to examine the impact of a humanoid robot on affect and interpersonal relationships of elders. The authors have used a survey question to evaluate how the Nao robot[3] could stimulate seniors' social communication and prevent loneliness. With regard to the study, it was agreed that the response from the robot not only was an effective social and emotional support platform but also promoted actual communication, and accordingly, it appeared that the robot could be used for improving social inclusion and preventing social isolation among the elderly users.In

another quantitative investigation, the researchers analysed the effects of the CuDDler, an animal-liked robot, on the mood-stimulating and stimulating activity of the elderly[4]. While some participants showed positive attitude toward the robot, some were negative probably because the robot was large and looked toy like than their expectation of their age group. In this study emphasis was made on how social aspects such as perceived emotional and cultural response of the target end-users can influence their acceptance of assistive robots, consequently this means that the design characteristics of such robots must be given serious considerations.Another coherent study ascertained the impact of a companionship robot on the students' well-being, mood, and desire for behavioral variability for better well-being of MIT students[5]. Thus, 62.86% of them indicated that a robot offered them companionship and they would like to talk with the robot[6]. Still, 32.29% of the participants expressed uncomfortable with proactive characteristics of the robot; they are worried about privacy since the robot is equipped with a camera and microphones. This brings out the aspect of integration of functional, practical and sometimes privacy aspects when developing and constructing social robots.

A subsequent was carried out to explore the view of the socially assistive robot "Stevie" from the residents and the staff of a LTC. Early responses came in response to how users first come into contact with the robot, specifically when a visitor would say that it was 'cute,'[7] leading to increased curiosity and consequent engagement among the users. Yet participants also offered more than twenty use cases of possible enhancements listing specific ways the system may serve the needs of users improved. This speaks to the importance of Iterative design and feedback in developing improvements to assistive technologies.

One experiment, based in Germany, found how leaving a 'robot companion' with senior citizens[8], without the presence of a human carer, for a week. In the first phase, 60% of the respondents gave positive comments about the design quality; however, they identified such drawbacks as problems with orientation in a specific area. After responding to these concerns, the second phase of a survey had a higher approval rating of 90 per cent among the participants. Consequently, this study emphasizes that more acceptance of robotic technologies has to begin with constant improvements and sleakness to the needs of its users. Likewise, the evaluation done on the GoldenPup, an animal like robot, showed that it helped to establish a close relationship with elderly users[9]. Some of the participants claimed they felt emotionally bonded to the robot and found familiar warm robotic appearance easy to accept and interact with and that signified that pet-like appearance inspires a sense of comfort and easy acceptance among older adults.

Based on these studies my research paper[2] has formed a novel strategy by carrying a survey prior to the creation and development of a humanoid robot for psychiatric counseling. Unlike forming a robot first and looking for an target audience, in this work, the goal is to get as much information on which characteristics and features of such a robot are desired by the pre-selected age groups. As a result of the need to ascertain prior to development what specific needs and expectations consumers may have of the final product, this research aims at guaranteeing that the developed robot will both meet an intended function and be well received by its probable user base. This will result in the creation of a robot that is practical and assist objective regarding issues of mental health counselling but will also lean towards the cultural and emotional standards of the users making it more fit for real world integration.

III. Motivation

The motivation behind this study stems from the urgent need to address the disconnect between mental health problems and the resources available to those in need. While technological advances and healthcare systems have made mental health services more accessible, many individuals still lack the awareness or confidence to seek help. By identifying the primary challenges through survey analysis, this paper aims to support policymakers and healthcare providers in bridging the gap between mental health issues and service utilization.

IV. Methods

A. Data Collection

The survey gathered responses from 255 participants, including students, employed individuals, and others. Closed-ended questions were used to assess the state of mental health and the availability of support.

- Gender, Age, Occupation
- Frequency of stress or anxiety in the past month
- Impact of low confidence on daily life
- Persistent feelings of sadness, hopelessness, or depression
- Thoughts of self-harm or suicide
- Difficulty making decisions due to self-doubt or fear of judgment
- Coping mechanisms for stress or emotional pain
- Access to mental health resources (e.g., counseling, support groups)

B. Survey Design and Distribution

The survey comprises 15 questions aimed at identifying respondent's mental health condition, his or her access to resources for mental health, and readiness to receive help. The investigated frequency factors are stress often, low self-confidence, chronic depression, decision-making complexities and judgement phobia. The survey was conducted with equal portion questions related to age, gender and age wise splitting of responses was also done.

