



## International Journal of Innovative Research in Computer and Communication Engineering

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# Analyzing Stress on Social Media through Data mining

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**ABSTRACT:** Data mining is the extraction of projecting information from large data sets, is a great innovative technology which helps corporations focus on the most important information in their data stockrooms. Social network analysis has become a very popular field of research as it is useful for many applications. In this paper we have overviewed and analyzed the stress caused to youth due to the social media networks using data mining tool (WEKA). Social networks plays a vital role in today's youngsters that leads lifestyle which differ from society, which cause a stress. So in this paper we summarize which social network will cause more stress to which group of age peoples.

**KEYWORDS:** Data Mining, Social Media, Random-Tree, AD-Tree.

### I. INTRODUCTION

In today's world, social mining is a process involving the extraction, analysis and representation of useful data from social media interactions. It is undeniable that social media plays an important role in impacting our culture, our economy and our overall view of the world. Social media is a new forum that brings people to exchange idea, connect with, relate to, and mobilize for a cause, seek advice, and offer guidance. Social network has gained remarkable attention in the last decade. Accessing social network sites sides such as Twitter, Whatsapp, Facebook and Hike through the internet. Social media mining is a new plan to boom business.

Although it has brought about many benefits, allowing us to easily connect with friends and family around the globe, allowing us to break down international borders and cultural barriers. Social media has a negative impact on our lives in the name of stress through relationship, lifestyle and culture. Social media is robbing us of trust and comfort we once placed in one another, replacing the human fellowship, physical and emotional support we once drew from each other with virtual connection. It robs us from self-control and from the ability to think independently and instead makes us gullible to join any group that posts perverse messages that tickle our ear and amuse our senses without evaluating the consequences.

### II. PROBLEM DEFINITION AND DESCRIPTION

Stress might come from maintaining a large network of Facebook friends, feeling jealous of their well-documented and well-appointed lives, the demands of replying to text messages, the addictive allure of photos of fantastic crafts on Pinterest, having to keep up with status updates on Twitter, and the "fear of missing out" on activities in the lives of friends and family.

In this paper we are going to analyze the level of stress based on age, time and the type of social media they used through the survey which we done. The level of stress is entirely differ from men to women, women are more stressed by the social media then men and its analyzed and summarized through the below sample questionnaires.

Some Questionnaires' of the survey are,

1. Write your Gender?
2. What is your age?



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3. Which is your favorite social media?
4. How many hours you spend in social media?
5. What type of stress you feel though social media?
6. Is the relationship affects due to social media?
7. Is your carrier goal change due to social media?
8. Whether your health is affected due to social media?
9. How you feel without social media for a whole day?
10. Is virtual relationship is good or bad?

### III. PSYCHOLOGICAL STRESS AND SOCIAL MEDIA USE

It makes sense to wonder if the use of digital technology creates stress. There is more information flowing into people's lives now than ever — much of it distressing and challenging. There are more possibilities for interruptions and distractions. It is easier now to track what friends and foes are doing and to monitor raises and falls in status on a near-constant basis. There is more social pressure to disclose personal information. These technologies are said to takeover people's lives, creating time and social pressures that put people at risk for the negative physical and psychological health effects that can result from stress. Stress might come from maintaining a large network of Facebook friends, feeling jealous of their well-documented and well-appointed lives, the demands of replying to text messages, the addictive allure of photos of fantastic crafts on Pinterest, having to keep up with status updates on Twitter, and the “fear of missing out” on activities in the lives of friends and family.

We add to this debate with a large, representative study of American adults and explore an alternative explanation for the relationship between technology use and stress. We test the possibility that a specific activity, common to many of these technologies, might be linked to stress. It is possible that technology users — especially those who use social media — are more aware of stressful events in the lives of their friends and family. This increased awareness of stressful events in other people's lives may contribute to the stress people have in their own lives. This study explores the digital-age realities of a phenomenon that is well documented: Knowledge of undesirable events in other's lives carries a cost — the cost of caring.

