

The Effects of Social Media & Mental Health among Youths

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It creates the feeling that you are on the outside looking in, can't participate, can't measure up, and would embarrass yourself if you tried,

- Gail Saltz, MD, an associate professor of psychiatry at the New York Presbyterian Hospital Weill-Cornell School of Medicine.

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Introduction to Social Media and Worldwide Consumption of Facebook

The consumption of social media alters happiness among youths.

Social media, whether one likes it or not, has been increasingly mainstream. This is not only prevalent among youths but also among adults and even retirees. It is seen as a form of escapism.

There are an estimated 3.6 billion users worldwide, and that number is projected to grow to almost 4.5 billion by 2025. While social media does not directly create depression, it instigates emotions and activities, or the lack of activities due to sedentary lifestyle, which can lead to depressive symptoms. While social media can cultivate a sense of community and reduce geographical barriers, unregulated consumption of social media can cause FOMO, aka “fear of missing out.”

Another behaviour that encourages depression is Doomscrolling - the idea that people can control what happens when they know everything. Doomscrolling is the habit of continuing reading the news on the internet even though it's depressing. Excessive doomscrolling can affect our view of the world.

“One of the most painful symptoms of depression is hopelessness. If you're watching more news than you need, or otherwise paying the most attention to negative content, then yes, it will contribute to depression,”¹ says Aimee Daramus, PsyD, a licensed clinical psychologist based in Chicago, IL.¹

¹ S. Fielding, 'How your social media habits may contribute to depression - and 4 ways to fix it', *Insider*, New York City, 2020, <https://www.insider.com/does-social-media-cause-depression>, (accessed 26 December 2020).

Correlation of Screen Time and Happiness among Teens

Research shows teens who spend more time than average on screen activities are more likely to be unhappy.

The survey from The Monitoring the Future survey, funded by the National Institute on Drug Abuse has asked 12th-graders more than 1,000 questions yearly since 1975 and 8th and 9th-graders since 1991 on how happy they are and how much of their leisure time they spend on different activities, including non-screen activities such as offline social interaction and exercise, as well as, screen activities such as social media, texting and Internet.

Eighth-graders who spend 10 hours or more a week on social media are 56% less happy as compared to those who spend less time. These same groups of teens who are heavy users of social media increase their risk of depression by 27%, compare to those who play sports, go to religious activities or even do more homework, then reduce their risk significantly.²

The more time teens spend on screen, the more likely they are to discover symptoms of depression.

Social media is also relentless in amplifying feelings of loneliness. Teens may spend less time in offline relationships, but when they do, they post their activities online, prompting the feeling of being left out for those who are not invited.

All screen activities lead to less happiness. In contrast, non-screen activities are linked to more happiness.

²J.M. Twenge, 'Have Smartphones Destroyed a Generation', *The Atlantic*, Washington, DC, 2017, <https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/>, (accessed 21 January 2021).

A group of people, including a woman with dark hair in a bun and a woman with blonde hair, are gathered around a table, looking at a smartphone. The scene is set indoors with a window in the background showing greenery. A dark blue semi-transparent overlay covers the center of the image, containing a quote.

“

Social media is addictive because users rely heavily on this medium to obtain gratification through likes, emoticons and comments from their online reference group.

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Why is Social Media so Addictive?

According to Defleur & Ball-Rokeach (1982), media dependency theory suggests that media influence is determined by the interrelations between the media, its audience and society. An individual's inner desire to seek information from the media is the primary reason why media messages have cognitive, affective, or variable effects. Media dependency is further driven when an individual's goal satisfaction relies heavily on information from the media system.

Rubin and Windahl (1986) proposed that media dependency also includes the gratifications sought by the audience as an interactive component with media dependency. It is the combination of gratifications sought and socially determined dependency that produced media effects and adoption. One's dependency on a medium or a message is reinforced when an individual either intentionally seeks out information or ritualistically uses specific communication media channels or messages.²

For example, McIlwraith (1998) discovered that self-labelled "TV addicts" often used this medium to distract themselves from unpleasant thoughts, to regulate emotions and to fill time. It is precisely this link between media dependency and functional alternatives that illustrates how uses and gratifications theory is "capable of interfacing personal and mediated communication" (Rubin, 1994b, p.428).

Variability of involvement indicates that the motivation to use any mass medium is influenced by how much an individual relies on it (Galloway & Meek, 1981) and how well the media satisfies his or her personal needs (Lichtenstein & Rosenfeld, 1983).³

Some may even use social media as a source of information, thus, further reinforce media dependency.

Notifications and two-way interaction among the online reference group also intensifies media attachment.

³ Ruggiero, T.E., 'Uses and Gratifications Theory in the 21st Century', *Mass Communication & Society*, 2000, [https://d1wqtxts1xzle7.cloudfront.net/31301720/uses_nd_gra.pdf?1369526559=&response-content-disposition=inline%3B+filename%3DAssessment of Routine Maintenance Needs.pdf&Expires=1614121449&Signature=gfidXzYkAZ0ABhcTUEGFF3MiBS0~hhhnRb7XsJI5v3TBzwredkj1LaHaovRkWu2jRedPU9~S0nDAiBYG0mzJRCvgxb7KokuZPpTLVcayX8s6tiyKXTpicr-tJmlxpBd1CoE~Vu1SGZ32IKtHDIPvCct9M31qJSNS~7ekyFtVu~z0-uh-tQIfEY4k-eUeKzYCx7gNWYOIZk8hln9-neak14scjgnrgYqQ5uxlQRuj4ZPNBsKjXcEXou8lh~5cOK7TOZyFFEpUrAOEHYxggEd3tqWUWMHFx0FOIMfzzbZ~8g3fyDMn1H~gwj8Xfk2EZS1lx3eU9XoEhahminTABZhzYw &Key-Pair-Id=APKAJLOHF5GGSLRBV4Z](https://d1wqtxts1xzle7.cloudfront.net/31301720/uses_nd_gra.pdf?1369526559=&response-content-disposition=inline%3B+filename%3DAssessment%20of%20Routine%20Maintenance%20Needs.pdf&Expires=1614121449&Signature=gfidXzYkAZ0ABhcTUEGFF3MiBS0~hhhnRb7XsJI5v3TBzwredkj1LaHaovRkWu2jRedPU9~S0nDAiBYG0mzJRCvgxb7KokuZPpTLVcayX8s6tiyKXTpicr-tJmlxpBd1CoE~Vu1SGZ32IKtHDIPvCct9M31qJSNS~7ekyFtVu~z0-uh-tQIfEY4k-eUeKzYCx7gNWYOIZk8hln9-neak14scjgnrgYqQ5uxlQRuj4ZPNBsKjXcEXou8lh~5cOK7TOZyFFEpUrAOEHYxggEd3tqWUWMHFx0FOIMfzzbZ~8g3fyDMn1H~gwj8Xfk2EZS1lx3eU9XoEhahminTABZhzYw &Key-Pair-Id=APKAJLOHF5GGSLRBV4Z), (accessed: 26 January 2021).

The Positive Effects of Social Media

There are lots of positive outcomes, derived from social media. In the aspects of education, it encourages collaboration and communication with students and one another. Some even use social networking sites to discuss educational topics and their assignments.⁴

Social media also facilitates political change, expedite disaster relief and gives social movements an instantaneous platform to disseminate information and mobilize people.

Information and news also spread faster online. Social media also helps friends to stay in touch with people you don't see regularly, and on occasions even make new friends.

Financially, social media provides new avenues of income. It is also a great place to hire and seek jobs.

Key findings from "The Social Network Effect: Determinants of Giving Through Social Media" reveals that an organisation's online donations can be driven by the size of its social network and the reach of its website.⁵ Online donations are driven by the number of 'friends'.

Social media is also key in building communities of similar interests, nationalities and various religions to discuss and spread the word.

Spreading awareness through social media, motivating people and simply assuring that they are not alone is a way to offer support and save lives. It allows people to share their experience with others. This way of communication generates emotional support and relieves social isolation.⁶

Emotionally, social media allows people to share their inner thoughts and develop self-expression without revealing their identity.

⁴ McGillivray, N., 'What are the Effects of Social Media on Youth', *Turbo Future*, New York, 2021, <https://turbofuture.com/internet/effects-of-social-media-on-our-youth>, (accessed: 28 January 2021).

⁵ A. Gauss, 'Social Media is Great for Nonprofits of Any Size', *Classy*, San Diego, CA, 2021, <https://www.classy.org/blog/the-social-network-effect-good-news-for-all-nonprofits/>, (accessed 24 February 2021).

⁶ V. Sharma, '7 Ways that Social Media is Affecting Us Positively', *Curatti*, CA, 2018, <https://curatti.com/social-media-positive-effects/>, (accessed 24 February 2021).

How Social Media is Affecting the Psychology of Users

After three weeks, participants who spent 30 minutes a day on social media said they felt less depressed and lonely, compared with participants who had no social media limits.

A study conducted by University of Pennsylvania demonstrates how social media use can cause fear of missing out “FOMO”.⁷

In this study of 143 participants, one group of participants limited their time spent on social media to 30 minutes a day, while another control group of participants continued their average usage of Facebook, Snapchat and Instagram. Researchers then tracked the participants’ social media via iPhone battery usage screenshots and asked participants to complete surveys about their mood and well-being.

“Using less social media than you normally would leads to significant decreases in both depression and loneliness. These effects are particularly pronounced for folks who were more depressed when they came into the study,” says Melissa G. Hunt, associate director of clinical training in Penn’s Psychology Department.

Hunt suggests that the reason for feeling depressed after spending so much time on social media derives from comparison. Users tend to think other people’s lives are better than yours through viewing someone else’s perfect pictures and curated life online.⁸

⁷ K. McSweeney, ‘This is your Brain on Instagram: Effects of Social Media on the Brain’, *Now by Northrop Grumman*, Virginia, 2019, <https://now.northropgrumman.com/this-is-your-brain-on-instagram-effects-of-social-media-on-the-brain/>, (accessed: 29 January 2021).

⁸ M. G. Hunt, ‘Social Media Use Increases Depression and Loneliness’, *Penn Today by University of Pennsylvania*, Philadelphia, 2018, <https://penntoday.upenn.edu/news/social-media-use-increases-depression-and-loneliness>, (accessed: 29 January 2021).

Algorithm-based Content Feeding Reinforces Current State of Mind

With algorithms, it automatically recommends and suggests contents that an individual is likely to be interested in, based on previous searches, clicks and even the duration of time spent looking at the posts.

In a large 2019 Canadian study among 3826 adolescents (47% girls), increase in screen time has led to increase in depressive symptoms. By 2020, mental health issues, including depression, are predicted to be among the leading causes of morbidity and mortality among adolescents. Stronger association between social media and depression is higher as it contains idealised actual individuals in real life, to which youth may socially compare themselves with individuals in a seemingly favourable position, such as perfect bodies and lives. It is also important to note how adolescents who consume algorithm-based content feeding, only reinforces the current state of mind.

