

Prospectus

Horse Show Result Tracking and Reporting

(Technical Topic)

Mental Health effects of Social Media Use

(STS Topic)

By

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On my honor as a University student, I have neither given nor received unauthorized aid on this
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Introduction

Social media has taken a large presence in most people's life. Everyday, 1.59 billion people spend at least an hour on Facebook (Noyes, 2019). Some people use it for forming relationships, maintaining relationships, showing how great their life is, or others using it to inform people of their lives. There's fear of missing out (FOMO), people feel the urge to know what's going on in other people's lives. People are interested in seeing how terrible and/or amazing other people's lives are doing instead of living their own life. Whatever the reason, it warrants the need for the average human to spend 6 hours and 42 minutes online per day of which 2 hours and 23 minutes are spent on social media (Ennis-O'Connor, 2019). Although the intention from these companies are to highlight the positives of social media, there is a darker side that is overlooked. The topic of my research is uncovering that darker side. What are the mental health effects of social media?

Transitioning to my technical project, the goal of my team is to build out a platform for horse show administrators to be used for keeping records of results and competitors information. The two topics are related by the platforms in question tracking user's data. The horse show platform keeps track of records for riders and horses competing in each show. While social media companies track user actions while on the internet. Horse shows consist of a rider guiding a horse over a set course of obstacles in a ring. However, each event is scored differently based on the type of competition. It might be scored based on the objective speed and accuracy the rider has over the course. While other events are based on a subjective judgement of form over

the course, whether that is the form of the horse or the rider (Burkey, 2018). Currently our client is using an outdated platform for tracking and reporting this information and we want to provide them with a user friendly software that fits their needs.

Technical Topic

How can horse shows better track and report results? The technical team will work to improve and add functionality to an existing Django application developed to manage horse shows. The team will work with a customer to define requirements that will represent the goals of the project and document all steps of the agile process so that future students can replicate and iteratively improve upon the team's development strategies and processes.

In horse shows, a system must exist for tracking riders, horses, combos, as well as their scores in different events. Combos consist of a horse and rider's name. For each show, there are divisions that can be based on age group, competition type, or horse type. For each division there are classes that have an identification number that are used to even further divide the field of competition (Burkey, 2018). For each combo the system must have a way to record scores for each event in the show. Previously, our customer used a large poster where everything would be handwritten, see Figure 1.

Rider	1. Hunter Off	2. Event Off	3. Jumping	4. Pleasure Driving	5. Pleasure Driving	6. Trail	7. Beginner	8. Jr. Eq	9. Sc. Eq	10. Subtotal	11. Western Cup	12. Egg & Spoon	13. Musical Saddle	14. E. Western Race	15. Barrel Race	16. Barrel Race	17. Pole Bending
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Figure 1. Previous system for recording results for Hoof n Woolf horse show.

This system is not optimal as all results are only in one location and fixing mistakes on the scorecard would be very messy. In addition, if new riders want to register on the day of the show it would be time consuming to get them set up. The clients had moved to a local platform on their computer for tracking and recording information during the horse show this past year but it was very bugging and did not have all the necessities. Our job is to expand on the existing code

base's functionality as well as fix bugs. We've already had several iterations of sprints to fine tune the platform to the client's desire so they can run their horse show as efficiently as possible. In addition, they have the functionality to access it from any computer if wanted to and no longer have to rely on running it locally on their personal computer.

With our system, new horses and riders can be added quickly and all horses, riders and combos from previous shows could be reused. Horses and rides can be searched for as well to save time. The old platform had restrictions on combo numbers. We removed those restrictions and added validators to ensure only valid class numbers could be added, but do not have the original limitations that the clients disliked. When adding riders or adding horses we made the list appear in alphabetical order. Originally the list was in order of the day/time the rider or horse was entered into the system. We also added a more user friendly show results that can be viewed for each class. We added the ability to add classes from the "Edit Combo" page so that combo information and class entry information can be entered when editing a combo. We fixed several bugs/issues on the platform. There was a timing of keystrokes bug. When entering a rider's name or horse name -- user's had to type quickly -- even a slight pause in keystrokes will reset the suggested rider or horse name. For example: When a user tried typing the horse name "Assemblyman", if a user typed "A" it will suggest "Aristocrat", then type "s" the suggestion moved to "Socrates". But if the user typed "As" quickly "Assemblyman" would appear. We fixed this issue so it's no longer a problem. We added a feature for adding a combo from the Add Combo page when the horse and/or rider were missing from the database. We improved this so it kept the "add combo" window open, but be temporarily redirected to the add horse (add rider) pages. Then, when finished adding the missing horse or rider, be redirected back to finish the

Add Combo page -- without losing the information that was previously entered. Originally, the client had to close the add combo page and add the horse and/or add the rider then go back to adding a new combo. This allowed for quick registration to new riders/horses the day of the event. We also added in complete code coverage using Travis CI to ensure no new bugs will be added.

Once complete with building out of the platform. We will have to provide documentation on all the changes we have made from the original software. This is for Professor Ibrahim, in case he wants to reuse this as a capstone project. In addition, we need to provide documentation on setting up a JIRA server to host the horse show software. This allows for simple replication of hosting the website.

Mental Health Effects of Social Media

Social media is a new technology that hasn't been properly studied to see whether the positives outweigh the negatives. Look at smoking, for centuries it was viewed as vogueish and healthy. With 45% of the world's population using social media, it affects us as a society (Ennis-O'Connor, 2019). The internet is the newest form of communication bringing society to new heights of connectedness. The concept of people today being only clicks away from interacting with anyone is in the infancy stages of development and the research of the topic has yet to even take its first steps.

