

TESTING ACCEPTABILITY OF SOCIAL SUPPORT AGENTS IN ONLINE PAKISTANI COMMUNITIES

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ABSTRACT

Objective: The aim of this study is to help people to reduce routine life stress and evaluate the acceptability of online social network (chat bot Messenger) in a Pakistani people.

Research Method: We evaluate acceptability of social support network usability testing using Online Social Chat bot messenger apps.

Findings: The testing acceptability of online social agent in Pakistani community was evaluated with SUS Questionnaire along with Adjective Rating Scale and Letter Grade Age Group Educational Level Adjective Rating Scale and Letter Grade: (Male/ Female) / Adjective Rating Scale and Letter Grade: Boredom Stress.

Originality: The study findings are helpful for Stressful Situation Chat bot messenger chat either people of Society accept this kind of support.

Keywords: Chat bot, Testing Acceptability, System Usability Scale

1. INTRODUCTION

There are so many issues in routine life can be categorized in the source of stress like task completion, timeline, tired, health, relation breakup etc. It can lead to mental disorder or feeling very tired or irritation in a routine of life day to day affairs, such as flight delaying, heartbroken, getting bored, office issues, feeling sadness and relationship problems are real life issues relate to stress. Stress is a complex phenomenon. Stress is a very general cause for non-smooth functioning of routine life friends and family members can help to overcome stress. It can lead to depression or other kind of mental disorder but here we are dealing with routine life stress. Today fastest communication is Online social network applications are available. Online social network can also help to achieve to this task. As participants (employee of the school education) were selected to interacting social network app chat messenger or intelligent chat bot, intelligent responses can be found as human.

1.1 SOCIAL NETWORK SITES

Online Social network Sites are focused of all users in the world including Academia, colleges, researchers, industrialists, militaries, celebrities etc.

1.2 CHAT MESSENGER

Familiar with messenger as a just platform keep connect with friends and family to access your messages and conversations when interacting with messenger app, text, voice or video etc.

1.3 SOCIAL APPS

Social app as computer programs that manage online communities on the internet using a computer, mobile phone or smart devices Facebook Messenger WhatsApp Messenger are common apps.

1.4 ONLINE SOCIAL AGENTS

Advance communication system utilized environment for share information newly technology computer based or agent. Online social agents response automatically whenever user interact with it whatever user ask it generate response from the knowledge base according to situation and condition.

1.5 SYSTEM USABILITY SCALE (SUS)

The System Usability Scale promotes strong way to measure the usability. Further SUS allow participants to scoring responses ranging from Strongly Agree to strongly disagree.

1.6 PROBLEM STATEMENT

Stress is a major problem it can lead to many kinds of mental health problems today's fast paced world we always not closed to our family members and friends a virtual buddy could help alleviate the effects of stress. Chatbot can also help us to reduce stress in the absence of family and friends. We have experimented with the people in Pakistan whether our society accept this social kind of social support (in the form of chatbot).

2. LITERATURE REVIEW

Medeiros & Bosse (2017) described two section first is development of agent and second is evaluation of agent in this researcher research on 33 participants to interact with variants of the agent. The result showed indication agent baseline version generates random messages. Medeiros & Bosse (2016) shows Social media are effective for people to convey day to day issues , the result shows in paper that hypotheses online peer support.

Medeiros, et al (2016) presented a model of a network for mutual support for prediction when more stress is experienced. Hill et al (2015) analyzed how communication changes when people communicate with an intelligent agent as opposed to with another human. This research based on seven different variations. The most reasonable explanation was found and also found minimum usage of chatbot.

Abdul-Kader & Woods (2015) showed the design of chatbot. They compares between design steps from nine specific research papers, differences in the strategies, improvements in Chatbots intelligent responses are shown. Breda et al (2012) showed healthy lifestyle way with ambient intelligent system also check social interaction. brook (2018) presented valuable evaluation reliable and robust by evaluating the usability. The System Usability Scale (SUS) is definitive for feedback.

Viswesvaran et al (1999) highlighted work stress in two ways by correlation between social support and physical place stressors while Chung (2014) discussed the effect of stress coping regarding social app Facebook. They prove it with different results. Cheung et al. (2011) presented new world interacting created by speedy through online social network came to know factors are driven in social networks in instant communication.

3. RESEARCH METHODOLOGY

To evaluate acceptability of social support network a usability testing was conducted The questionnaires were filled by the participants to measure the satisfaction attribute of usability for Online Social Chat bot messenger apps under Support Stress full situation of work.