The study also demonstrates that the increasing amount of time spent on social media by 1 hour within a year was associated with an increase in the severity of depression symptoms. An increase in social media screen time and depression amplifies self-esteem issues, particularly upward social comparison. The study also reveals that repeated exposure to idealised images affects adolescents' self-esteem, triggers depression and enhances depression over a period of time.

The research also suggests that heavier users of social media with depression are more negatively impacted. This could be due to the time spent on social media and the information that was selected, which could potentially enhance depression over time. Studies also show that the lower adolescents' mood level is, the less positive content they select. It is also suggested that there should be more research done on how algorithm functions enhance this process. It is important to note that social media affects only depression levels and not self-esteem.⁹

The study also concludes that adolescents' social media and television consumption should be regulated to prevent the onset of depression and to reduce the amplification of existing depressive symptoms.

⁹Boers, E., Afzali, M.H., Newton, N., et al., 'Association of Screen Time and Depression in Adolescence', *Jama Network*, Chicago, 2019, https://jamanetwork.com/journals/jamapediatrics/article-abstract/2737909?guestAccessKey=f3fe2ed6-1fb3-44cc-a9a8-a38bd0463942&utm_content=weekly_highlights&utm_term=081019&utm_source=silverchair&utm_campaign=jama_network&cmp=1&utm_medium=email, (accessed: 26 December 2020).

Be Wary about Younger Users on Instagram

The reason why people get so attached to social media is because humans are wired to find social interactions rewarding, said Dar Meshi, a cognitive neuroscientist at Michigan State University.

Instagram, which is owned by Facebook, has recently started testing out a new policy to remove likes from the platform. In the past, users could previously see how many likes from other posts, however, now they can only see likes on their own photos. While the loss of likes may improve mental health, that little heart-shaped button is a profitable tool for influencers, with 3.7 million brand-sponsored posts in 2018.

CEO, Adam Mosseri, explained that anxiety and social pressures that come from the app “are becoming more acute, particularly with young people, particularly in a mobile-first world.”¹⁰ These interactions, whether it’s a like, comment or share is uplifting to users. Meshi relates such online engagements as pleasurable social experiences, similar to when a listener nods their head during conversations or when someone gives you a compliment.

This seemingly harmless social reward system activates the ventral striatum, a part of the brain that highlights reward-related behaviour. This makes social media so enticing because it is the same area that get humans fired up when people gamble, enjoy a slice of cake or have sex, according to cognitive neurologist Ofir Turel.

Another very attractive feature of social media is that when users post, they do not know how many likes and when they will receive them. This feeling of ‘fear of missing out’ (FOMO) then encourages users to check social media frequently to see when this new information will appear.

Turel believes younger Instagrammers are more tempted with social media because the brain’s reward system develops and matures at a young age, however the mental regions on managing self-control don’t finish developing until at a later age. Excessive social media use can be problematic, leading to sleep disruption, productivity loss and interpersonal conflicts.

¹⁰J. Keventhal, ‘How removing ‘likes’ from Instagram could affect our mental health’, PBS News Hour, Virginia, 2019, <https://www.pbs.org/newshour/amp/science/how-removing-likes-from-instagram-could-affect-our-mental-health>, (accessed 3 January 2021).

“They have a very mature accelerator, but the brake system is not mature yet,” Turel said. “For example, they go on social media and they want to see one video, and they’re sucked in. Two hours later, they realise they’ve watched 200 cat videos.”¹⁰

Losing the ability to view other user’s likes greatly impacts how users use the app. By removing likes, Instagram removes reference points as users are no longer able to compare their numbers to others. Turel believes by removing the likes, it may make Instagram a safer environment.

Meshi draws similarities to other addictive behaviors, like a gambler pulling the lever at a slot machine with users who regularly and repeatedly check social media for online interactions. Meshi and Turel were also quick to point out that there were several key differentiation factors between excessive social media use and substance addiction. The consequences of substance addiction can lead to criminal behavior vs minor negative effects for excessive social media use. Also, disconnecting from social media may cause irritability but withdrawal symptoms from substance addictions can be physical like sweating and shaking.

Removing likes will alter how influencers do business as “likes has been the standard of measurement up until now”, says Evan Asano, founder of the influencer marketing agency Mediakix.¹⁰

When brands select influencers to represent their product, it is highly influenced by the influencer’s engagement rate, ratio of likes to followers. The higher the engagement rate, the more valuable the influencer is for the brands.

¹⁰J. Keventhal, ‘How removing ‘likes’ from Instagram could affect our mental health’, PBS News Hour, Virginia, 2019, <https://www.pbs.org/newshour/amp/science/how-removing-likes-from-instagram-could-affect-our-mental-health>, (accessed 3 January 2021).

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Imagine if every time you go to a bank, you get your balance, but you also see the balance of other people. It will cause most people to feel annoyed or dissatisfied with what they have.

”

- Ofir Turel, cognitive neurologist



The Instagram Experiment

The idea of removing the likes is so that it could reduce the negative implications and eliminate the competition to have the most “likable posts”, thus, increasing authenticity across posting.

Instagram is testing this to have users concentrate on the posts and interacting with the app rather than likes. A recent report from UK’s Royal Society for Public Health (RSPH) and the Young Health Movement demonstrates negative factors like anxiety, depression, loneliness, sleep quality and negative body image linked to social media, despite there were some positives about the opportunity for self-expression, a sense of community and accessing health information.¹¹

Influencers have expressed concerns about their feed ranking in the algorithm and their source of income. Followers counts on profiles will still be there, as they are the main source of sponsorships for influencers.

With the inability to publicly see likes, developers will need to update the algorithm and find new ways to curate content feeds based on other factors, for example engagement through comments.

¹¹ N. Martin, ‘Instagram may be getting rid of ‘likes’ on platform’, *Forbes*, New Jersey, 2019, <https://www.forbes.com/sites/nicolemartin1/2019/04/30/instagram-may-be-getting-rid-of-likes-on-platform/?sh=1d04291b31d1>, (accessed: 4 January 2021).

Reference Group as Opinion Formation on Social Media

The people with whom you choose to follow on social media, then becomes your opinion formation. They reinforce your thoughts, beliefs and shape your opinion on an ideal lifestyle, intensifying conformity, disguised as trends. Hence, they become your “online reference group”.

The concept “reference group”, first used by Hyman (1942), have long been recognised by sociologists and other social scientists whereby one’s attitudes, self-evaluations, behaviour and opinions are shaped by the groups to which one belong.¹² Hence, their perspectives are shaped by groups of others rather than the person’s own. The way an individual evaluates their social status is contingent on their choice of a social framework for comparison.

These reference groups then reinforce an individual’s positive and negative behaviour. It influences what behaviour is to be avoided and what is to be emulated.

Comparative and normative functions of reference groups, as drawn by Kelley (1952) are simply two aspects of the same entity.¹³ The very same reference group is the source of the individual’s norms, attitudes, values and standards against which they evaluate their adequacy, accuracy and validity.

Self-evaluation and appraisal apply when he or she accepts the evaluations expressed by others and applies it to themselves as normative referents. No comparisons are needed in this process of self-evaluation. The implication of normative reference orientations is conformity to the norms of a group to which the individual aspires to belong, rather than those they currently hold membership.

¹² Hyman, H. H., *The Psychology of Status*, Archives of Psychology, no. 269, 1942, cited in Singer, E., *Reference Groups and Social Evaluations*, cited in Rosenberg, M., Turner, R. H., *Social Psychology: Sociological Perspectives*, New Jersey, Library of Congress, 1992, p. 66.

¹³ Kelley, H. H., *Two Functions of Reference Groups*. In *Readings in Social Psychology*, 1952, p. 68.

It also comes across through a process of comparison to others. Self-evaluation is formed directly on the basis of appraisal by others, but also indirectly as a result of comparing his or her current situation with others. These comparisons also have normative force, in which it implies an expectation level and carries the implication of “ought” and “should”.

It is important to note many have used reference group concepts to rationalise the changes in behaviour and attitudes. These “online reference groups” or social media influencers create ripple effects to behavioural change. More so, the power of social media in evoking conformity in political beliefs or ideologies.

When these changes evoke conformity with attitudes and behavioural change to which an individual aspires to belong, it is referred as “anticipatory socialisation”.

Social Media and Dopamine

Dopamine helps in reinforcing the pleasurable feeling, which will allow individuals to continue seeking the activity. These behaviours are similar to substances.

The strategy used among social media platforms like Instagram, Facebook, Snapchat in hooking many users is the release of dopamine into the brain.

“Cognitive neuroscientists have shown that rewarding social stimuli - such as laughing faces, positive recognition by our peers, and messages from loved ones - activate the same dopaminergic reward pathways,” says Research Technician, Trevor Haynes at Harvard Medical School.¹⁴

Humans are wired for connection and social interaction. When a user shares a post, it is expected that other users will visit, comment or like the posts. This leads to a notification where others have acknowledged your ideas or opinions. Precisely this repetitive cycle reinforces social media use among users as it increases the threshold and promotes engagement from the user.

Social media has increasingly become a way of life where users display their daily lives and thoughts to followers, friends and family. Users want to “stay involved” with what’s happening and the availability of having interactions with others. When this accessibility is missing, this can cause feelings of isolation or also known as F.O.M.O = Fear of Missing Out.

In order to sustain this level of stimulation, we now always have our smartphones readily accessible, so much that it has entirely changed the way we communicate and interact with people even in public places, and even in the privacy of our own home.

One must recognise both the benefits and consequences of the rapidly evolving social media technologies. If used correctly, it becomes a voice, connection and for some, marketing. Misuse will lead to maladaptive behaviours e.g. lack of face-to-face interaction, distractions from school or work, lack of sleep etc.

¹⁴ B. Mireles, ‘Your Brain on Social Media: What Makes It So Addictive?’, *Painted Brain*, Los Angeles, 2019, <https://paintedbrain.org/lifestyle/your-brain-on-social-media-what-makes-it-so-addictive/>, (accessed: 5 January 2021).

Every notification, whether it's a message, "like" on Instagram or Facebook reinforces this positive stimulus and creates a dopamine influx.

Some form of boundaries and screen time limitations are wise. Real life engagement and socialising will also be able to provide a different level of connection. Limiting the amount of time spent on social media will give us the feeling of self-control vs being overly stimulated in this new digital era.

Social media platforms like Facebook, Snapchat and Instagram leverage on similar neural circuitry used by slot machines and cocaine to keep users addicted to the app.