#### 1) Social media stress 1: Identity fraud

The personal details many of us share on social media sites; it seems we are making the job of identify fraudsters much easier. With the click of a few buttons, it is easy to bring up a whole host of information on users who believe they are simply sharing innocent information with friends. In fact, according to experts, you could be providing enough information for somebody to easily set up a bank account in your name. To avoid becoming a victim of identity fraud, remember to update your privacy settings to make sure your personal life is kept private.

#### 2) Social media stress 2: The relationship status

Those early are-we-or-aren't-we days in a relationship have always been slightly tricky territory. However, prior to the rise of social media, all we had had to contend with were those common dilemmas of when to say I love you, how you should introduce them to your friends, and whether you were ready to meet the parents. Now we have had another obstacle thrown in our way: the relationship status. After all, you know you're official but are you “Facebook official”? Are you ready to take your relationship to that next ever-so-public level? And who should do it first? In the increasingly stressful world of dating, we're just not sure social media is helping! On the subject of relationships, social media sites seem to have thrown yet another spanner in the works for couples. According to a study conducted by the American Academy of Matrimonial Lawyers, more than 80 per cent of divorce attorneys have seen an increase in the number of divorce cases which use social networking as evidence in the past five years, whilst Divorce-Online have stated that a huge one in five divorces are caused by Facebook. Flirty messages, befriending exes and suspicious photos can all spell out trouble, so try to conduct yourself on social media sites as you would in real life to avoid unnecessary relationship drama



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### 3) Social media stress 3: Lifestyle envy

We all know those people who not only appear to live incredible lives but who just love to tell the world all about it (repeatedly) via social media. It's hard not to feel a touch envious when yet another idyllic proposal/travelling/night out status or photo pops up while you are sat at home mourning the state of your love/social life. In fact, research carried out by a team at the Utah Valley University found that the longer we spend on Facebook, the more we start to think everyone else has much better lives than we do. However, it's important to remember that everyone is probably not leading the perfect lives you imagine, and they are probably having the same thoughts as you!

### 4) Social media stress 4: Catching a bad mood

Just as we are all familiar with those social media friends who can't stop gushing about how wonderful their lives are, on the other side of the coin are those folks who seem to use social media as their own personal sounding board to rant about just about everything, from that guy who looked at them funny on the train to the state of the world at large. However, research has found that this can be just as detrimental to our happiness, as Facebook moods can be contagious! The study found that the emotions of Facebook users directly affect the emotions of their friends for up to three days.

### 5) Social media stress 5: Virtual friendships

When it comes to separating 'real' friends from virtual ones, sometimes the lines are blurred. Do we invite that girl we IM'd a couple of times to our party? What about that guy who always likes our statuses? The distinction can get even more difficult when deciding which of our real-life acquaintances to accept into our virtual world. Being inundated with updates from people who cause you stress in any way can easily ruin your mood, as can tailoring your content for the approval of your colleagues or boss, so try to be selective about who you add to help cut social media stress.

## IV. METHODOLOGY

### WEKA Tool:

Weka (pronounced to rhyme with Mecca) is a workbench that contains a collection of visualization tools and algorithms for data and predictive modeling, together with graphical user interfaces for easy access to these functions. The original non-Java version of Weka was a Tcl/Tk front-end to (mostly third-party) modeling algorithms implemented in other programming languages, plus preprocessing utilities in, and a Make file-based system for running machine learning experiments. This original version was primarily designed as a tool for analyzing data from agricultural domains, but the more recent fully Java-based version (Weka 3), for which development started in 1997, is now used in many different application areas, in particular for educational purposes and research.

### AD-Tree:

- The **ADT Binary Tree** is a finite set of nodes which is either empty or consists of a data item (called the **root**) and two disjoint binary trees
- A Binary Tree is a "position-oriented" ADT, as lists, stacks, queues. However, since it is not linear as the ADT lists we have seen so far, we will not reference items in a binary tree by using a position number. The Binary Search Tree is a value-oriented ADT whose elements are organized on the basis of their values.