3.1 DEMOGRAPHIC QUESTIONNAIRE

Demographic questionnaire has been filled by 50 respondents (Employee) of the School Education which covers demographic data of the respondents. The respondents were selected randomly.

3.2 CHATBOT CREATED

The following languages and tools are used to build our web Application for our proposed system

- HTML 5
- PHP
- BOOTSTRAP 04
- AJEX.
- Wamp Server
- Sublime Text Editor
- MySQL
- Arduino IDE

3.3 EVALUATION QUESTIONNAIRE

Q.1. Chat bot Messenger chat is very helpful when people are alone?

Q.2. Chat bot Messenger chat can reduce stress?

Q.3. Chat bot messenger are very essential for routine life issues?

Q.4. Chat can help to reduce boredom?

Q.5. Do you accept this kind of social support?

4. RESULTS & DISCUSSION

The experimental study consists of pre-test questionnaires, actual tasks and post-test questionnaires. Usability Evaluation Method Adjective rating scale and Letter grade scale were measured during the Experimental study. Then satisfaction was measured just after completing experimental questionnaire feedback through the System Usability Scale by getting the opinions from the participants.

4.1 DEMOGRAPHIC RESULTS (Pre-test questionnaire)

The pre-test questionnaire was conducted from employee of the school education and literacy department from the district Jamshoro Tehsil Sehwan city Bhan Sayedabad. The total of 50 people participated in pre-test questionnaire 39 male and 11 female. Figure 1 shows the number of participants with additional information in terms of age group and education level

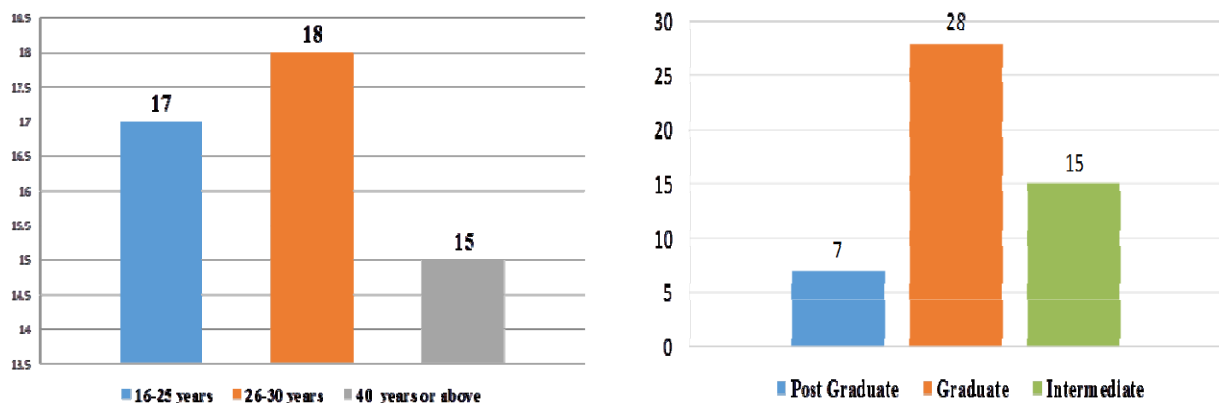


Figure 1: Age Group and Educational level of the participants

4.2 ACCEPTABILITY OF CHAT BOT

Figure 2 represents the acceptability of Chat bot measured with SUS liker scale. Figure 3 shows the acceptability of Chat bot measured with SUS letter grade scale. From results, it is observed that more peoples are strongly agreed on the stress of work due to online system

