

# Detecting Stress Based Social Network Interactions Using Machine Learning Techniques

<sup>1</sup>S.Rajasekhar <sup>2</sup>K.Ishthaq Ahmed

<sup>1</sup>(M.Tech)Student, Department of CSE, G.Pulla Reddy Engineering College, Autonomous, Kurnool, Andhra Pradesh, India

<sup>2</sup>Associate Professor, Department of CSE, G.Pulla Reddy Engineering College, Autonomous, Kurnool, Andhra Pradesh, India

## Abstract

In this busy world actually stress is continuously grow up in research and monitoring social websites. The social interaction is a process by which people act and react in relation with each other like play, fight, dance we can find social interactions. In this we find social structure means maintain the relationships among peoples and group of peoples. Its a limit and depends on its behavior. Because relationships established on expectations of every one involve depending on social network. There is lot of difference between emotional pain and physical pain. When you feel stress on physical body we all feel with tensions, stress on physical consequences, physical effects on our health. When we work on social network websites, developments or any research related information retrieving etc. our brain is going into stress. Actually by social network interactions like watching movies, online shopping, online marketing, online business here we observe sentiment analysis of movie reviews and feedback of customers either positive/negative. In movies there we can observe peoples reaction with each other it depends on actions in film like fights, dances, dialogues, content. Here we can analysis of stress on brain different actions of movie reviews. All these movie review analysis and stress on brain can calculated by machine learning techniques. Actually in target oriented business, the persons who are working in marketing always their brain in stress condition their emotional conditions are different at different times. In this paper how does brain deal with stress management. In software industries when developers are work at home, connected with clients in online work they gone under stress. And their emotional levels and stress levels always changes regarding work communication. In this paper we represent emotional intelligence with stress based analysis using machine learning techniques in social networks. It is ability of the person to be aware on your own emotions or feeling as well as feelings or emotions of the others use this awareness to manage self and your relationships. social interactions is not only about you its about every one can interacting and their expectations too. It about maintaining

performance. Performance is sociological understanding how people can interact and a key to know analysis of social interactions. It is always to maintain successful interactions and inline expectations. That is to satisfy the audience. So people careful to control all of these and maintain impression management.

## Keywords:

*Emotional intelligence, stress analysis, movie reviews, impression management, social networks, Machine learning.*

## 1. Introduction

Every day in a life stress about too many things like work, relationships, family, bills, opinions. In life man of stress is necessary but excessive stress is can take damage of your health either physically or mentally. We can get rid of stress in no time at all in life[1]. Here in this concept we observe different feelings, anxiety, fear, anger, sadness, self respect. In this paper we introduce a Sentiment analysis of movie reviews collaborated with stress based analysis using Machine Learning Techniques. There are so many negative emotions in these six major negative emotions are impact on health which are not manage properly, they are angry, fear, anxiety, worry, sadness, shame. Fig.1 shows the Social network communication among the peoples and share information between them by utilizing social media. Different types of social networks are available in society like twitter, facebook, telegram, watsapp etc. as shown in below fig.2



Fig.1. Social network communication



Fig2. Different types of social networks

II. Social network applications

2.1. Twitter

Twitter can be used to tweet against politics, movies, persons, cinemas, about a person. If we tweet positive way or negative way got information of movie reviewers and movie ratings using Machine Learning Techniques[2]. Present world every one use twitters, facebook, watsup to tweet or chat with different persons. They reveal their opinions about above said concepts. As shown in fig.3 using Machine Learning reviews against social media.



Fig.3 tweets on social network

2.2. Facebook

Facebook is also one of the most popular social network to connect with different persons. In facebook we can tweet about posted pictures or vedios etc. user of facebook receive comments or likes depends on reviews gone under stress when we give negative feedback. Depends on comments we share pictures or vedios to home page. Fig.4 shows tweets on facebook account[3].