The research will be focused on how individual people's mental health has been affected as well as how social media is affecting society as a whole. The framework I am utilizing is unintended consequences (Coolingridge, 1980). Social media was created to form connections

with people. To be a place of community (Zuckerberg, 2017). Within all societies though, there are flaws and unintended consequences of their implementation. The impact of technology cannot be easily predicted until it is extensively developed and widely used.

This research is important due to a multitude of studies already existing today that point out the negative effects of social media. One of the first studies published about the Internet, showed that Internet use in general significantly affects social relationships and participation in community life (1998, Kraut et al.). In the paper, the authors found that increased time spent online is related unintentionally to a decline in communication with family members, as well as the reduction of the Internet user's social circle, which may further lead to increased feelings of depression and loneliness. This work was later followed by several other publications where it was suggested that computer use has negative effects on children's social development. The time children and adolescents spend in front of the computer screens has significantly increased (Pantic, 2014). This has led to the further reduction of intensity of interpersonal communication both in the family and in the wider social environment. Although social networks enable an individual to interact with a large number of people, these interactions are shallow and cannot adequately replace everyday face-to-face communication (Pantic, 2014).

The ability to interact with so many people is so seductive because it allows for the illusion of companionship without the demands of friendship (Turkle, 2012). Certainly, social media has had a profound effect on how people interact with their social networks. One way that social media is changing how young adults interact with their networks of relationships is by changing the privacy of these relationships. The relationships people have with others on Facebook are visible to many, often resulting in a loss of privacy within personal relationships

(Guadagno, 2013). Although being able to keep up with information about a friend's life via social media may be viewed as a way to remain close, this lack of privacy may actually backfire. It has been shown that monitoring others' activities on social media has inadvertently lead to negative relationship outcomes such as online and offline relational intrusion (Lyndon et al., 2011).

Studies have shown that having user's information be public results in users constantly comparing themselves to their friends and perfectly photoshopped influencers. They see their flaws and where they fall short. The intention of bringing images and videos on to social media was to provide a greater context, however, it has unforeseenly caused users to take drastic measures and have eating disorders in attempt of losing weight to match their peers. There was a survey of 1787 adults aged 19-32 about social media use and depression. The survey uncovered that there was a significant positive overall linear associations between social media use variables and eating concerns (Sidani, 2018). An eating disorder treatment center in Chicago revealed that 30–50% of its teen patients used social media as a means of supporting their eating disorders (Staff, 2016).

Social media is a powerful research tool for companies who want to know what user's are thinking. Companies are able to track a huge amount of information. Social media has a multitude of ways for seeking information from actually storing the data, scraping over the web, data mining, or measuring user behavior (Curran, 2018). There have been many unethical attempts to get even the slightest competition on. Recently, Facebook got caught using contractors to transcribe voice messages on messenger to be used as data points in models (Molina, 2019). Those models will then be used to provide targeted content to users. When this

much effort is being put into seducing users to stay on the site, the effects of such effort should be studied. It will be difficult to change this technology when it has become so entrenched into social media company's business model.

Research question and methods

What are the health effects of using social media? With all the time spent on social media, shouldn't its users have a solid understanding of the possible effects? I will be using case studies and interviews to find the answers to my question.

Case studies show records of research in which detailed consideration is given to the development of a particular person, group, or situation over a certain amount of time. I'll be looking into trends from the time period of before social media and what has changed since its arrival. The goal is to be able to use these studies to prove that there are detrimental health effects from direct use of social media. I will be looking at health studies that correlate social media use to quality of sleep, self-esteem/body image, depression, anxiety, promotion of risky behavior, the effect on social relationships and others. The objective is to prove that social media is the root cause for the changes in people's health, not some other cause. While I have already done a preliminary search, I want to be able to paint broad strokes on what social media does to us a society. Social media relies on network theory and I plan to use it to examine the spread of health-related behaviors. I will be looking into studies that measure social media usage and the user's level of happiness, self-confidence, depression, self-image, overall well-being, and other characteristics that might appear in the study. I will also be analyzing how

social media affects user's quality of sleep, time taken away from other activities, physical consequences, and potentially more.

Interviews will provide first hand experiences of the effects of social media. Having personal testimonials will provide explicit examples of certain health effects that I plan to back up with case studies to show it's not a one off event. I will be interviewing college students who do and don't use social media to compare the two. This will be able to show the contrast of what social media does it to the human psyche. I will also be looking at interviewing advocacy/political groups to get their viewpoint. I'll be looking into these groups to see why they are fighting for change and what are their selling points are. These groups will be a useful source of information in terms of their personal stories as well as research they have conducted.

Conclusion

The technical deliverable is a platform for recording and tracking horse shows that can be run locally or on a server. As well as documentation for setting up the platform and all changes made from the original platform. The timeline for the technical project is actually done. It was only a one semester capstone. All we need to do is document what we've changed to the system. I plan on writing a scholarly article going over the project. This platform will be used in future Virginia horse shows for more efficient events, less stress, and more portability of records.

The case studies and interviews will examine what effects social media has on its user's health. To prove that are serious negatives to using these platforms. Hopefully this will shed light on social media and make people think twice about the amount spent on social media. The

conducting of the research will be done by the end of February 2020 and a complete analysis of the research by March 2020.

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