Exploring the Relationship between YouTube Content Creators' Microcelebrity Status and Mental Health

Lama Mohamad Zeitoun

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Interdisciplinary School of Health Sciences
Faculty of Health Sciences
University of Ottawa, Ottawa, ON

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Supervisor: Dr. Anne TM Konkle

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ABSTRACT

Mental health disorders (MHDs) are among the leading cause of global ill health and disability. Research on MH of social media (SM) content creators is sparse. This study aims to assess whether being a microcelebrity YouTuber has an impact on one's MH. A survey of international YouTubers garnered participants aged 18 to 45 years, mostly male and white. Most common motivations to become a YouTuber were entertainment, and joy/passion. Most were not professionally diagnosed with a MHD; they reported that YouTube use had no effect on symptoms of said conditions. A significant relationship was shown between MH status and YouTube effect on MH status, as well as MH status and life satisfaction. While study findings present minimal impact of YouTubing on MH, this is likely due to our small sample size. Future research on microcelebrity may be beneficial for all SM users, including youth increasingly showing interest in SM and its careers.

RÉSUMÉ

Les troubles de santé mentale (TSM) sont parmi les principales causes de mauvaise santé et d'invalidité dans le monde. Les recherches sur le TSM des créateurs de contenu de médias sociaux sont rares. Cette étude vise à évaluer si le fait d'être une microcélébrité YouTuber a un impact sur sa SM. Une enquête auprès de YouTubers internationaux a rassemblé des participants âgés de 18 à 45 ans, principalement des hommes blancs. Les motivations les plus populaires pour devenir YouTuber étaient le divertissement et la joie/passion. La plupart n'ont pas été diagnostiqués professionnellement d'un TSM; ils démontrent aussi que l'utilisation de YouTube n'avait aucun effet sur les symptômes reliés au TSM. Une relation significative a été démontrée entre le statut de SM et l'effet YouTube sur le statut SM, ainsi qu'entre le statut SM et la satisfaction de vivre. Bien que les résultats de l'étude présentent un impact minimal de YouTube sur la SM, cela est probablement dû à la petite taille de notre échantillon. Les recherches futures sur la microcélébrité pourraient être bénéfiques pour tous les utilisateurs de médias sociaux, y compris les jeunes montrant de plus en plus d'intérêt pour les médias sociaux et ses carrières.

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ABBREVIATIONS

ADHD: Attention-Deficit/Hyperactivity Disorder

ASD: Autism spectrum disorder

CBD: Cannabidiol

CD-RISC: Connor-Davidson Resilience Scale

COVID-19: Coronavirus disease of 2019

DSM-V: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition

FOMO: Fear of missing out

GAD: Generalized anxiety disorder

HCPs: Health care professionals

IPIP: International Personality Item Pool

MDD: Major depressive disorder

MH: Mental health

MHD(s): Mental health disorder(s)

PTSD: Post-traumatic stress disorder

SWLS: Satisfaction with Life Scale

SIMS: Situational Motivation Scale

SM: Social media

SMIs: Social media influencers

SMU: Social media use

SNSs: Social networking sites

UGC: User generated content

UGT: Uses and gratification theory

UK: United Kingdom

WHO: World Health Organization

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CHAPTER 1: INTRODUCTION

1) Social Media Use

a. Social Media

Technology has become an essential part of our daily lives, with its use in advancements in health, education, business, communication, and socialization. The rise in smartphone uptake has coincided with the increase and widespread use of social media (SM) (Lup et al., 2015). SM is used regularly, worldwide, and among a variety of age groups, with time spent on SM rising every year; average users spent 2.42 hours per day on SM worldwide in 2020, only a few minutes more than in 2019 (Tankovska, 2021a) and an estimated 3.6 billion global SM users in 2020 which is expected to increase to 4.41 billion by 2025 (Tankovska, 2021b), suggesting SM has become an integral aspect of one's daily life and its use a daily practice for many as it allows individuals to stay connected with others online at anytime and anyplace (Kuss & Griffiths, 2017). Note that these projections are pre-pandemic so these may now differ given our increased use of technology during times of confinement.