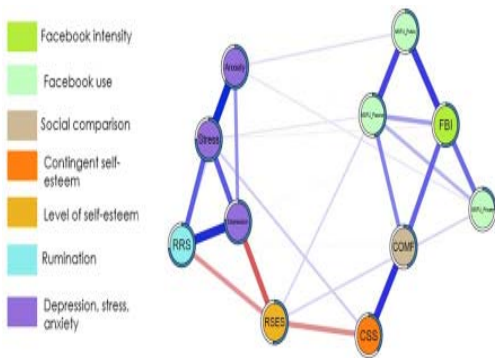


Fig.4 tweets on facebook

The most dangerous thing is to some peoples take serious about comments or tweets they gone under pressure or stress on brain take him to death condition also. Now a days some peoples going to do some dangerous stunts to get likes and comments in facebook or twitter or watsup . some times it will take them into critical conditions[4]. If one experiences these emotions period of time continuously and if they are into your body and not manage it properly and have a telling on effect on your physical health. In this emotional pain also produce physical pain, like blood pressure, speed heart beat, sugar. Paralysis attacks etc. harmful to your body. When stressful events occur say for example some body says about you, don't like your attitude, you get angry that is a stressful event. The brain perceives that stress it produce health related issues[5].

III. Implementation of Stress analysis:

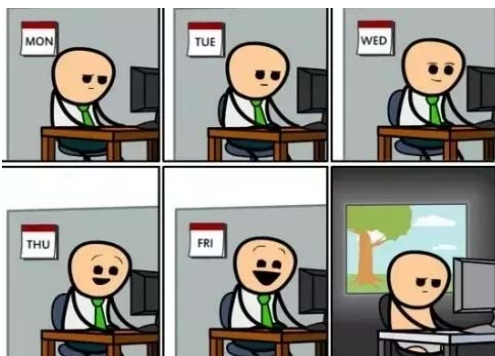


Fig.5 Employee stress analysis in office

Fig.5 explains about a person who is working from Monday to Friday busy with full time work in office when he comes home he totally drained and totally exhausted, because of meetings, client issues, with boss all those problems etc., he is facing in the office. But in weekend holidays Saturday he wakeup early compare to working

days and going for walk, swimming, take long break fast along with family because holiday and going to shopping mall for shopping, movie, parties with family. Even he does not feel tired and look like extremely fresh[6]. Because he feels Monday to Friday his job is imposition or punishment, and gone into stress. We have lot of negative thoughts like Fear we fight with boss or manager and get unnecessary thoughts about job, employee in dilemma whether I could be in a job or not. Actually in the software industries so much work stress regarding targets of work. Boss given deadlines for a complete a task. Depends on lack of time employee can feel stress. Actually in cities due to large amount of traffic we are not able to reach office In time every day[7]. At that moment due to lack of time tension will create a stress on brain of the employee. There are so many reasons to find out stress which will come on the face.

IV. Stress Testing:

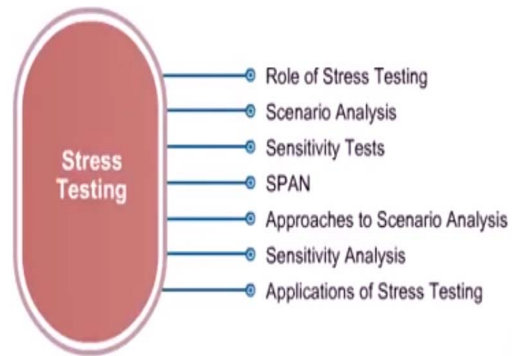
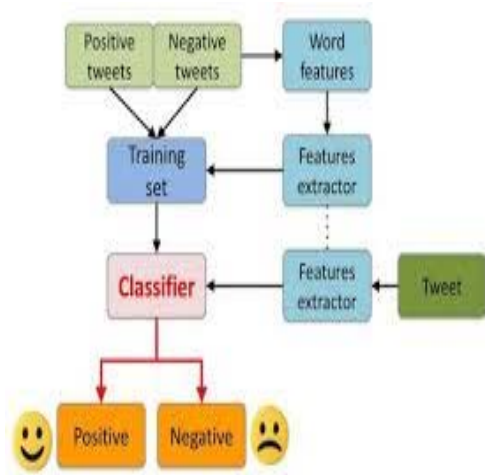


Fig.6. Stress Testing

Main applications of stress testing as follows In this part one of the first application is role of Stress Testing as shown in fig. 6, in the movie review analysis how much stress we can face[8]. At what basis brain comes under stress in the movie review scenario like happy, angry, smile, anxiety so many observations we find out in self or in different persons. Another application is scenario analysis here we can analyze possible scenarios. Some peoples are very sensitive, at the time of movie review they start crying when sentiment dialogs come . At the same time we can observe stress on brain[9].