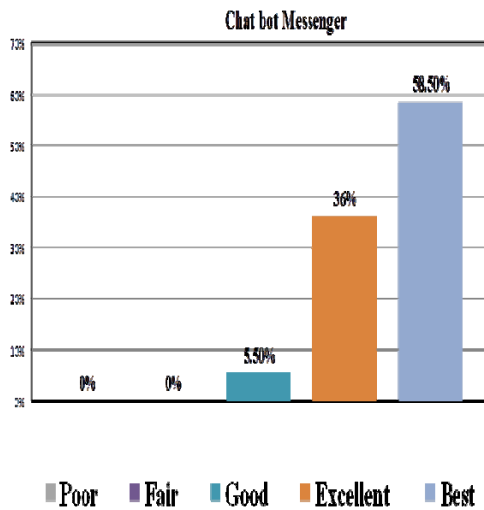


Figure 2: Acceptability of Chat bot messenger using SUS Liker Scale

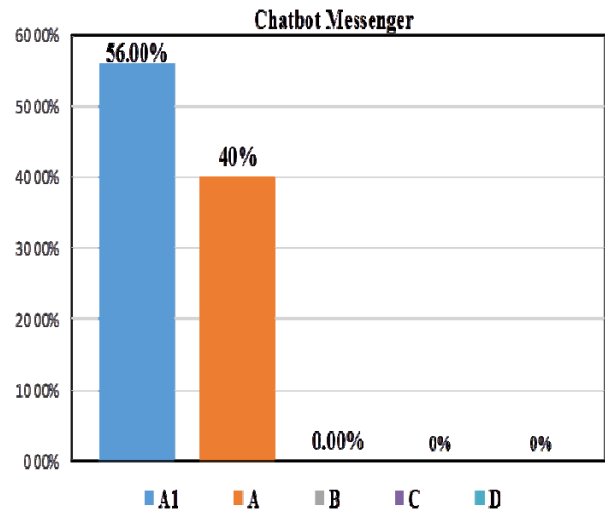


Figure 3: Acceptability of Chat bot messenger using SUS Letter grade scale

4.3 STRESS OF WORK EVALUATION

Figure 4, Figure 5 represent the evaluation of stress of work using SUS adjective rating scale and SUS letter grade scale respectively.

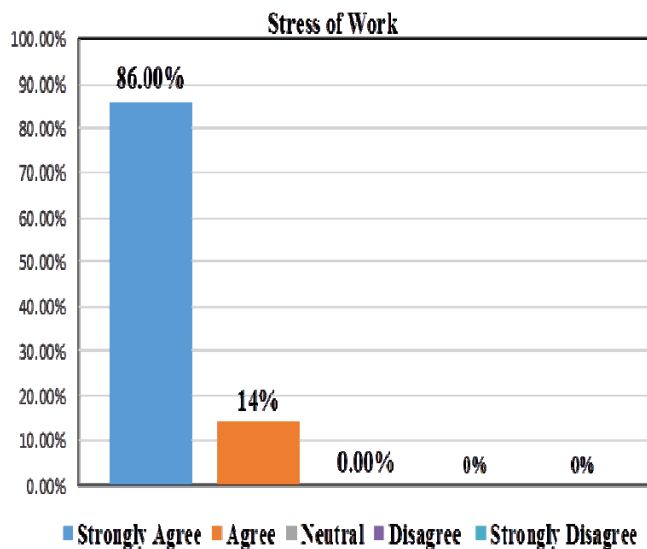


Figure 4: Stress of work using SUS adjective scale

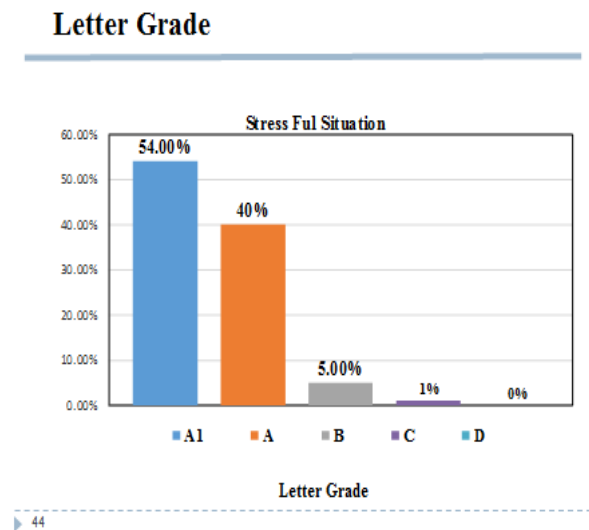


Figure 5: Stress of work using SUS letter grade scale

4.4 ONLINE HELP TO OVERCOME STRESS

Figure 6 represents that around 90% people are agreed that online help can overcome the stress.