Power BI and DAX expressions were used for analyzing the data. Every mental health factor was derived by applying query on its DAX as presented in the DAX calculation to identify the number of affected individuals, with specific mental health issues. Demographic characteristics, resource accessibility, and willingness to seek help and the absence of the required resources were on the foreground of the analysis.

Key calculations:

- Frequent Stress: Number of respondents who said they experienced stress "Often" or "Always."
- Low Confidence Impacting Life: Number of people who gave a "Yes" or "Sometimes" response to questions related to confidence.
- Depression: Number of cases of people having episodes of sadness, hopelessness or depression.
- Self-Harm Thoughts: Number of people who had ideas of self- harm or harming themselves.
- Decision-Making Issues: Number of people experiencing decisional conflicts attributable to uncertainty or avoidance of erroneous decisions.
- Lack of Access to Mental Health Resources: Number of people with no externally provided mental health resource.

V. Results

The data collected from the survey is summarized in Table I. The table highlights various mental health Fig. 1 indicators such as Decision Doubt, Depression, Stress, Internal Pain, Fear of Judgment, Low Confidence, Self-Harm, and the tendency to Seek Help across different age groups and genders.

A. Age and Gender Distribution

The survey data was collected from six different age groups: Under 18, 18-24, 25-34, 35-44, 45-54, and 55+. Each of these age groups is further categorized by gender, with responses from Males, Females, and a respondent identifying as 3rd Gender in the 55+ group.

B. Mental Health Indicators

The following mental health indicators were assessed in the survey:

- **Decision Doubt**: Difficulty in making decisions.
- **Depression**: The presence of depressive symptoms.
- **Stress**: Reported levels of stress.
- **Internal Pain**: Psychological or emotional pain experienced.
- **Fear of Judgment**: Fear of how others perceive them.
- **Low Confidence**: Lack of self-confidence.
- **Self-Harm**: Tendencies toward self-harming behaviors.
- **Seek Help**: The act of seeking professional help or support.

C. Tool to analysis the data

Power BI was selected over Excel for creating graph as its ability to handle large and complex datasets, advanced visualization features, powerful and easy DAX calculations, ease of data refresh and integration, enhanced collaboration, and interactive filtering capabilities. These features made Power BI the superior choice for analyzing mental health survey data and extracting meaningful insights, allowing for a more sophisticated and scalable analysis compared to Excel.

D. Analysis of Age Distribution and Mental Health Indicators

The visual representation of age distribution and mental health indicators is shown in Fig. 1. This makes it easy to represent trends with other age groups and makes it easier to show how some conditions like, anxiety or depression take different forms in different age categories. By plotting age against mental health outcomes the figure provides information about which population is more vulnerable to experience ill mental health, and therefore can indicate target population for health promotion and prevention programs. Due to the method used in this structure, it is possible to recognize clearer tendencies and differences in mental health according to age.

E. Observations by Age Group

Under 18 (4 respondents):

- Out of 4 the respondents, 75% expressed decision-related type of doubts; 100% said they had low confidence, judgmental fear, and depression; 50% have stress; and 75% had internal pain. Also, 25% of the participants said that they self-harm while 50% were current utilizers of help. Nevertheless, only 30% of people were aware of existing mental health services.
- It is, however, useful to make three observations about the focus group: first, respondents under the age of 18 reported suffering primarily from mental health problems that made them feel insecure, anxious, and fearful of stigma, even violence and self-harm.

18-24 (116 respondents):

- Mental Health Challenges (Age 18-24): Among this age group, 62.07% experience decision-related doubts, 78.45% suffer from depression, 34.48% report stress, 72.43% endure internal pain, 69.83% face judgmental fear, and 81.03% struggle with low confidence. Additionally, 22.41% engage in self-harm.
- Help-Seeking and Awareness: While 73.27% are actively seeking help, 71.33% remain unaware of available mental health resources.