Statistics have shown that adults in the US are spending 2-4 hours per day on the phone, tapping, typing and swiping on their devices. About 73% of people experienced a mild state of panic when they misplaced their phone. We become so entwined with our digital lives that we sometimes feel that the phone is vibrating, even when it's not.¹⁵

The true drivers of attachment are the hyper-social environment that smartphones allow access to. Through our smartphones, we carry an immense social environment in our pocket, a potential of 2 billion potential connections. Many have probably wished to spend less time with our phones but can't disconnect. Studies have also shown the links between smartphones usage and increased level of anxiety and depression, poor sleep quality and increased risk of car injury or death.

Dopamine is a chemical that is released in our brains when we for example, take a bite of delicious food, when we have sex, after we exercise and, in this context, when we have successful social interactions. This rewards beneficial behaviours, reinforce the association between a particular stimulus or sequence of behaviours and the feel-good reward that follows, which then motivates us to repeat them. Every time we experience the reward, these associations become stronger through this process called long-term potentiation.

This process then strengthens the frequently used connections between brain cells called neurons by increasing the intensity at which they respond. Cognitive neuroscientists have demonstrated that rewarding social stimuli - emoticons, positive recognition by our peers, messages from loved ones, all activate the same dopaminergic reward pathways.

Social apps through smartphones provide us an unlimited supply of social stimuli, both positive and negative. The more we engage with it, the more it reinforces this reward pathway.

¹⁵ T. Haynes, 'Dopamine, Smartphones & You: A battle for your time', SITN, Harvard University, Boston, 2018, <http://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/>, (accessed: 6 January 2021).

The Psychology of Social Media Users

Social Proof Theory – The Impact of Social Media Influencers on Followers

One of the very potent weapons of influence is the principle of social proof, whereby one determines what is correct through finding out what other people think is correct. This principle applies particularly to the way we decide what we establish as correct behaviour. We view a behaviour as more correct in any given situation, relative to the degree that we see others performing it. The actions and reactions of those around us will be important in defining our own actions.

As a general rule, we make fewer mistakes by acting in accordance with social evidence than contrary to it. This is a convenient way for determining how to behave, yet, at the same time, those who use this shortcut are vulnerable to influence unknowingly.

Relating to social media, users' internal decision to purchase, dine or engage in a brand is very much influenced by the numerical likes, followers and views. When one is uncertain or have never tried before, they then apply the principle of social proof, which is assuming that if so many users like, follow and view a particular brand, it must be good. Hence, influencing their purchasing decision.

Cavett Robert, sales and motivation consultant illustrates this principle well, "Since 95% of the people are imitators and only 5% initiators, people are persuaded more by the actions of others than by the proof we can offer." The principle of social proof performs best when the proof is provided by the actions of a lot of other people.¹⁶

¹⁶ R. B. Cialdini, *Influence: The Psychology of Persuasion*, New York, HarperCollins Publishers, 1984, p. 118.

In the social media world, when one is uncertain of the efficacy of a product or service, one then refers to the testimonials or social media influencers to determine their own purchasing behaviour. In the mind of the consumers, “it must be good”. Hence, social proof theory, at times are used not by others, but by ourselves - to convince us that what we prefer to be true will seem to be true. Social proof merely confirms the innate interest and desires.

The numerical followers, likes and comments hence, affect the psychology of social media users, even in the absence of direct contact with the social media influencer or product. The greater the number of followers who find any idea or product acceptable, the more it is acceptable.

The principle of social proof operates most powerfully when we are observing the behaviour of people just like us. Hence, advertisers leverage on this theory by demonstrating online testimonials and endorsements through social media influencers that seem like “ordinary” people, influencing the psychology of social media users.

In line with the influence of social proof, Dr David Phillips illustrated this further with the “Werther effect” - the effect of emulative suicides across Europe when the hero of a German novel, Werther commits suicide. In a morbid illustration of the principle of social proof, readers decide how they should act on the basis of how some other troubled person has acted.

Hence, social media amplifies such effect due to the accessibility and speed of the dissemination of information among online users. It is not surprising then, why advertisers choose to launch or have a group of social media influencers posting on a product or services simultaneously, attempting to influence the behaviour of their followers.

Therein lies the danger of social media as this social proof is now a numerical data - i.e. 35 million followers, 1 million likes, 5,000 comments.

Liking – How Physical Attractiveness is Influencing Social Media Users

Research has shown that we instinctively associate good-looking people with favourable traits such as talent, kindness, honesty and intelligence. Other experiments have shown that attractive people are more likely to obtain help when in need and are more persuasive in influencing the opinions of an audience.¹⁷

Hence, with the nature of attractive social media influencers, who tend to portray their best self forward, social media users tend to be influenced by them. More so, if one resonates with the social media influencer who seems to be similar to us.

Association, Advertising and Social Media

Advertisers have long used this association theory to lend positive traits such as beauty and desirability to their products. You see this so often in the automobile industry and beauty products.

Hence, the linking of celebrities and social media influencers to products and services are highly widespread on social media. Social media influencers are paid well even for a single posting and their creative association of themselves with the product. The important thing from an advertiser point of view, is to establish the connection for their respective users.¹⁸

¹⁷ R. B. Cialdini, *Influence: The Psychology of Persuasion*, New York, HarperCollins Publishers, 1984, p. 171.

¹⁸ R. B. Cialdini, *Influence: The Psychology of Persuasion*, New York, HarperCollins Publishers, 1984, p. 191.

Portraying Authority on Social Media

Culturally, we are brought to comply with authorities, namely parents, teachers, and the government. All individuals have a deep-seated sense of duty to authority within us all. In fact, our authority frequently occurs with little or no deliberation.

Information from a recognised authority seem to provide us a valuable shortcut for deciding how to act in a situation. It is also easier to allow ourselves the convenience of automatic obedience, rather than thinking it through.¹⁹

Social media influencers with high numerical followers seem to be able to command such authority among social media users. This leads to unthinking behaviour when social media users are exposed to products and services that are associated with social media influencers.

In some cases, we also see the existence of trappings of authority on social media via titles, clothes, mansions and fine automobiles. This seeming portrayal of success then triggers compliance among social media followers.

¹⁹ R. B. Cialdini, *Influence: The Psychology of Persuasion*, New York, HarperCollins Publishers, 1984, p. 218.

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The question then becomes, do high social media followers imply authority and subject matter expertise or are they just attractive, and in some cases, provocative.

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Scarcity and its Influence on Social Media Users

The idea of potential loss plays a huge role in human decision making. Though it may seem common, however, it seems to work. When a product or service seems rare or becoming rare, it is more valuable, hence its rarity is able to elicit an increased desire for it.

In our attempt to justify the desire, we begin to assign positive qualities to make sense of our desire for the product or service.

Limited editions and time limits are prevalent in social media. The idea is to drive urgency among consumers, without thinking too much about it.²⁰

The scarcity principle combined with liking through good-looking social media influencers is potent in influencing the psychology and purchase decision of social media users.

²⁰ R. B. Cialdini, *Influence: The Psychology of Persuasion*, New York, HarperCollins Publishers, 1984, p. 251.

How is Social Media being Consumed in Other Parts of the World?

Social Media in Nordic Countries

In Denmark, one in four 15-year-old girls spend at least 4 hours a day on social media and other forms of digital communication, as compared to 15-year-old boys. Facebook in particular is extremely popular among Nordic young people, with penetration of 85% to 95%.²¹

Facebook, undoubtedly is the world's most popular social media platform. Nine out of ten use Facebook regularly among young people in the Nordic countries.

Predominantly, research has linked between the use of Facebook and unhappiness. However when there is user engagement and direct communication with others, Facebook has been found to stimulate feelings of connectedness, social capital and self-esteem. This research highlights the available research is insufficient to determine causation.

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

The Facebook Experiment

Active Facebook use leads to increased positive affect - i.e. better mood.

In March 2019, a research was conducted with 860 respondents, mainly young women (84%), age between 14 and 29 years old. It is crucial to note the correlation between the use of Facebook and well-being is largely dependent on how young people spend their time on the platform. There are 2 types of social media use:

Active use:

User engagement and direct communication with others. This includes posting status updates, sending messages, commenting on posts and sharing information.

Passive use:

Scrollers passively consume content without engagement and directly communicating with others. On Facebook, this includes scrolling through the newsfeed, reading other user's status updates and looking at friend's pages.

The diverse consumption of Facebook correlates with the outcomes.

Passive Facebook use leads to negative affect - i.e. poorer mood. These associations are valid even for those with few offline close social ties.²¹

This is also further illustrated by Frison and Eggermont (2016) whereby girls who passively use Facebook and boys who actively use Facebook in a public setting were more likely to be affected by the negative impacts of Facebook.²²

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

²² B. Keles, N. McCrae, A. Grealish, 'A Systematic Review: The Influence of Social Media on Depression, Anxiety and Psychological Distress in Adolescents', *Taylor & Francis Online*, London, 2019, <https://www.tandfonline.com/doi/full/10.1080/02673843.2019.1590851>, (accessed: 4 March 2021).

The Effects of Facebook

Overall, looking at your Facebook friend's pages is the strongest trigger to change among young people's emotions.

The variety of Facebook engagement generates various positive and negative emotions. For instance, users who share links predict a +5% happiness, as opposed to users who didn't share any links at all. Time spent sharing links is also correlated with increased feelings of pride and decreased feelings of loneliness. Searching for events is correlated with increased feelings of interest.

On the flipside, time spent scrolling on the newsfeed is correlated with lower levels of happiness. This is valid even after adjusting the amount of time spent on Facebook, the number of close relationships, the general level of social activity and various socio-economic factors.

Looking at your Facebook friend's pages correlate with decreased feelings of interest and pride, as well as increased feelings of loneliness and shame.

It is important to note that users tend to share more positive than negative experiences online, hence, the more time users spent on Facebook passively scrolling and observing the lives of others, the more likely they make social comparisons. These upward social comparisons generate a decrease in happiness.

It is also important to note many Facebook activities do not trigger any changes in young people's emotions. Posting status updates, sending messages, commenting on other people's posts, and reading status updates are not correlated with changes in either positive or negative affect.²¹

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

The Relationship between Close Social Relationships and Consumption of Facebook

The longer they spend on social media, the more anxious they become. These emotions are less visible if they have two or more strong social ties.

In this experiment of 850 respondents, young people who have less than two close relationships see an increase in social media consumption, which leads to emotions of loneliness and anxiety.²¹

This suggests that Facebook amplifies feelings of loneliness and anxiousness and it becomes an isolating and stressful experience.

An equally sound justifiable explanation might be that users who are lonely and anxious are likely to spend more time on Facebook. The research is uncertain whether more Facebook use causes unhappiness, or whether unhappiness causes more Facebook use.

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

Correlation between Social Media Consumption and Offline Well-being

*Key findings
from PISA
analysis
revealed that
girls seem to
be more
dependent on
social media
compared to
boys.*

The outcomes of this survey revealed that the higher social media consumption, it correlates with lower life satisfaction, negative social comparisons, reduced trust in others, less participation in cultural events and less volunteering.