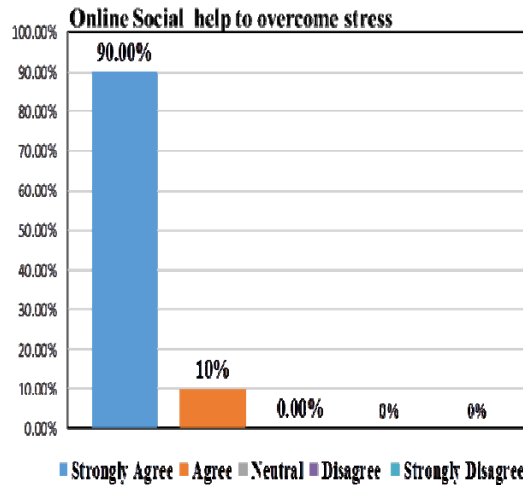


Figure 6: Stress overcome through online social help

4.5 REDUCE BOREDEM

Figure 7, Figure 8 and Figure 9 shows the acceptability of social app to reduce boredom measured with SUS liker scale, SUS adjective scale and SUS letter grade scale respectively.

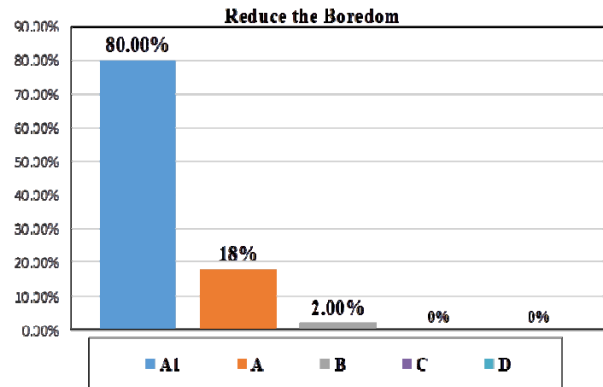
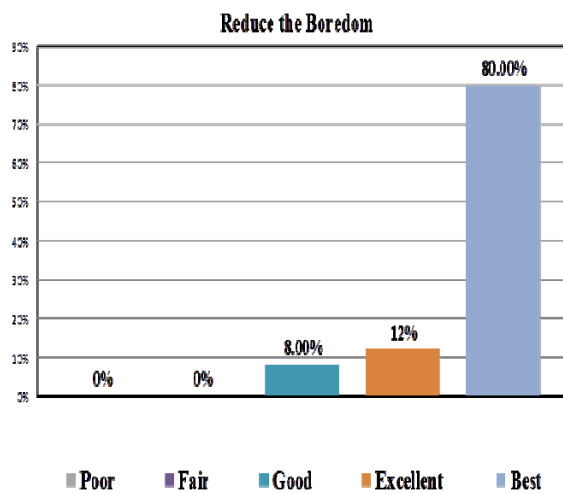


Figure 7: SUS Liker scale

Figure8: SUS Letter grade scale

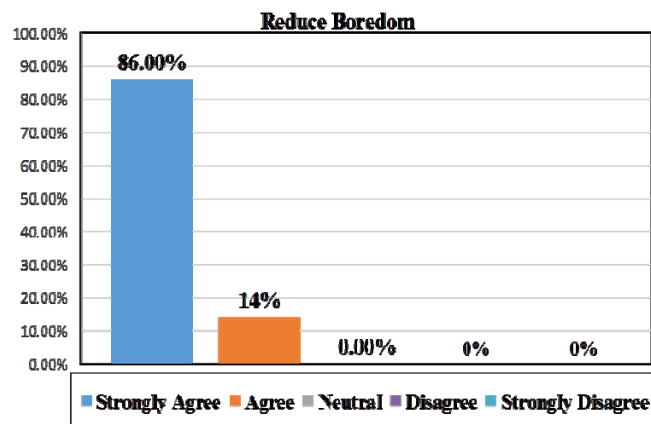


Figure 9: SUS Adjective scale

5. CONCLUSION

The testing acceptability of online social agent in Pakistani community was evaluated with SUS Questionnaire along with Adjective Rating Scale and Letter Grade was used. The research was based on experimental analysis, main objective of this research to evaluate the acceptability of online social agent in our Pakistani society, to reduce the stress of routine life through online social network (Chat bot Messenger Chat). In order to evaluation of acceptability the pilot study was conduct and feedback obtained from the questionnaire from the 50 participant employee of schools education department. The result showed According to SUS the results of our usability test containing SUS Score along with Adjective Rating Scale and Letter Grade: over all using online Social Network support overall score is 59.35, Adjective Rating Scale and Letter Grade: (Male/ Female) SUS Male score is 71 and SUS Female score is 67.35, Adjective Rating Scale and Letter Grade People of Pakistan acceptability of this support is” Best” and A Grade , Online social network support helpful when people are alone” Best” and “ A1Grade“Online social network support can reduce the stress of routine life “Best”and“A1Grade”Online social network support boredom can be reduce “Best “ and ” A Grade”.

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