25-34 (81 respondents):

- Mental Health Challenges (Age 25-34): Among this age group, 60.49% experience decision-related doubts, 75.31% suffer from depression, 29.75% report stress, 66.67% endure internal pain, 74.07% face judgmental fear, and 80.25% struggle with low confidence. Additionally, 20.99% engage in self-harm.
- Help-Seeking and Awareness While 74.07% are actively seeking help, 67.65% remain unaware of available mental health resources.

35-44 (27 respondents):

- Mental Health Challenges (Age 35-44): Among this age group, 33.33% experience decision-related doubts, 55.56% suffer from depression, 33.43% report stress, 62.96% endure internal pain, 62.96% face judgmental fear, and 66.67% struggle with low confidence. Additionally, 14.81% engage in self-harm.

TABLE I
MENTAL HEALTH DATA ACROSS AGE AND GENDER

Age	Gender	Decision Doubt	Depression	Stress	Internal Pain	Fear of Judgment	Low Confidence	Self Harm	seek help
Under 18 (4)	Male (3)	2	3	1	2	3	3	0	1
	Female (1)	1	1	1	1	1	1	1	0
18-24 (116)	Male (48)	29	31	15	28	27	37	8	21
	Female (68)	43	60	25	56	54	57	18	20
25-34 (81)	Male (51)	29	38	14	37	37	40	12	22
	Female (30)	20	23	12	17	23	25	5	11
35-44 (27)	Male (14)	6	8	3	9	9	8	3	7
	Female (13)	3	7	6	8	8	10	1	4
45-54 (20)	Male (9)	5	4	3	3	7	6	0	4
	Female (11)	3	10	4	8	8	7	3	2
55+ (7)	Male (3)	0	1	0	1	3	1	0	1
	Female (3)	0	1	0	3	3	0	0	2
	3rd Gender (1)	1	1	1	1	1	1	1	0

- Help-Seeking and Awareness: While 70.37% are actively seeking help, 68.57% remain unaware of available mental health resources.

45-54 (20 respondents):

- Mental Health Challenges (Age 45-54): Among this age group, 40% experience decision-related doubts, 70% suffer from depression, 35% report stress, 55% endure internal pain, 75% face judgmental fear, and 65% struggle with low confidence. Additionally, 15% engage in self-harm.
- Help-Seeking and Awareness: While 60% are actively seeking help, 71.43% remain unaware of available mental health resources.

55+ (7 respondents):

- Mental Health Challenges (Age 55+): Among this age group, 14.29% experience decision-related doubts, 42.86% suffer from depression, 14.29% report stress, 71.43% endure internal pain, 100% face judgmental fear, and 28.58% struggle with low confidence. Additionally, 14.29% engage in self-harm.
- Help-Seeking and Awareness: While 57.15% are actively seeking help, 70% remain unaware of available mental health resources.

FUTURE TREND

F. RoboPet Companion

RoboPet Companion is an innovative response to this mental health crisis. Unlike traditional approaches, which are often limited by availability and accessibility, RoboPet provides constant, non-stigmatizing, and user-tailored support. This paper discusses the need for such a solution based on survey outcomes and outlines the technological structure of RoboPet.

G. Mechanical Characteristics of RoboPet

RoboPet is designed with several key features to address the mental health challenges identified in the survey: - Emotion Detection: How it works RoboPet utilizes artificial intelligence algorithms incorporated in a conveniently designed device which listens and observes user's verbal expressions, mannerisms, and physical gestures to identify the presence of emotions distress. - Real-Time Intervention: As opposed to having to attend timed therapy sessions with the actual therapist, RoboPet caters to the user's needs when they need it. - Privacy and Data Security: In order to reduce the amount of privacy issues all information concerning users will be encrypted and available only to the users who are authorized to have such data. - Personalization: Similarly, RoboPet listens to the user's reactions and provides recommendations like mood management, meditating, or reading depending on the user's preferences.