It is important to caution that these results alone are inconclusive, as it does not determine the significant threat of social media to the well-being of young people.

An estimated 59% of 15 to 16-year-old girls in Nordic countries reported feeling uncomfortable when they have no access to the internet, in comparison to 54% of boys. It is a relative minor difference but surprising, given that boys spend more time on the internet. The findings also revealed that although girls generally spend less time online, they spend more time on social media.

Spending more time on social media is strongly predictive of feeling uncomfortable without internet access. As a result of this, girls in the Nordic countries more frequently experience the negative aspects of digital technology.²¹

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).



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Increased in social media consumption is strongly correlated with lower life satisfaction, particularly among girls who have little or no emotional support from their parents.

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Parental Support plays an Imperative Role in Social Media Effect

PISA analysis denotes a negative association between social media use and life satisfaction among girls.

These groups of girls tend to feel worse if they spend more time on social media. This is in congruent with results previously presented whereby young people's offline social relationships play a vital role in determining the emotional affect, derived from Facebook consumption.

Extreme Use of Social Media

Social media has different effects, depending on which platform is being consumed. This independent survey of 1,160 respondents from Nordic countries demonstrate that overall Facebook and LinkedIn have mostly insignificant and even positive associations with well-being.

In contrast, spending more time on Twitter, YouTube, Instagram, Snapchat or Tinder is linked to a number of negative outcomes.

The survey asked respondents to rate how often they used these social media platforms and response varies between "0 = I don't use this platform" to "6 = multiple times per hour". Heavier users on Snapchat and Tinder are more likely to make negative social comparisons.²¹

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

For young adults, social media use no longer predicts declines in life satisfaction.

Consuming YouTube predicts lower levels of social activity, cultural events participation and volunteering. Instagram and Snapchat are also associated with lower levels of trust, while the latter is also related to decreased participation in cultural events and less volunteering.

Surprisingly, Snapchat and Instagram are also associated with increased level in social activity. Interestingly, when the samples are divided into 2 categories: teenagers (14 to 19-year-old) and young adults (20 to 29-year-old), there seem to be diverging effects.

Young adults are more likely than teenagers to make negative social comparisons when they use Facebook more.

The Link between Social Media and Social Comparison

In this survey, increased consumption of social media platforms (Facebook, Instagram, Snapchat and Tinder) is correlated with negative social comparisons. Young people who spend more time on these platforms are more likely to think their friends are happier than they are.

Social media is designed in such a way that social comparisons are present and even amplified. Comparison of information is more evident in social media as opposed to their real life.²¹

Social media users tend to present their best and ideal self, which may be incoherent with their real life. In fact, with social media the comparison is now numerical, where we can view the number of followers, likes and comments that we or our friends do.

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

How is social media being consumed in Asia, specifically in Singapore?

Social Comparison and its Effects on Self-Esteem & Social Anxiety among Singaporeans

In a study done in Singapore among 388 participants, with 70% of social media penetration among Singaporeans. One of Instagram's defining features is that it allows users to beautify their photos by using filters. These filtered photos then portray an idealised beauty, which may affect the users' emotional and psychological responses.²³

Social comparison is defined as people's biological inclination to compare their situation, skill and overall identity in comparison with others, based on the information they receive about others. In which some may rank themselves lower than others, which leads to negative mental health assessment of self-imagery during social interactions.

Interestingly, even downward social comparison, which is comparing oneself with others who are deemed inferior, may enhance one's social anxiety. People with greater tendency to compare themselves upwards or downwards have greater concern about how they are being evaluated by others. Due to this tendency, they would make efforts to conform to certain social norms. Over a period of time, this self-consciousness, as an effect of social comparison may lead to one's perception of lack of social skills and even fear of social interactions.

This situation of upward social comparison may lead to an increase in social anxiety.

²³ S. Jiang, A. Ngien, 'The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore', *Sage Publications*, Los Angeles, 2020, <https://journals.sagepub.com/doi/full/10.1177/2056305120912488>, (accessed: 27 December 2020).

Through social media, users selectively revealed their preferred or ideal identities or characteristics. Hence, when users view those pictures, they would unintentionally do social comparison. Social media comparison is further amplified with numerical and measurable feedback, for instance, the number of likes, followers, comments and retweets. In contrast with offline social interactions, a user's online profile is more numerical and measurable. Their social popularity is measurable.²³

Most importantly, in order to generate the online media presence and feedback, one has to maintain their offline social networks. This may further amplify the effect of social media comparison.

Empirical evidence has shown the corresponding relationship between social media consumption and social comparison. In a study among young adults in the Netherlands, it demonstrates the higher the intensity of Facebook use, the more it is associated with social comparison.

A similar conclusion was also found in Instagram, whereby social media can predict the individual differences in social comparison orientation, behaviour and characteristics. In fact, even within the health care setting, social media users tend to compare their health status, conditions and treatments.

Precisely these social comparisons may lead one to believe that external conditions or socially approved benchmarks through numerical likes and followers are more important than internal and personal traits. As one assumes his or her inherent characteristics to be less important in obtaining online social media recognition, the sense of self-esteem is lowered.

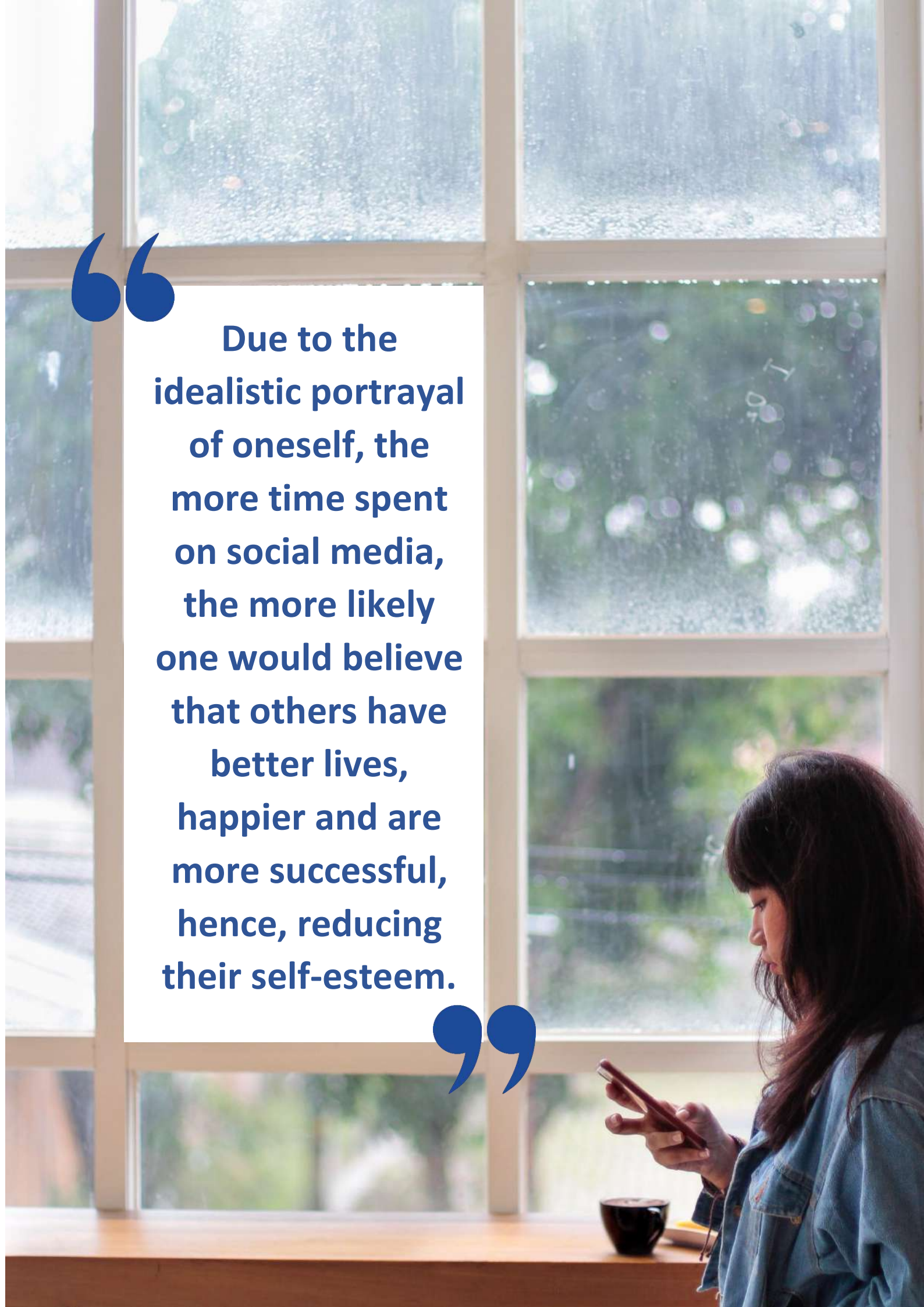
Past studies also shows that when users perceive their social media friends have better lives comparatively, their self-reported self-esteem level was lower.

These filters allow Instagram users to select and exaggerate positive life scenarios compared to Facebook users. Notably, Instagram is more visual focus, which then creates higher impression formation by escalating social presence. Visuals also command higher attention and recall than text-centred information like Facebook.

Hence, social media comparison and its effects on self-esteem becomes more prevalent on Instagram.

It is interesting to note that Instagram users may increase users' social comparison and its effect on self-esteem, due to different technological features such as options of enhancement filters.

²³ S. Jiang, A. Ngien, 'The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore', *Sage Publications*, Los Angeles, 2020, <https://journals.sagepub.com/doi/full/10.1177/2056305120912488>, (accessed: 27 December 2020).



Due to the idealistic portrayal of oneself, the more time spent on social media, the more likely one would believe that others have better lives, happier and are more successful, hence, reducing their self-esteem.

This online study, conducted among 388 pax of Singaporeans revealed that Instagram use increased social comparison, which leads to reduced self-esteem and finally resulting in greater social anxiety.²³

It is vital to note that the direct path from Instagram use to social anxiety was insignificant. The findings demonstrated that social comparison and self-esteem completely mediated the effect of Instagram use on social anxiety.

Specifically, social media platforms like Instagram, photo and video sharing social networking site, Instagram allows users to create personal profiles, offer abundant opportunities to information about other people's lives, which then allows users to follow, view, like, comment on influencers and celebrities that you may not know personally. The use of hashtags can further drive social comparison as all hashtags are searchable, making it more accessible to a broad base of users.

The results also show that social comparison can increase one's social anxiety. Through visual and video-based content, users tend to compare themselves with other user's appearance, ability, popularity and social skills through numerical followers, likes and comments. Such comparisons amplify strong psychological responses, particularly when users have the option to portray their desired and idealised images of themselves. The use of various filters to edit and enhance photos can further activate negative emotions, contributing to negative psychological responses, leading to greater social anxiety.