The **ADT Binary Tree** is a finite set of nodes which is either empty or consists of a data item (called the **root**) and two disjoint binary trees (called the **left** and **right subtrees** of the root), together with a number of access procedures. The Binary Tree is a more general ADT than the linear list: it allows one item to have two immediate successors.

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## Works:

- Representing 1:2 relations;
- Representing sets;
- Evaluating expressions.
- Data item

TL TR

r = a node

TL = left binary tree

TR = right binary tree

R -Nodes with no successors are called leaves. The roots of the left and right subtrees of a node “i” are called the “children of i”; the node i is their **parent**; they are **siblings**. A child has one parent. A parent has at most two children.

## V. RESULT AND DISCUSSION

As from the above discussion the paper summarize the result as, the highest level of stress is caused by the social media Facebook and the level of stress is differ from age and gender. Through the survey the age group of people below 25 cause more stress due to the social media hike and twitter then the other age groups. Below 25 is consider as the age of adult and they are stressed more because of comparing their lifestyle and relationship with others.

Analyze of stress through the questionnaire which we collected are executed in ADTree algorithm using a weka tool. The tree mainly focused on the attribute age and the type of social media they used. The age below 25 and above 25 are categorized and the type of media they used are analyzed. The result of the paper shows that the age below 25 are more stressed due to the social media hike and twitter.

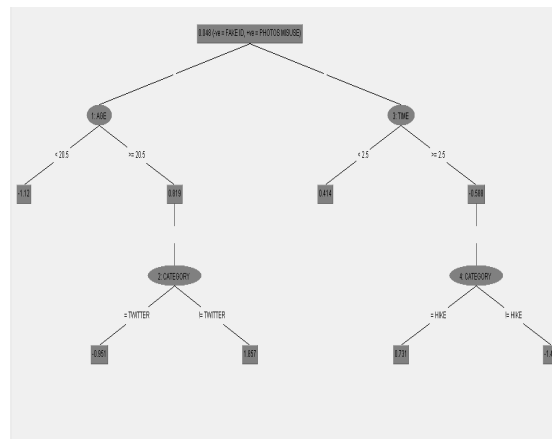


Fig 1: Analyze of stress on ADTree

This is the overall summarization of the people who caused more stress because of social media they use with respect to their age. The age group of people from 20-25 are more stressed due to social media.



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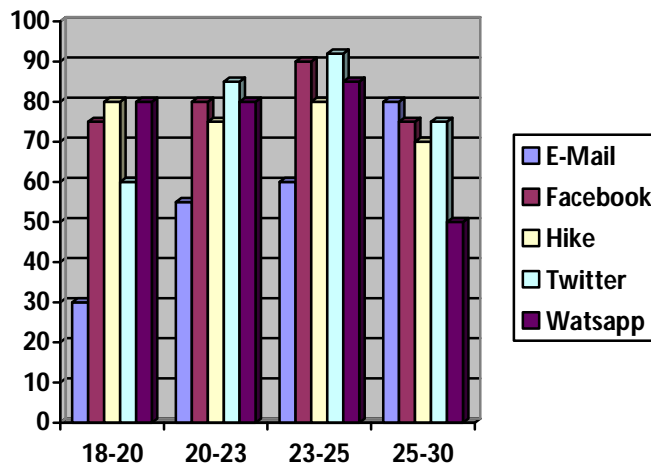


Fig 2: Social media Users

## VI. CONCLUSION

The Paper analyze the level of stress through collecting a questionnaires' from different peoples as students of various departments, professors, IT peoples, business mans. From their answers the paper concludes that the social media facebook cause more stress to peoples and it's also analyses the age from 20-25 cause more stress then the other age groups by comparing their lifestyle with others.

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