CONCLUSION

Combining all the gathered data on different age groups, the client's report highlights that mental health problems such as decision-related doubts, depression, stress, internal pain, judgmental fear, and low confidence are massively widespread. The prevalence of these issues tends to fluctuate with age, but certain trends are noteworthy:

- **Young Adults (18–34)** are the most likely to suffer from low confidence, judgmental fear, and decision-related doubts. This age group also has a higher possibility of receiving treatment, although many have limited knowledge of mental health services.
- Another category that still struggles is **Middle-aged Adults (35–54)**, where the rates of depression, decision-related doubts, and self-harm begin to decline slightly. Nevertheless, issues related to judgmental fear and internal pain continue to be relevant.
- **Older Adults (55+)** exhibit the lowest rates of decision-related doubts and stress, but the highest levels of judgmental fear (100%) and internal pain. Their help-seeking behavior is lower than that of younger groups, and the majority are unaware of existing mental health facilities.

Across all age groups, a common issue is the high proportion of individuals lacking knowledge about mental health services, which underscores the need to increase awareness. The information presented here implies that any intervention should be targeted toward specific age groups, as they face

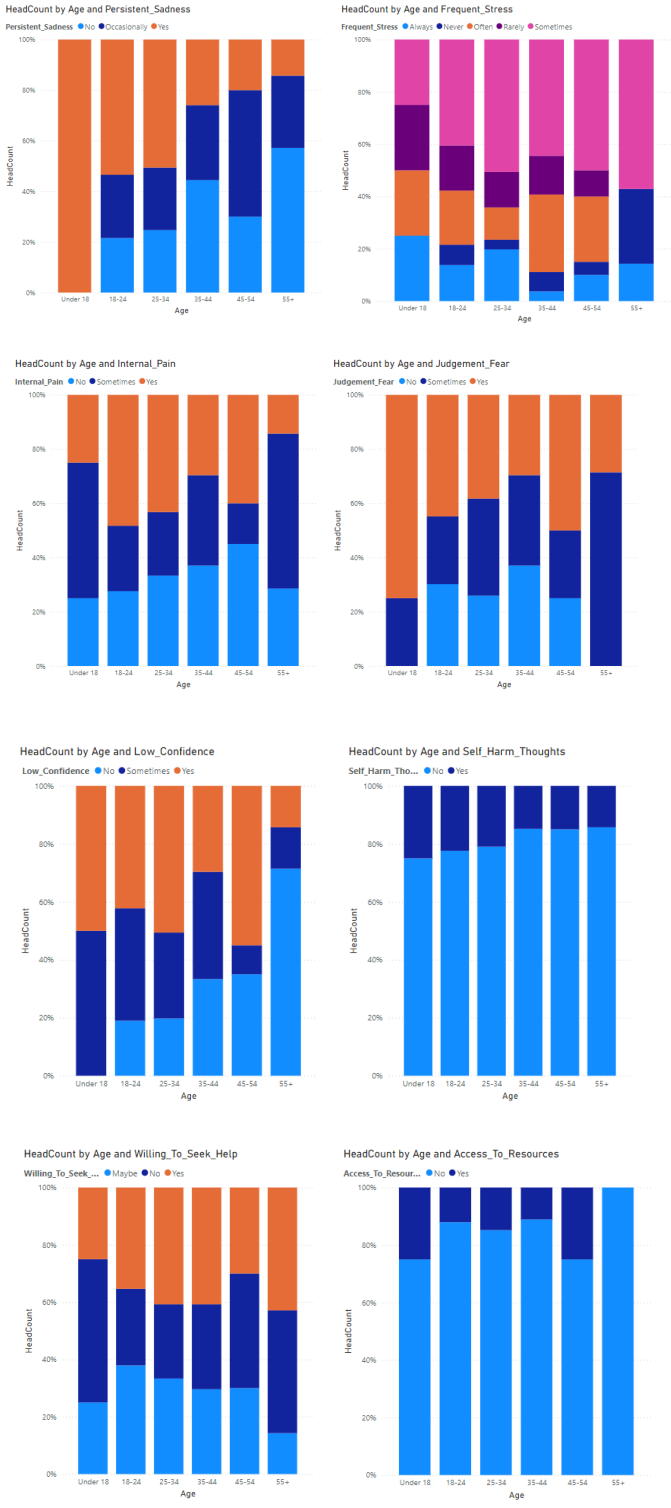

Fig. 1. Age Distribution and Mental Health Indicators by Age Group

different challenges in life. However, increasing knowledge and access to mental health services must be encouraged among all individuals.

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