The findings also indicated that social comparison significantly decreased self-esteem. The results are consistent with previous findings where higher social comparison orientation correlates with poorer self-perception, lower self-esteem and more negative feelings. Social comparison increases awareness of certain norms (e.g., beauty standard, correctness of opinion).

The data also reported that the increased frequency of Instagram use is correlated with higher social comparison.

²³S. Jiang, A. Ngien, 'The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore', *Sage Publications*, Los Angeles, 2020, <https://journals.sagepub.com/doi/full/10.1177/2056305120912488>, (accessed: 27 December 2020).

It is important to note that social media does not directly influence social anxiety. However, through social comparison, specifically on the user-media-message interaction process, social media evokes emotions, affecting self-esteem, which then has an impact on greater social anxiety.

Specifically, when users see other users' beautified photos and videos (media feature), users would mentally compare themselves with the photos and videos (message processing). Due to this process, social media has an impact on one's emotional state.²³

This research also suggested practical implications such as, social media users should be mindful of the use of social media, particularly those with greater inclination of social comparison.

One should try avoiding frequently trying to compare abilities and opinions of others and should such circumstances arrive, be conscious that the user's online self-representation only reflects an idealised version of oneself.

Social media users may consider using cognitive reframing strategy to combat comparison-triggered emotions and view others' triumphs and achievements as a source of inspiration.

This research concludes there are no direct effects of social media on social anxiety. Having said that, it is completely mediated by social comparison and self-esteem.

When social media users realised they are different from the norms, they tend to make changes to suit societal expectations and values of the referent group.

²³ S. Jiang, A. Ngien, 'The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore', *Sage Publications*, Los Angeles, 2020, <https://journals.sagepub.com/doi/full/10.1177/2056305120912488>, (accessed: 27 December 2020).

Social Comparison and Online Reference Group

One motive, as suggested by Festinger (1954) is an individual's need to evaluate one's opinions and abilities. In line with the theory of social comparison processes, Festinger observed pressures toward uniformity of opinions due to a universal need to evaluate one's abilities and the validity of one's opinions. It is essential to note that in social comparison, one tends to rely on comparison with other people, should there be no other objective means available.²⁴

In social comparison, Hyman (1942) commented on two aspects, namely status enhancement and status depreciation, in which both comparisons with others dissimilar with respect to specific dimensions.²⁵

In status enhancement, one tends to compare themselves with others who are worse off, therefore, enhancing their self-esteem or satisfaction.

In status depreciation, one tends to make comparisons unfavourable to themselves, thus, selecting a reference group whom they think are better off.

Such subconscious comparison, resulting in dissatisfaction, can then act as a lever for change or lead to demands for change e.g. job, pay etc. (Patchen 1958, 1961).^{26 27}

Festinger also noted that one tends to make evaluations based on opinions and abilities "close" to one's own.

²⁴ Festinger, L., *A Theory of Social Comparison Processes*, Human Relations 7, 117-40, 1954, cited in Singer, E., *Reference Groups and Social Evaluations*, cited in Rosenberg, M., Turner, R. H., *Social Psychology: Sociological Perspectives*, New Jersey, Library of Congress, 1992, p. 77.

²⁵ Hyman, H. H., *The Psychology of Status*, Archives of Psychology, no. 269, 1942, p. 77.

²⁶ Patchen, M., *Group Standards and Job Satisfaction*, Human Relations, 1958, p. 77.

²⁷ Patchen, M., *A Conceptual Framework and some Empirical Data regarding comparisons of Social Rewards*, Sociometry, 1961, p. 77.

Suls and Miller (1977) recognizes that many comparisons have an evaluative component, hence, judgments of consonance and dissonance are likely to have repercussions on self-esteem as well.²⁸

With positive evaluations, one's satisfaction with one's performance or status increases, under selected conditions, when it exceeds the expected level.

On the flipside, the consequences of comparison may also result in negative evaluations. When one compares with another person, they find themselves wanting. Should the dimension to which they compare themselves with are desirable, the consequence is dissatisfaction with self, which depending on their feasibility to bring about change, may lead to striving for achievement or to emotional or physical symptoms of stress (Crosby, 1976).²⁹

Psychologically, youths are prone to have social comparison in their adolescence as their need to present an ideal body image has also developed (Morrison et al., 2004). Morrison explains that the Social Comparison Theory has both upward and downward comparisons that are universalistic and particularistic.

Upward comparison compares someone that has a more alluring and fascinating lifestyle, which is detrimental to the confidence of a person (Suls et al., 2002; Wills, 1981). As illustrated by Festinger (1954), Social Comparison Theory emphasises on the individual's insecurity and the need to constantly measure and assess themselves to define themselves.

The danger lies in subconscious incessant comparisons with filtered, idealised and unrealistic images of social media that would encourage youths to abandon their current goals and pursue new ones, depending on the frequency of social media usage.

Downward comparison compares individuals who are more inferior to them will then provide validation and dominance (Suls et al., 2002; Wills, 1981).

Visual-based social media, such as Facebook and Instagram spur this comparison further, affecting the mental health of social media users. Pictures and videos evoke emotions, arouse uncertainty, affect self-esteem, and therefore, has an impact on greater social anxiety. Rooting from this perspective, features such as likes, may even serve as a numerical online validation and affirmation from followers, which we may or may not have direct contact in real life.

This "online reference group" is a tricky one, as they only portray the idealised self and predominantly the positive self. As opposed to real life reference groups, you are more likely to see and experience both the positive and negative side of life.

²⁸ Suls J. M., and Miller, R.L., eds, *Social Comparison Processes*, Wiley, 1977, p. 84.

²⁹ Crosby, F. A., A Model of Egoistical Relative Deprivation, *Psychological Review*, 1976, 83:85-113, p. 86.



Hence, in algorithm-based social media, the reference group with whom we compare ourselves with online, reinforces this notion, and depending on who we choose to “follow” or our “friends”, they become our “online reference group”.



Social Media Consumption in Malaysia

Zooming to Malaysia, it is ranked as one of the highest users of social media in the Asia Pacific Region. Social Media Marketing statistics shows 71% of internet users (22 million) having an account on a social media platform. Among social media networks in Malaysia, Facebook topped as the most active social platform with internet users accounting 22 million Malaysian users, with 91% of the users accessing via mobile. The popularity of Facebook is followed by Youtube with 68% Malaysian users, Whatsapp with 60% and Instagram with 47%. Malaysians also spend about 2.8 hours per day on average just on social media. 73% of consumers have been impacted by a brand's social media presence when making a purchase decision.³⁰

Malaysian youths, aged between 13-34 years old comprise 80% social media users in Malaysia. The highest users of social media in Malaysia are youth aged 18-24 years old (35%), followed by 25-34 years old (30%) and 13-17 years old (17%).³¹

These youths engage in social media such as Facebook, Twitter and Instagram frequently on a daily basis. Malaysian youths use social media to serve different functions, which include but not limited to education, information seeking, entertainment, communication and socialisation.

The primary reason why Malaysian youth use social media is for peer-to-peer communication. Platforms such as Facebook and Twitter provide an opportunity for youth to communicate, socialise, network, participate based on shared interest and connect with their peers. These social networking sites also allow real time conversations with someone from a distance at the same time.

³⁰ Digital Influence Lab, 'Malaysia Digital Marketing Statistics 2020 - Social Media Marketing', *Digital Influence Lab*, Singapore, 2020, <https://digitalinfluencelab.com/malaysia-digital-marketing-stats/>, (accessed: 2 January 2021).

³¹ J. H. Ahmad, N. Ismail, N. N. A., Nasir, 'Investigating Malaysian Youth's Social Media Usage, Competencies and Practice with regard to Crime Prevention: An Application of the Social Media Literacy Model', *University Sains Malaysia*, Penang, 2015, <http://eprints.usm.my/32058/1/Nurzali%2C%20Jamilah%2C%20Nur.pdf>, (accessed: 1 January 2021).

Through the use of social media entertainment such as downloading music and video files or playing online games, it helps to fill in their free time and to overcome loneliness and stress.

Another unique advantage of social media platform is how it builds new understandings and collaborations for young people from very different cultures. One can build a global network around everything from special interests and hobbies to activism activities.

Social media is also a great platform for users to share their work or content creation like images, videos and writings with each other. This shows how social media can satisfy youths' needs for relationship development and at the same time, provide them with unique opportunities to become active media participants.

Learning is another big reason why Malaysian youths utilise social media. Social media is also a form of entertainment where functions such as forums, reviews, ratings and sharing and location options are available.

The real-time experience and conversation between users are another fundamental feature to a dynamic online social environment.

An earlier research done by Whiting and Williams (2013) denotes that social networking sites provides opportunities for users to express their thoughts and opinions.³²

Qualman (2014) proposed that social media users trust peer recommendations more than search engines, and this phenomenon is present from social media users who review or comment their experiences in product consumption, services and social trends on their social media accounts, particularly on dining out and "cafehopping" as a social experience.³³

³² Whiting and Williams, 2013 cited in N.L. Khalid, S.Y. Jayasainan, N. Hassim, 'Social Media Influencers - Shaping Consumption Culture among Malaysian Youth', *Taylor's University*, Malaysia, 2018, https://www.shs-conferences.org/articles/shsconf/pdf/2018/14/shsconf_ichss2018_02008.pdf, (accessed: 14 March 2021).

³³ Qualman, 2014 cited in 'Social Media Influencers - Shaping Consumption Culture among Malaysian Youth', 2018.

The frequent browsing of other social media accounts is by individuals who believe other people are far happier and have a better life compared to themselves (Chou & Edge, 2012).

Instagram, in particular provides heightened insights into one's personal life, therefore, reinforces the notion that content is crucial in shaping identities, social constructs and expectations among social media users (DeNardis, 2012).

Through the evolution of Instagram features and particularly when Instagram deploys an algorithm that suggests who to follow, which photos and videos to view and "like" (Tait, 2017), it encourages stalking behaviours and redefined the term "strangers" by creating intimacy among people who may not know each other in real life (Lup et al., 2015).

Other studies have also discovered that a lack of self-esteem on social media through stalking behaviours, heightens social comparison and envy, which eventually dampen the standards of their own lives (Krasnova et al., 2013).

Various studies have posited narcissism and egocentricity are motivations to why people use social media to document their achievements (Andreassen et al., 2016; Błachnio et al., 2016; Wang et al., 2012). Those with high self-esteem are also more open to communicate with their peers and are more likely to comment on social media accounts of others (Barker, 2012; Wang et al., 2012).

Barry et al. (2015) argued that individual with low self-confidence may also be more inclined to reveal information on social media rather than face-to-face interactions to gain acknowledgements they may not be able to achieve in real life.

