

# Study of Interaction in Social Media

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#### **General Vision**

The study of interaction in Social Media is the research of how people connect to each other in terms of relationships, engagement, connection, communication... This topic is mainly related to psychological factors, such as self-perception, the influence on our well-being... In this report we will focus on how Social Media engages people to some point that defines who they are.

#### **Structure**

- 1. Which effects do people suffer from long-term use of social media
- 2. What techniques are used by designers, developers... to obtain the public attention
- 3. What do they do with us
- 4. Numbers, statistics and projection
- 5. Possible solutions
- 6. Conclusion

#### **Introduction**

In the 1960's, Simon Ramo was already speaking of millions of minds connected together and envisioned "a degree of citizen participation ... unthinkable today". Computers could not only be used for computation but also for communication.[3]



### **Human effects**

As we have all heard dozens of times, social media has some impact on our lifestyle, being one of the most influential objects in our life. Wherever you go or watch, social media is there, in any advertisement from a fast food line, in every banner in the road, social media will be there, no matter where or how.

Taking this aspect into account it is more than obvious that we need to flow in the same direction as the world is going, but, following the flow means modeling our personality and behavior? Obviously not.

Having a lot of friends in our social media is thought to be correlated to being more outgoing, with several social skills, but it is not like that. Social skills are defined as "abilities that **enable people to interact** [...] including verbal and non-verbal behaviors and communication techniques, such as active listening, empathy, and appropriate **body language**". Are we really interacting with people or are we just interacting with the environment, in this case the device or app, waiting for a response that could not really happen?

One of the most common examples about this kind of "interactions" is uploading a story, a kind of publication that only lasts a few hours. In this example, the subject uploads the story and their followers are able to observe it, but is not a real interaction as it has not response, and in the case that there's a response, it is not a real case of human communication, as the subject that uploaded the story was not waiting for the response of that follower.

Moreover, talking about interaction human-to-human in the context of social networks and related to the difference between friends and followers, everybody knows that our accounts are full of people that we used to know or we have never met in real life, so, can we consider those followers as "friends"? Knowing the obvious answer we can answer a previous question, having lot of followers is related to having lots of friends? No.

Relationships in the network are mainly based on fake information, distorted reality and thousands of unreal aspects. Being social here doesn't mean being social in real life, evenmore, basing our relations with other people on social media make us more austere, reserved and withdrawn.

When a person that considers himself very sociable discovers that it is not true the possibilities of ending feeling depressed are incremented drastically. One of the first feelings when a person discovers reality is loneliness. Realizing that most of the people that they were considering as close friends end up being just normal people that after all you do not know anything but the fake scenario that somebody wanted to show in their social network.

Social media is like a museum of happiness where everybody shows the aspects in their life that they like. It is not common to see bad aspects of someone, because they are seen as attention-seekers, even if something bad really happened. In the network you must be strong, without weakness, or in that case some of your fake friends (followers) would use that information against you.

There are plenty of cases of people that have been bullied online for several reasons, one point would be the "showing your weakness" case, but it is not the most common case.

Sometimes bullying starts in real life activities and it evolves into social network and real life harassment. Being active in social media is one of the main reasons why bullied people cannot rest in peace even out of the "danger zone", the stalker has full time to make the life of the bullied into a constant suffering

In relation to the bullying case, it can get even worse when both of the implied parts have any kind of addiction to social media, where they cannot leave that world and feel the necessity to be 24/7 into this world, creating new kinds of problems that will be explained in the human-computer interaction.

Good aspects of social media could be also found in day-by-day activities. It helps us to keep in touch with some real friends that can be far away, or even so close to us in real distance but we can't see each other frequently for any reason.

Another key aspect for social media is the value that it has when we want to be informed of news that comes around, that affects us or happens in the other part of the world, but with this aspect, misinformation appears, being one of the illnesses of the XXI century. Nowadays it is nearly impossible to find an apolite newspaper, most of them are biased with the interest of some people or organizations that rule the media.

Last but not least, recently there has been a new opportunity for social media to bloom a good use of it. The disaster occurred in Albacete and Valencia. With this terrible event, thousands of people started to create a way to find missing people and provide help and settlement for people in need.

Getting into account all these aspects, we can say there is a balance in pros and cons of social media.

### **Human-computer relation**

Related to previous topics, human behavior is exploited to its limits, trying to obtain the maximum interest in their apps, webs... This is called algorithm personalization. With this technique the user behavior is analyzed, seeing how the user moves with the environment, being the environment the computer, with this, social media shows personalized content for the user, being relevant and attractive for him. This creates an individualized experience that keeps the user fully connected to the app, reducing the possibilities of him leaving the product.

All this is related to the use of design and dopamine, creating and infinite cycle where the user obtains an enormous quantity of dopamine because of the app, when the user receives a like, someone writes him, whenever their favorite artist or influencer uploads a photo or story, an amount of dopamine is generated by the neurotransmitter and the user

ends up feeling some kind of satisfaction. This could end in a very bad way in terms of becoming addicted to social media, modifying our behavior, our way of feeling... Even in real life this has a deep problem, when a user tries to find this feeling out of the screen it would be impossible for them, transforming all these problems into stress, and a feeling of not being able to find whatever they are looking for in terms of friendships, love...