There has been confusion in the scientific literature as to the definition of SM (Kaplan & Haenlein, 2010), with the umbrella term commonly used interchangeably with social networking sites (SNSs) (e.g. Facebook, Twitter) (Kuss & Griffiths, 2017), although each have different meanings. Defining SM has been a challenge due to the rapid and continuous changes in technology and user habits (Obar & Wildman, 2015). Kaplan & Haenlein (2010) defined SM based on the relevant concepts of Web 2.0 and User Generated Content (UGC). Web 2.0 is a term that was used to describe the shift in the use of the World Wide Web from content consumption to interaction and participation, and it represents the platform which allowed for the evolution of SM as users moved from consumers to participants (Kaplan & Haenlein, 2010; Obar & Wildman, 2015). While Web 2.0 is the ideological foundation, UGC refers to the ways in which individuals make use of SM as it refers to various forms of media content that are publicly available and created by users (Kaplan & Haenlein, 2010). Therefore, Kaplan & Haenlein (2010) defined SM as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content (UGC)". Kaplan & Haenlein (2010) went further and

organized the variety of available SM websites and applications into the following classifications based on their definition of SM: collaborative projects (e.g. Wikipedia), blogs (e.g. text-based or personal blogs), content communities (e.g. YouTube), SNSs (e.g. Facebook, Instagram, Snapchat, and Twitter), virtual game worlds (e.g. World of Warcraft), and virtual social worlds (e.g. Second Life). Kaplan & Haenlein (2010) went further to classify SM based on the level of two key elements of SM: (1) social presence/media richness, referring to the "degree of contact and reduction of uncertainty and ambiguity that can be achieved between two communication partners", and (2) self-presentation/self-disclosure, referring to "the degree of self-disclosure it requires and the type of self-presentation it allows". For instance, blogs are categorized as low on social presence/media richness (as they are usually text-based allowing for simple exchanges) and high on self-presentation/self-disclosure due to the personalized nature of blogs, meanwhile content communities, such as YouTube, would be classified as medium level of social presence/media richness (due to their range of media types) and low on self-presentation/self-disclosure (as users are not required to create personal pages and not all users are YouTubers or microcelebrity YouTubers). Finally, virtual social worlds (i.e. Second Life) score high on social presence/media richness and high on self-presentation/self-disclosure as they allow users to behave freely and replicate face-to-face interactions without restrictions (Kaplan & Haenlein, 2010).

Obar & Wildman (2015) identified 4 commonalities among SM by using SM definitions from the literature: (1) SM are Web 2.0 Internet-based applications that allow users to be both content consumers and producers; (2) SM is fueled by UGC, such as sharing personal information and creating and engaging in network connections by "friending", "commenting", and "liking" others' content, and without UGC, SM would be useless and thus abandoned; (3) SM users create specific profiles, using identifying information, which are maintained by the website or application allowing for the connection with other users; (4) SM facilitates the development of online social networks by connecting user profiles through "friends" or "followers" allowing for content consumption and interaction between users, such as accessing shares and liking posts. These characteristics must be present for a mobile or computer-mediated technology to be deemed a SM.

b. Social Media Use

Along with the variety of SM types, applications, and webpages, comes a variety in the ways in which one can produce, consume, engage and interact with UGC, or in other words, use SM. Differences in accessibility to SM, time of use, fre quency and patterns of use, preferences for type of SM, purpose and motivation for social media use (SMU), may impact individuals' SMU. SM are available via mobile or web applications and/or webpages and as such can be accessed via smartphones, computers, and/or other devices, allowing for a wide range of use with regards to time and space accessibility. In addition to differences in SM types, SM features and functionality allow for users to be both consumers and producers of UGC, or "prosumers" (Ritzer & Jurgenson, 2010), and so these various functionalities may result in various types and patterns of SMU. For example, some SNS users may take on a passive use of scrolling through their SM feeds, whereas others may take on an active use and post photos, status updates, and create and share content. Furthermore, while some individuals prefer using virtual game worlds, others may prefer involvement in content communities. Similarly, SM users may also have different purposes for SMU ranging from leisure to work purposes, which may in turn impact the nature of their SMU which will be discussed further in a later section.

With respect to scientific measures of SMU, there is no clear consensus on which specific measures should be used when analysing SMU (Escobar-Viera et al., 2018). This may be due to the various ways individuals may experience the use of SM. And so, there have been multiple corresponding methods of measuring SMU commonly found in the literature when assessing the effects of SMU on individuals. These include: time spent per day (Lup et al., 2015); frequency of times visited per day (Kerr et al., 2020); when it is used during the day (overall vs. nighttime specific use) (Woods & Scott, 2016); types of self-presentation strategies, such as positive (displaying highly socially favorable aspects of oneself) or honest self-presentation (displaying oneself openly and honestly without controlling for favorable aspects) (Kim & Lee, 2011); number of friends (Kim & Lee, 2011); closeness to online friends (Rosen et al., 2013) or number of strangers followed (Lup et al., 2015); number of platforms used (Primack et al., 2017); and types of activity or engagement, such as active-use (e.g. posting updates or photos), or passive-use (e.g. scrolling

through feeds or looking at photos) (Deters & Mehl, 2013), and routine use or emotional connection to SM use (Bekalu et al., 2019). For the purpose of this thesis, we focus on the use of specific types of SM: SNSs (i.e. Instagram) and content communities, specifically YouTube.