In relation to Instagram use, a study by Chua & Chang (2016) postulated that youth who create virtual representations of themselves online with texts, picture and videos are conscious about their self-representation and peer comparisons happen simultaneously.³⁴

³⁴ N. Hassim, M. H. N. Hasmadi, M. S. Sharipudin, 'Social media or social comparison? An analysis of Instagram use among Malaysian youth', *Taylor's University, Malaysia*, 2020, https://d1wqtxts1xzle7.cloudfront.net/63936488/2020_Determinants_of_online_purchasing_decision_among_university_students20200716-53977-rf6q41.pdf?1594893324=&response-content-disposition=inline%3B+filename%3DI_COME_1_8_S_CHOOL_OF_ME_DI_A_AND_COMMUN.pdf&Expires=1615718806&Signature=Ovyk~oSgq1ZBza7Lf4SS7iHcc5JfgA2uKuxx6Xssx5vvyiyOHh81M42ltMTeSBfm14UNF9eOsSSLa soRBOLXSFYcPI4zURYtA3bcm0sBcnYpHWMjnjpsg6SbtNhlv24AW2Yslpjfn19Zrueb42iBzd7DdXcUkgMwW5CKvZb7O~q6JzUvlcW4aJPnYM4bF~fd09gejURcNSZnfylDvXVZGsJQMEwpXStR8KSGKijj1D3fPA2Jn3ooHzPaWraEz954s8b9gcgPD5n2oJVPpQcf7PFKJwqg6l8d7iZqxxEF-nPRm-BnaL0IY9iHHfp5X-QAskivxlR19xnLUdbV3PYEQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA#page=38, (accessed: 14 March 2021).

“... they are basically people who are instafamous – maybe because they use Instagram more often because of what they do that are a fascination to others, visually.” 20-year-old diploma student

When feedback is affirmed through the technical architectures of numerical likes, it allows Instagram users to step back and evaluate their social media postings, which would increase tendencies of comparison with how other presents themselves online. Subsequently, this encourages them to rethink their future undertakings and how they would want to illustrate their worth on their social media accounts.

In a study done on students of Taylor’s University, the survey revealed 81% of the respondents engage with Instagram on a daily basis. A heavy majority are heavy users who spends 4 to 6 hours on Instagram (57%). Results show that 40% of the respondents follow other users on Instagram who portray positive, unique and interesting lifestyles.³⁴

This process of glorifying regular individuals with enticing Instagram posts can be referred to the “micro-celebrity” trend, which is perceived as self-promotion and self-branding (Couldry et al., 2016). Such daily exposure of Instagram posts of others shape social expectations and spur anxieties on youths as they perceive these profiles or influencers as role models.

Most importantly, 75% of them find the need to keep up with their lives of their friends or strangers for the “fear of missing out” (FOMO).

A 20-year-old diploma student revealed that aside from viewing updates and newsfeed from her circle of friends, her curious nature and algorithms of Instagram had suggested and led her to frequently browse Instagram profiles that are worth following. While these are unintentional, it helped her understand new trends and find inspiration in her daily life.

³⁴ N. Hassim, M. H. N. Hasmadi, M. S. Sharipudin, ‘Social media or social comparison? An analysis of Instagram use among Malaysian youth’, *Taylor’s University*, Malaysia, 2020, https://d1wqtxts1xzle7.cloudfront.net/63936488/2020_Determinants_of_online_purchasing_decision_among_univesity_students20200716-53977-rf6q41.pdf?1594893324=&response-content-disposition=inline%3B+filename%3DI_COME_1_8_S_CHOOL_OF_ME_DI_A_AND_COMMUN.pdf&Expires=1615718806&Signature=Ovyk~oSgq1ZBza7Lf4SS7iHcc5JfgA2uKuxx6Xssx5vyiyOHh81M42ltMTeSBfm14UNF9eOsSSLa soRBOLXSFYcPI4zURYtA3bcm0sBcnYpHWMjnjpsg6SbtNhlv24AW2Yslpjfn19Zrueb42iBzd7DdXcUkgMwW5CKvZb7O~q6JzUvlcW4aJPnYM4bF~~fd09gejURcNSZnfyLDvXVZGsJQMEwpxStR8KSGKijj1D3fPA2Jn3ooHzPaWraEz954s8b9gcgPD5n2oJVPpQcf7PFKJwqg6l8d7iZqxxEF-nPRm-BnaL0IY9iHHfp5X-QAskiNvxIR19xnLUdbV3PYEQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA#page=38, (accessed: 14 March 2021).



“

The results show that 72% of respondents are affected by what is viewed on the Instagram accounts that they follow, such as posting of vacation photos and relationship updates that could spark envy and sadness.

”

This following, highly influenced by the attractiveness of Instagram posts are regarded as high points of reference and may in turn be considered as role models for followers to benchmark their life goals and lifestyles, which may expose users to a false sense of reality. Therefore, imposing a feeling of insufficiency among followers mediated by downward comparison.

The ability to express themselves freely and creatively, while sharing their current moods, thoughts and feelings on a personal level drives the ubiquity of social media (Rahim et al., 2011).

Viewing the news feed inflict their sense of self-esteem as they feel the desire to have similar experiences as their friends. FOMO is also correlated to the competitive sense of belonging among social media users as subconscious “social monitoring systems”, as postulated by Lai et al. (2016) and Dossey (2014).

This study demonstrated a total of 81% of respondents see the need to edit their photo before posting it on Instagram, illustrating a lack of self-esteem as they use filters to mislead others with photos of their false realities, which they feel is more superior.

A respondent concurred and found that not all Instagram users post genuine photos, including themselves.

“I realise us younger generations are more obsessed about how present ourselves to others. Some people only look good on photo and was not able to PR or socialise in reality,” added by the respondent.³⁴

Having said that, a study done by Bakhshi et al. (2013) posited that presentation of selfies or personal photos do not necessarily generate reactions or following from others, as other followers are more interested to look into the user’s day-to-day socialising activities.

³⁴ N. Hassim, M. H. N. Hasmadi, M. S. Sharipudin, ‘Social media or social comparison? An analysis of Instagram use among Malaysian youth’, *Taylor’s University*, Malaysia, 2020, https://d1wqtxts1xzle7.cloudfront.net/63936488/2020_Determinants_of_online_purchasing_decision_among_university_students20200716-53977-rf6q41.pdf?1594893324=&response-content-disposition=inline%3B+filename%3DI_COME_1_8_S_CHOOL_OF_ME_DI_A_AND_COMMUN.pdf&Expires=1615718806&Signature=Ovyk~oSgq1ZBza7Lf4SS7iHcc5JfgA2uKuxx6Xssx5vyiyOHh81M42ItMTeSBfm14UNF9eOsSSLasoRBOLXSFYcPI4zURYtA3bcm0sBcnYpHWMjnjpsg6SbtNhlv24AW2Yslpjfn19Zrueb42iBzd7DdXcUkgMwW5CKvZb7O~q6JzUvlcW4aJpNYM4bF~fd09gejURcNSZnfylDvXVZGsJQMEwpxStR8KSGKijj1D3fPA2Jn3ooHzPaWraEz954s8b9gcgPD5n2oJVPpQcf7PFKJwqg6l8d7iZqxxEF-nPRm-BnaLOIY9iHHfp5X-QAskINvxIR19xnLUdbV3PYEQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA#page=38, (accessed: 14 March 2021).

In fact, 51% of respondents are motivated to improve their lives after receiving encouraging feedback from the postings on Instagram, especially feedback from strangers.

Another respondent commented that when people compare photos, they tend to look for weaknesses and try to place themselves as role models. This habit evokes more harm to young generations, especially for women because other Instagram users tend to see pictures and later take it out of context through their individual interpretation.

Having said that, the majority of respondents (57%) agreed that instantaneous responses received on their posts, increased positive attitudes towards themselves.

A 23-year-old undergraduate who uses Instagram regularly feel that encouraging words from others represent her self-worth. “We like to find something easy to gain validation instead of working hard for it, which is not a bad thing,” she added.

Another respondent also find that social comparisons on Instagram is not just a phenomenon but a part of daily life and social cycle of digital natives.

The analysis of the interviews also illustrated that youth are more affected by the life of strangers than of their closer circle of friends. However, we should also understand the impact of real friends that are connected to youths on social media, as an individual is more connected to the people they are actually close with on an emotional basis due to their personal history.

“Sometimes when we meet face-to-face and they fail to know what I was up to, I feel annoyed that they didn’t invest the time or care enough to check on me on how I’m doing on Instagram,” added the respondent.³⁴

This study is aligned to the idea that people tend to choose opinions that hold them in high regard, driven by a force of self-evaluation to the groups that one belong, as postulated by Van Rooy et al. (2016).

³⁴ N. Hassim, M. H. N. Hasmadi, M. S. Sharipudin, ‘Social media or social comparison? An analysis of Instagram use among Malaysian youth’, *Taylor’s University, Malaysia*, 2020, https://d1wqtxts1xzle7.cloudfront.net/63936488/2020_Determinants_of_online_purchasing_decision_among_university_students20200716-53977-rf6q41.pdf?1594893324=&response-content-disposition=inline%3B+filename%3DI_COME_1_8_S_CHOOL_OF_ME_DI_A_AND_COMMUN.pdf&Expires=1615718806&Signature=Ovyk~oSgq1ZBza7Lf4SS7iHcc5JfgA2uKuxx6Xssx5vyiyOHh81M42ltMTeSBfm14UNF9eOsSSLa soRBOLXSFYcPI4zURYtA3bcm0sBcnYpHWMjnjpsg6SbtNhlv24AW2Yslpjfn19Zrueb42iBzd7DdXcUkgMwW5CKvZb7O~q6JzUvIcW4aJPnYM4bF~fd09gejURcNSZnfyLDvXVZGsJQMEwpxStR8KSGKijj1D3fPA2Jn3ooHzPaWraEz954s8b9gcgPD5n2oJVPpQcf7PFKJwqg6l8d7iZqxxEF-nPRm-BnaL0IY9iHHfp5X-QAskiNvxIR19xnLUdbV3PYEQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA#page=38, (accessed: 14 March 2021).

Undoubtedly, social media provides positive values for the individual branding and self-expression for youths, however, the negative cycle of comparisons triggers low self-esteem, which may lead to negative assumptions and onwards depression.

At a younger age, social media engagement amplifies feelings of loneliness and anxieties as the distortion towards the user profile not only creates false realities for their followers, but also themselves in an attempt to evaluate their upward comparison (Oberst, 2017).

The results of this study are congruent with progressions of social comparison theories made by scholars, whereby upwards comparisons would reflect the output of downward comparisons, leading to one's self-evaluation whether their lives are sufficient or insufficient. In addition, validation from other users of Instagram would either raise or lower the scale of comparisons to mark and validate their achievements. In doing so, the comparison of their lives with other users shape how they project the reality in order to downplay their own weaknesses in accordance to the strengths of others. Then, the feedback and engagement from users define the veracity of their posts and produce a ripple effect on others.