At the time of movie review sentiment analysis peoples give feedback either positive/negative about the movie. Those peoples give positive feedback when they feel happy and the satisfaction of movie. In this moment observe stress of peoples with different feelings.

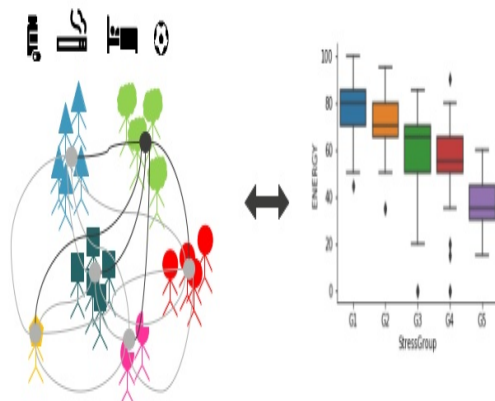


**Fig.7. movie reviews feedback**

As shown in fig. 7 it explains about the positive and negative feedbacks. Negative feedback gives stress on mind. All these negative thoughts may not be removed from brain that causes a stress. Mother fearing about son and getting stress, emotions about his features. Another one is worry explains about past events for example we hurt some body. On the next day we worry about him continuously and what the other person is thinking about me like unnecessary thoughts gives lot of stress on brain[10].

The relationships among teacher and students is depends on expectations. Such relationships also depends on status of persons because of person position got position in society or social group. Status is an identity of person among group of persons.

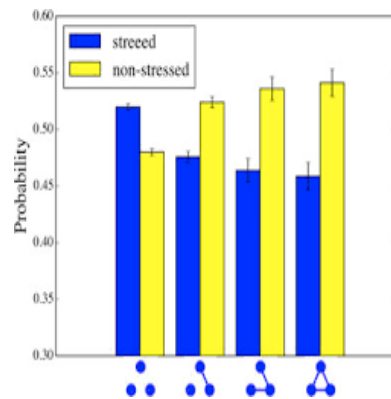
**V. Stress detection using Machine learning Techniques:**



**Fig.8 peoples Mental stress indicators**

When you think about effective leader what characteristics come to mind. Chances or pictures some one who listens to their team. They stay cool under pressure. No one to trust into their mission, and they will never take back step. Peoples like these have high degree Machine Learning Techniques (ML). ML is an ability to recognize your emotions understanding how they are effective surround you. Having high Machine Learning Techniques so means to understand other peoples emotions as shown in fig.8. This allows you to manager relationships better and avoid potential complex. That there are five elements to find out Machine Learning Techniques. The first is self awareness. When you have self aware you no have feeling all of the time and you understand how those feelings are effecting the peoples around you. The second one is self regulation. This is ability to control your motions and actions. You can develop self regulations by living a values when you make mistakes Third one is motivation highly motivated people put offshore to my words for longtime success. The fourth element is Empathy. This is one you have an ability to identify other people understand wants and needs and view points. Finally having good social skills also critically important. This works with positively with other people and manage conflict effectively.

As shown in fig. 9 Having high Machine Learning Techniques is crucial in today’s work place. By using ML technique Detecting Stress Based on Social Interactions in Social Networks. If you can build and maintain a strong relationships then you can come more capably and productively with the people around you. It also one of the key attributes have been affective leader. In Machine Learning Techniques there are two kinds of strategies are implemented one is expectation and another one is explanation. For Expectation from Samsung phone.