Another computer-human usage is the infinite scrolling, designed to obtain a continuous way to see new information, post... with no need to refresh or change from one page to another. This is one of the biggest problems about social media, to have the possibility to never finish using it, being always with the possibility of finding something new, producing an enormous engagement for the user. This could be by difference the first reason why people become addicted to social media. Notion of time is lost because of infinite scrolling.

Keeping in line with this topic, another cause of why human-computer interaction is so important for software developers, designers and social media owners is the intermittent rewards, which are based on a principle of psychology where the reward is obtained randomly, instead of being predictable. Users do not know when they will receive a notification or some content of their likes. Having this "problem" for the user, some feelings of curiosity and anticipation are created, so the user stays always in alert to see if something new happened. This is similar to what online casinos do, you always feel like something new could happen, not leaving never the web.

# **Computer-computer relation**

In this last part of the interaction between humans and computers we would like to make a brief mention about computer to computer relation in terms of the use of our data, information and how sometimes companies do some experiments with us to obtain more details about us.

Related to some experiments, one of the most mediatic cases was one made by Facebook in 2012, where they took 700.000 users to analyze how social media influences them by showing two types of news. The first group was bombed with dozens of bad news, the opposite of the second group. This experiment created a really bad opinion on social media and a new debate was created, is it legal and moral to experiment with users without them knowing it?

Another case of data manipulation that became very known is the problematic with TikTok and the use of personal data from minors under 13 without parents supervision. With this problem, the platform had to pay 5.7 million dollars to the USA government and they had to create new ways of data recollection, but it was not enough since many users are now worried about the treatment of their personal information. All these examples are just a very small example of how companies exploit their legal limits with us to obtain as much money and power as they can.

# Numbers, data and problems



Taking the information from this simple graph made by "Mentalidad Humana" in 2023, the first information that we notice is that 3 out of 10 people are addicted to social media (in the range between 15 and 25), extrapolating this information to the users of social media around the world, more than 1.500 million of users are addicted to it, being 11.91 in Spain (out of 39.7 million users). In the range from 50 to 64, 73% of the people use at least one Social Media. Related to the difference between men and women is not that important, as we can see, this problem is equal for both.

When talking about reasons why people prefer social media, more than 50% confirm that it is just because they like it, something obvious if we take into account previous information about the obtaining of dopamine by some technical aspects. Then, 30% of the users confirm that their main objective is to obtain more friends, something related to the human-human interaction previously defined, where people consider online friends as important as real life friends, making people less social and reserved.

Related to why people prefer social media instead of real life communication is mostly because of economical factors and sloth.

#### **Possible solutions**

Previous pages have been mainly about actual problems for users of social media, but not just problems, some solutions should be given.

When all of the previous problems appeared, it is obvious that mental health support is more than needed for all these users. Some problems must be treated as common cases of addiction, similar to tobacco, drug or alcohol addictions, and all of them need help from specialists that support people, in this case, psychologists. It must be also said that not everything depends just on experts, the user must take some steps to reach back their mental health.

One of the most used steps to improve with these problems is the time management features that our phone brings us, limiting the time that we can spend in some apps such as Instagram, Twitter...

Education about social media is also needed, providing digital programs to help users from some of all the threats that can appear when using social media. Having a basic knowledge of these topics is very important to know how to react when one of the symptoms appears. Also, basic knowledge of how to interact in real life is needed, to find easier to communicate person-to-person more than through a screen.

Children should be protected from all the possible problems that can occur since they do not have the possibilities to protect themselves. This could be done by parental control, limiting the time they can spend using technologies, restricting some webs and applications...

Last but not least, combating dopamine boost is also one of the most needed techniques to be implemented. One of the most radical but useful steps to be done is delete all social media on your phone, try to forget about the other world that is far away from reality, where most of it is manipulated to change social opinion, where we transform into antisocial humans. While performing this step it is also important to find a new way to find real dopamine, doing some sport, meeting new people... And you might never need anymore dopamine produced by social media.

Everybody must find the best solution to their case and try to implement it in the healthiest way possible, avoiding new problems such as new addictions or even growing other addictions such as gambling, smoking...

# **Conclusion**

Social media is one of the most useful and problematic things that has happened to humankind in the XXI century, and as we can see, everything depends on how it is implemented.

It is a priority for users to understand how social media works, to provide them the opportunity to avoid most of the problems that occur daily, to understand how their data is treated and avoid a bad use of it.

Nobody is safe from those problems, but being more informed is a good help.



- [1] (ADICCIÓN A LAS REDES SOCIALES, 2023, Mentalidad Humana)
- [2] (Nate Gentile, 2024)
- [3] Social Computing | The Encyclopedia of Human-Computer Interaction, 2nd Ed.