Social Media Paradox

An interesting discovery is that Snapchat and Instagram predict higher levels of social activity. The more time spent on social media links to the more time spent socialising in real life. However, it is the same group of people who are more likely to be unhappy.

Young people who spend more time on social media are more likely to be bullied, less likely to be happy but more likely to spend time with friends outside of school. However, it is important to be aware that the quantity of social activity does not necessarily equate to the quality of social activity. It also does not necessarily refrain loneliness.

One possible evaluation could be young people who spend time on Snapchat and Instagram are more likely to spend time in large group settings, hence, less likely to have meaningful personalised experiences with close friends.

Based on the research, it is important to note the various correlations between the use of social media by young people and happiness or unhappiness. However, we must consider how social media is used, who uses it and which platform they were consuming.

Another possible interpretation is consuming Snapchat and Instagram distracts young people from being present and truly enjoying the moment.

²¹ M. Birkjær, M. Kaats, '#SortingOutSocialMedia. Does Social Media really Pose a Threat to Young People's Well-being?', *The Happiness Research Institute*, Copenhagen, 2019, <http://norden.diva-portal.org/smash/get/diva2:1328300/FULLTEXT01.pdf>, (accessed: 10 January 2021).

There are four imperative factors to promoting well-being in relation to social media:

Who uses social media?

It is critical not to categorise young people as a single entity, rather identify the distinctions based on age, gender and social circumstance. The relationship between well-being and social media differs between teenagers and young adults, between young women and young men and between young people with strong or weak offline social ties. For instance, analysis in the reports shows that young people with less emotional parental support, particularly among young girls and those with few close offline social relationships are more vulnerable online.

How social media is consumed?

When studying well-being and social media, it's important to see what young people are doing on social media and not just the accumulated time spent on social media. As clearly demonstrated in this report, active use of social media (posting updates, commenting on posts, sharing links etc) vs passive use of social media (scrolling on news feed, looking at friends' pages) has very different outcomes on your well-being.

Which platform is used?

The consumption of different social media platforms have very different outcomes on the well-being of young people - some are image-based, some are text-based, some are hybrids, some encourage more socially active use while some encourage more passive use. Hence, the differences in young people's well-being is contingent to which social media platform is consumed.

How much time is spent on social media?

The overall time young people spend on social media has generally minor or insignificant relationships with well-being, with the exception of extreme use. Extreme use seems to lead to unhappiness. However, the causal factors remain ambiguous. It is not clear whether extreme use leads to unhappiness, or whether unhappiness leads to extreme use.

Hence, it's essential to highlight that unrestricted use of social media may still be harmful, even if the user has close social offline relationships, uses social media actively and uses the least harmful social media platforms.

Awareness of these factors help future researchers to arrive at a better understanding of how to manage costs and the future benefits of social media platforms. It's important to keep these nuances in mind so that we do not base our recommendations on overgeneralizations, which may overlook the real issues on social media and neglect segments on which it can be used to support social needs.



“

When you are young, it makes sense to have a broad circle of acquaintances. But when you have children and a permanent life partner, your social interaction is concentrated on a few people and your use of social media changes. This can then change again when you become divorced. Your life situation has a big influence on how you use social media,

”

Anne Mette Thorhauge, Associate Professor,
Department of Media, Cognition and Communication,
University of Copenhagen.

The Different Impact of Social Media and Mental Health among Boys and Girls

“I’m nervous about what people think and are going to say. It sometimes bugs me when I don’t get a certain amount of likes on a picture,”
Athena, 13-year-old teen, Houston, Texas.

In 2015, 48% more girls said they often felt left out vs in 2010, compared with 27% more boys. Girls tend to use social media more often, hence, exposing themselves to more opportunities to feel excluded and lonely when they are not invited to the activities. There is also a psychological tension as teens anxiously await for the online affirmation of comments and likes after they do their postings.

Teenage girls are also more susceptible to experience cyberbullying as they are more likely to undermine their social status and relationships, and social media provides the platform for girls to exercise that aggression online.

Some teens are even aware about the danger of their ever-present phones. “I’m trying to talk to them about something, and they don’t actually look at my face,” said Athena.³⁵

In a study from the UK Millennium Cohort Study on 10,904 pax of 14 year olds, reveals that girls are more impacted with the correlation of social media use and depressive symptoms, compared to boys.

Compared with 1-3 of daily use, 3 to < 5h 26% increase in scores for girls vs 21% for boys; ≥ 5h 50% increase in scores for girls vs 35% for boys. Girls reported more hours of social media use than did boys. Over two fifths of girls used social media for 3 or more hours per day compared with one fifth of boys.³⁶

³⁵ J. M. Twenge, ‘Have Smartphones Destroyed a Generation’, *The Atlantic*, Washington, DC, 2017, <https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/>, (accessed: 21 January 2021).

³⁶ Y. Kelly, A. Zilanawala, C. Booker, A. Sacker, ‘Social Media Use and Adolescent Mental Health: Findings from the UK Millennium Cohort Study,’ *Science Direct*, Amsterdam, 2018, <https://www.sciencedirect.com/science/article/pii/S2589537018300609>, (accessed 2 March 2021).

The longer the time spent in social media, the higher the tendency for online harassment, poor sleep, low self-esteem and poor body image, and this leads to higher depressive symptom scores for girls.

Girls were also more likely to report fewer hours of sleep compared with boys and experienced disrupted sleep more often or most of the time. Of all, the most important routes from social media use to depressive symptoms are shown to be via poor sleep and online harassment.

Greater social media use was related to less sleep, taking more time to fall asleep and more sleep disruptions. For instance, ≥ 5 h using social media was associated with $\approx 50\%$ lower odds of 1 h more sleep. Consequently, depressive symptom scores were higher for girls and boys experiencing poor sleep.

For boys, higher depressive symptom scores were seen among those reporting 3 or more hours of daily social media use.

The study also shows that girls and boys living in lower income and single parent households were more likely to use social media for 5 or more hours daily.

Adolescent is a period of vulnerability for the development of depression, and young people with mental health problems are more susceptible of poor mental health throughout their lives. Adolescence is also the phase of life where personal and social identity forms (Erikson, 1950), and a predominant part of this development is now reliant on social media.

Hence, early intervention can deter the onset of poor mental health.

A study by Rosen, Whaling, Rab, Carrier and Cheever (2013) demonstrated that online multitasking predicts symptoms of mental disorders. Primack and Escobar-Viera (2017) discovered that the number of social media accounts correlated with the level of anxiety, due to overwhelming demand.

Sampasa-Kanyinga and Lewis (2015) in Canada found that daily social media use of over two hours was associated with psychological distress. A study by Neira and Barber (2014) among youths (N = 1,819, 55% female) across 34 diverse high schools across Western Australia, found that the frequency of social media usage was linked to higher social self-concept, while investment in social networking sites was associated with lower self-esteem and higher depressed mood. Social media might have negative aspects for female youth while being a positive leisure activity for male youth.³⁷

³⁷ B. Keles, N. McCrae, A. Grealish, 'A Systematic Review: The Influence of Social Media on Depression, Anxiety and Psychological Distress in Adolescents', *Taylor & Francis Online*, London, 2019, <https://www.tandfonline.com/doi/full/10.1080/02673843.2019.1590851>, (accessed: 4 March 2021).

On one hand, adolescent who use social media intensively may be susceptible to mental health problems due to less time spent on offline activities that are vital to the development of mental health (Primack & Escobar-Viera, 2017; Underwood & Ehrenreich, 2017).

Researchers also argued the correlation of social media usage and mental health could be bidirectional.

On the other hand, adolescents with more mental health problems may also be more inclined to use social media more intensively for the reason of obtaining emotional and social support for their problems (Radovic, Gmelin, Stein, & Miller, 2017).³⁸

It is also argued that adolescents who engage in high social media usage intensity may be well able to positively regulate it and combine with a healthy lifestyle. Many adolescents use social media intensively to maintain and enhance their social involvement with peers (Anderson & Jiang, 2018; Boyd, 2014; Vannucci & McCauley Ohannessian, 2019). Hence, the intensity of social media usage may rather be normative adolescent behaviour than a behaviour that is specific to adolescents with low mental health.³⁸

Low mental health may also elicit social media usage problems. Davis, 2001 suggests that some adolescents with low mental health may feel, for example that their offline life is less meaningful than their online life, or that social media usage attenuate their sorrows. Hence, they rely on social media usage to feel positive about themselves and to divert from their problems, and therefore, develop addiction-like social media usage problems (Griffiths, 2013).³⁸

There are four mediating processes that could explain the effect of social media usage problems on low mental health.

First, adolescents with social media usage problems may have perceived the online world, which is filled with ideal self-presentations, as the social reality. They attach excessive importance to social media and not being able to position the overly flattered portrayals of others into perspectives. Therefore, they may engage in upward social comparisons.

³⁸ M. Boer, G.W.J.M. Stevens, C. Finkenauer, M.E.D. Looze, R.J.J.M.V.D Eijnden, 'Social Media Use Intensity, Social Media Use Problems, and Mental Health among Adolescents: Investigating Directionality and Mediating Processes', *Science Direct*, Amsterdam, 2020, <https://www.sciencedirect.com/science/article/pii/S0747563220303927?via%3Dihub>, (accessed: 5 March 2021).

Researchers have also proposed that girls have a higher tendency to ruminate about the content on social media and to compare themselves with others online than boys (Nesi & Prinstein, 2015; Underwood & Ehrenreich, 2017).

Secondly, due to the importance placed on social media activity, and disengagement may cause stress or anxiety, adolescents may replace online activity with crucial offline social activities with peers and schoolwork activities. Hence, thirdly, social media usage is at the expense of face-to-face contact and school achievement.

Finally, driven by social media rewards, recognition, reassurance to be noticed and appreciated by others, adolescents may engage in high levels of self-disclosure on social media, making them susceptible to cybervictimisation (Weber, Ziegele, & Schnauber, 2013).³⁸

Girls reported higher averages in social media usage problems, intensity, depressive symptoms, upward social comparisons, lower averages in life satisfaction and cybervictimization than boys.

Hence, girls may be more prone to adverse effects of social media usage than boys.

Interestingly, the research posits that adolescents who demonstrate addiction-like social media usage problems are at risk for decreases in mental health, compared to adolescents who solely show high intensity in social media usage. Specifically, it is behaviours like being unable to control social media usage impulses, constantly thinking about it, feeling bad when it is restricted or attaching crucial importance to social media usage that seem to trigger detrimental consequences to mental health.

Hence, the adverse effects of social media usage may be contingent to usage control rather than frequency. Adolescents who actively engage in high social media usage intensity, without any problems may be well able to regulate that, and it may not necessarily interfere with their life domains relevant to their mental health.