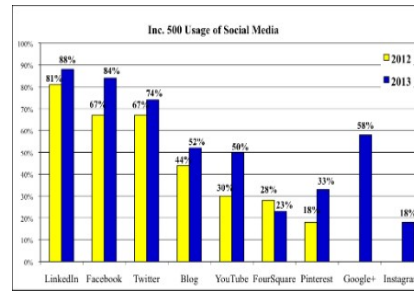
**Fig. 9 Detecting Stress Based on Social Interactions in Social Networks**

**VI. Results and Discussions:**

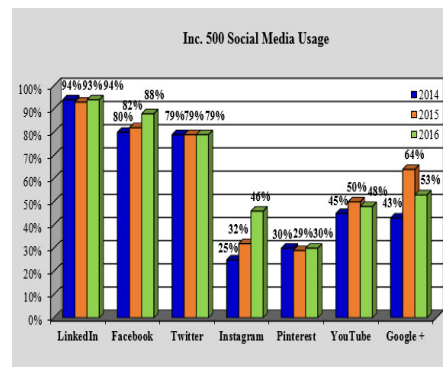
Twitter can be used to tweet against politics, movies, persons, cinimas, about a person. If we tweet positive way or negative way got information of movie reviewes and movie ratings using Machine Learning Techniques[2]. Present world every one use twitters, facebook, watsup to tweet or chat with different persons. They reveal their opinions about above said concepts. As shown in fig.3 using Machine Learning reviews against social media.

Mange negative emotions or stress busters:

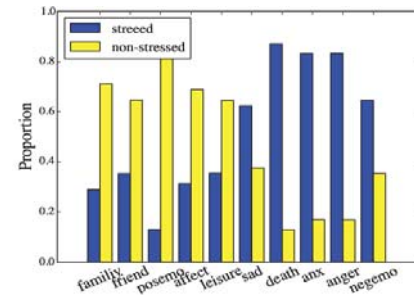
1. Keep busy yourself, not a workaholic. Once you are completed office works, business works and forget all office, other issues left in office and go through devotional or emotional songs by listening it forgot stress these are give great relief quality.
2. Once we go to home play with children’s, its great relief for me and a cute smile on children’s face that’s a million dollar smile is one of the greatest stress reliever according to me.
3. Loving pets another great relieving thing. Especially dogs at home.
4. Morning walk with mind fullness, I tried to utilize maximum number of my senses. Ex. Watching sun rise early in the morning is beautiful scene, unfortunately beach walk with bear footed, sensations of the sand, feel the sensation of the waves that come along all these things are stress relieving concepts.
5. Another one beautiful stress relieving thing is running.
6. In Swimming once immense your body in water it’s a great relaxing experience and forget all tensions.
7. Practice yoga and meditation is also great stress buster. Massage is also great body, mind relief concept.
8. Going for trekking nearby mountains.



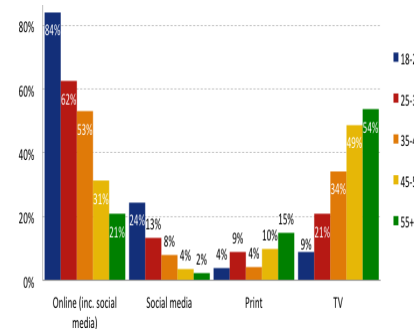
**Fig.10 social network utilizations**



**Fig.11 Social media usage**



**Fig.12. Stress and non Stress on Social network**



**Fig.13. utilization of social network by different ages.**

As shown in above diagrams fig.10,11 it explains about different ages of persons utilizing social networks. Day to day life we can observe utilization of Social network



increased. Awareness and utilization of these social networks increasing and it becomes a part of life. It shows different age group peoples working on social media also stress also increased on brains as shown in above fig.12,13. today social media and network utilization is important for everyone to communicate with who are living in abroad. Although Machine Learning Technique(ML) is important to part of like, emotional feeling is key to achieving your targets. By observation of so many comments or reviews, peoples get confidence on that product relaxed from particular stress about the product as important as regular intelligence, and many companies now use Machine Learning Technique(ML) to hire new staff. Machine Learning Technique(ML) is an awareness of your procedures and thoughts – and how they influence those around you.

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## AUTHORS PROFILE



**S.Rajasekhar Sai.**, pursuing M.Tech in Computer Science and Engineering from G.Pulla reddy engineering college, Kurnool, her research interest includes big data analytics, Computer Networks, Embedded Systems.



**K.Ishthaq Ahmed.**, Working as Associate Professor in G.Pulla reddy engineering college, Department of CSE, Kurnool, his research interest includes big data analytics, Machine Learning, Artificial intelligence, Dataware House, Computer Network, Soft computing.