Furthermore, high social media usage intensity has become a fundamental part of daily lives and most adolescents use social media intensively to maintain social contact with peers (Boyd, 2014).³⁸

³⁸ M. Boer, G.W.J.M. Stevens, C. Finkenauer, M.E.D. Looze, R.J.J.M.V.D Eijnden, 'Social Media Use Intensity, Social Media Use Problems, and Mental Health among Adolescents: Investigating Directionality and Mediating Processes', *Science Direct*, Amsterdam, 2020, <https://www.sciencedirect.com/science/article/pii/S0747563220303927?via%3Dihub>, (accessed: 5 March 2021).

In interviews and focus groups conducted with Canadian girls, Caitlin (age 19) suggested that at least in high school, success tend to be measured by one's friend and follower counts, suggesting that the way social media sites are structured, can create incentives to expand networks to include unknown people.³⁹

"Like, the more friends you have, the more popular you are," Monica, age 16.³⁹

In this manner, online environments are structured in such a way that encourages disclosure of information, which may unknowingly set girls up for judgment, particularly when social norms interplay with stereotypical performances by peers.

Girls have a higher tendency to be more vulnerable to online attacks than boys because girls are more susceptible to greater negative scrutiny in relation to their appearance and sexuality, compare to boys.

Lynda (age 16) says the "pressure that's put on girls" to be like the images they see in magazines and on television. "You feel like you need to be perfect, or live up to everyone's expectations of you. And the media's expectations of what girls are supposed to be like," Lynda, age 16. In her view, the internet amplified the situation further "because you see other girls' profiles and they're like portrayed as like super pretty and all that, and you try to be like that. I guess, girls feel pressured to be like that."³⁹

As Alicia (age 17) puts it, emulating such stereotypes encourage girls to compete for attention and amass followers, which can enhance self-determination and create a sense of vulnerability.

Clare (age 16) further illustrates this by saying girls feel pressured to be on multiple social media sites and posting pictures of themselves, and when they attract a lot of guy followers, they feel pressured to cater their pictures, or style of pictures towards the guy followers, so they post pictures to gain attention, a following and feel more powerful doing it.

Having said that, gay and gender-non-forming boys were also exposed for engaging stereotypically "female behaviours", such as posting selfies.

The depiction of their everyday experiences with the varied standards applied to boys and girls, parallels the double standard applied to girls' expressions of sexuality.

³⁹ J. Bailey, 'A Perfect Storm', *University of Ottawa*, Canada, 2015
<https://poseidon01.ssrn.com/delivery.php?ID=605091068094074005122120114081108065040056008022062094030092101087127022007103028007011010029007119043019121004021102115092093056082000035040123085070116098095101119088000049065070087112127030125096066095004109003066029099114077030114015125086095116114&EXT=pdf&INDEX=TRUE>, (accessed: 9 March 2021).

Many has said that online visibility is integral to social success. There is also the pressure on girls to emulate stereotypes of beauty and sexuality as a recognisable way of achieving visibility. Hence, these unrealistic norms act as enablers of recognition, resulting in girls being subject to intense online scrutiny, as compared to boys. Therefore, leads to an exaggerated risk of permanent reputation effects for crossing the fine line between expressions of socially acceptable sexualised beauty norms and being a “slut”.

The technical architectures of social media encourage self-disclosure, that simultaneously promises influencer status and recognition, at the same time, a gendered risk of shame and harassment that may impact on mental health, complicated by the potential consequences of permanent digital records.

“

- It's hard to be a girl online because no matter what you do, you're doing something wrong. Like, if you don't have social media, your friends can't reach you. If you do have social media, creeps are everywhere. And it's just, like, no matter if you say yes to something, you say no to something, they're going to judge you for whatever you choose.

- Beth, age 16

”



Cyberbullying and Mental Health

“Cyberbullying is any behaviour performed through electronic and digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others.” (Tokunaga, 2010).⁴⁰

One of the initial studies by Latane & Darley (1968) on the bystander effect, which concludes the presence of a bystander lessened participant’s likelihood of providing aid.⁴⁰

Linking this to the Diffusion of Responsibility, whereby as the number of bystanders increases, the personal responsibility of the individual bystander decreases. The responsibility of online users assisting to prevent cyberbullying are dispersed when there are many other online users involved.⁴⁰

Results from Brody & Vangelisti (2015) from 265 students re cyberbullying on Facebook support the diffusion of responsibility effect. A higher number of bystanders to an online bullying incident was negatively related to participants intervening to stop the incident. Their research also demonstrates that people are most likely to intervene when they were close friends with the victim, when they were identifiable as being online and when there were fewer bystanders witnessing the incident.⁴¹

Anonymity plays a salient role on the bystander effect. Anonymity is defined in terms of whether bystanders believe their presence is apparent to others.

Hence, in the online world, other online users are less likely to help and do not feel obliged to intervene, thinking that someone else may have done so already.

⁴⁰ R. D. Blagg, ‘Bystander Effect’, *Britannica*, Chicago, 2010, <https://www.britannica.com/topic/bystander-effect/Diffusion-of-responsibility>, (accessed: 12 February 2021).

⁴¹ N. Brody, A.L. Vangelisti, ‘Bystander Intervention in Cyberbullying, Communication Monographs’, *ResearchGate*, Berlin, 2015, [file:///C:/Users/irene/Downloads/Bystander Intervention in Cyberbullying.pdf](file:///C:/Users/irene/Downloads/Bystander%20Intervention%20in%20Cyberbullying.pdf), (accessed: 12 February 2021).

A study by Santana (2014) illustrated 53% of anonymous comments included language that was vulgar, racist, profane or hateful. People are more likely to behave in ways that they ordinary would not, when disguised under the cloak of anonymity.

“It’s when commenting descends into hateful language, threats or racism that the conversation breaks down and any benefits of constructive dialogue goes away,” Santana added.⁴²

Newspapers are increasingly disallowing anonymity by ensuring readers sign in with their Facebook account to participate in commenting forums. “In short, when anonymity was removed, civility prevailed,” he said.⁴²

The rise of social media platforms also give rise to keyboard warriors, who aimlessly pass judgment through comments, while hiding behind the façade of keypads. Keyboard warriors not only come in the form of social media users, but also in the form of influencers.

Recently, a Malaysian actress and influencer was condemned publicly for posting her take on the “perfect body” for women. Such statement might have originated from a place of narcissism or insecurity.⁴³

Perhaps aiming to seek attention and attain validation, these individuals do not realise the detrimental impact of their words online.

Keyboard warriors manifest their true emotions through text-based medium of the internet, with no real life repercussions.

⁴² A. D. Santana, ‘Researcher finds anonymity makes a difference with online comments’, *ScienceDaily*, Maryland, 2014, <https://www.sciencedaily.com/releases/2014/01/140122134310.htm>, (accessed: 18 March 2021).

⁴³ A. J. S. Maria, ‘Social Media and Mental Health Issues in Millennials’, *Free Malaysia Today*, Malaysia, 2020, <https://www.freemalaysiatoday.com/category/leisure/2020/03/07/social-media-and-mental-health-issues-in-millennials/>, (accessed: 19 March 2021).

Research by Schwartz and Gottlieb (1980) concluded that another force that could influence helping is evaluation apprehension - the fear of being judged by others at the scene.

Another factor influencing whether online users will intervene during a cyberbullying episode, is the quality of the relationship to the victim. People are more likely to help a close friend or family member than an acquaintance. When users reported feeling close to the victim, they are more likely to exhibit helping behaviour, such as defending the victim (Oh and Hazler, 2009).⁴⁴

In interviews and focus groups conducted with Canadian girls age 15 to 17 years old and young women age 18 to 22 years old, many of the participants felt that the girls' reputation was particularly vulnerable online, creating a gendered risk of developing a permanent record. Many reasons were offered for and explanations of such susceptibility may lead them to exposure to cyberbullying, which focuses attacks by peers rather than unknown sexual predators.³⁹

Eve (age 16) emphasized that other factors such as racism, were also often prevalent in cyberbullying. As Brianne (age 20) puts it, cyberbullying is mostly based on weight, what you look like and your sexual orientation.

Many participants felt that girls are targeted more often than boys and in different ways.

Clare (age 16) and Amelia (age 18) posit that girls were attacked more online, because they participate and disclosed more online than boys. Girls posted more, sought more attention, and therefore open themselves up to a higher risk of judgment. Nicole (age 16) also connected this to unrealistic media images of girls.

Hence, with anonymous online users and the ability to disguise one's identity via nicknames, online users are less likely to help victims of cyberbullying due to having less evaluation apprehension.

⁴⁴ J. Cieciora, 'A Summary of the Bystander Effect: Historical Development and Relevance in the Digital Age', *Inquiries Journal*, Massachusetts, 2016, <http://www.inquiriesjournal.com/articles/1493/a-summary-of-the-bystander-effect-historical-development-and-relevance-in-the-digital-age#:~:text=John%20Darley%20and%20Bibb%20Latan%C3%A9,and%20study%20the%20bystander%20effect.&text=Specifically%2C%20Darley%20and%20Latan%C3%A9%20believed,will%20help%20someone%20in%20one ed>, (accessed: 12 February 2021).

³⁹ J. Bailey, 'A Perfect Storm', *University of Ottawa*, Canada, 2015 <https://poseidon01.ssrn.com/delivery.php?ID=605091068094074005122120114081108065040056008022062094030092101087127022007103028007011010029007119043019121004021102115092093056082000035040123085070116098095101119088000049065070087112127030125096066095004109003066029099114077030114015125086095116114&EXT=pdf&INDEX=TRUE>, (accessed: 9 March 2021).

Broad Conclusions

Unless we live in a cocoon, one can't escape social media as an integral part of modern living. In fact, life just gets more intensely intertwined with the alchemies of social media. Perhaps, the first step is to be aware of our own boundaries to social media, knowing we have an option to control, rather than being controlled by it.

It doesn't help that the technical architectures of social media apps are designed in such a way that social popularity is numerical, implying ways of obtaining online recognition and affirmation.

It is important to stress that social media has both its advantages and limitations. It is a powerful tool, if used productively, yet unlimited consumption may lead to detrimental effects of mental health.

The bane of mental health may not fully rest on the social media platform, but rather on the consumption.

Do one, then, curate their social media pictures and information to garner more numerical likes and followers, or is that authentically them?

I wonder how online social interactions is affecting our self-concept and how much do we alter ourselves, if any, to blend in to the unspoken online social norms, validated through numerical likes, views, followers and affirmations. In a seamless integrated offline and online world, how do we stay true to ourselves without diverging into separate identities?

To some extent, the next step may lie in our responsibility to portray authenticity in social media. How, then, can one measure authenticity?

Given how interconnected we are due to social media, it seems likely the consumption of social media will steadily increase, in fact, users may even consume it at a much younger age. Hence, it is recommended more research to be conducted in the areas of social media, mental health and the portrayal of authenticity, leveraging on the power of Artificial Intelligence (AI).

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