c. Motivation for SMU

The ever-growing opportunities brought by SM have resulted in the great uptake in SMU worldwide. Apart from entertainment and information consumption and interaction, SM has allowed individuals to meet and connect with those of similar interests, build stronger relationships with friends, family, and strangers, and even pursue online businesses, among others. Thus, the motivation for SMU has been theorized beyond the purposes of entertainment. Multiple theories have been used in the literature to explain the motivation behind SMU, but for the purposes of this thesis the following three theories were deemed most relevant: 1) Maslow's Hierarchy of Needs theory, where one can describe SMU as a method to satisfy one's safety, belongingness, self-esteem and self-realization needs (Riva et al., 2015); 2) Uses and Gratification theory, which proposes that SMU is guided by individuals' need for seeking gratification (Katz, Blumler, & Gurevitch, 1999); and 3) Social Comparison theory, whereby individuals may use SM for the purpose of social comparison and self-evaluation in order to build a sense of self and evaluate their progress in comparison to their peers and others by observing their online profiles (Lup et al., 2015).

i. Maslow's Hierarchy of Needs

The first is Maslow's Hierarchy of Needs theory (Maslow, 1943) which classifies human needs into a hierarchical pyramid of importance starting with the most basic needs at the bottom to the most developmental at the top. In order to progress to the top of the pyramid, one cannot skip levels and must satisfy the deficient needs on the bottom level first in order for the subsequent higher level needs to emerge and become fulfilled. From the bottom-up, these levels of needs include: (1) Physiological needs: basic survival needs such as food and shelter; (2) Safety needs: ensure safety and stability, and protection from danger; (3) Love and belonging needs: need to give and receive love, and feel affection and association with a group; (4) Self-esteem needs: need for high self-regard, self-evaluation and self-respect, and to feel respected and recognized by others for one's competence and achievements; (5) Self-actualization needs:

need for self-fulfillment and to actualize one's own potential, which differs greatly between individuals. In general, basically satisfied people, those who have satisfied their physiological, safety, love, and self-esteem needs, and are expected to self-actualize, are an exception in society, and so, since only few members of society fulfil their self-actualization needs, little is known about self-actualization (Maslow, 1974).

Maslow's hierarchy of needs has been used in the literature to explain the motivation for the recurrent use of SM (Kuss & Griffiths, 2017; Ghatak & Singh, 2019; Cao et al., 2013). Riva, Wiederhold, & Cipresso (2015), apply Maslow's Hierarchy of Needs theory specifically to the use of SNSs, and describe how the use of this specific SM can be a method to satisfy one's safety, belongingness, self-esteem and self-actualization needs: (1) Safety needs can be met through SNS privacy settings, which allow users to protect their personal information from those from whom they wish to keep it private (i.e. only sharing and connecting with "friends" or "followers" instead of strangers and controlling who to allow as "friends": For public accounts this could also include the option to block certain users whom one is not comfortable accessing their profiles); (2) Need to belong is met by communicating and connecting to others irrespective of time and space by "friending" or "following" them, and even search for an intimate relationship; (3) Need for self-esteem is met by users comparing themselves to others by the amount of friends and likes they have; while one can choose who to "friend" online, others can add them too, and so the more friends they have gathered the more worthwhile they feel; (4) Finally, the need for self-actualization can only be met by a minority of users who are capable of presenting themselves how they wish to be perceived, and use their skills to offer social support to their online friends who may be seeking it. As such, SNSs can meet individuals' social support and self-expression needs in two forms: individuals can search for support as well as offer support, and express oneself as well as explore others' self (Riva, Wiederhold, & Cipresso, 2015).

ii. Uses and Gratification Theory

The second is the uses and gratification theory (UGT) which has been widely highlighted in the literature to understand the motivation for and effects of the use and continued reuse of SM. As reviewed

by Kuss & Griffiths (2017), this theory would propose that SMU is driven by individuals' needs that they actively and consciously seek to gratify through SM (Katz, Blumler, & Gurevitch, 1999). As reviewed by Riva et al. (2015), UGT provides five main assumptions for individuals' use of SM and its consequences: (1) users (or audience) are active and goal-oriented in their consumption of media; (2) media use provides users with gratification; (3) media are in competition with other potential sources for need satisfaction; (4) users understand and are aware of their personal media use, motives, and choices enough to communicate them to others; and (5) only users can make judgements regarding the value of media content.

Based on UGT, individual needs have been categorized by researchers. As reviewed by Qin (2008), Katz, Gurevitch, & Hass (1973) categorized individual needs as: (1) cognitive needs: to acquire information and knowledge; (2) affective needs: to acquire emotional and pleasurable experience; (3) personal integrative needs: to strengthen one's self-image; (4) social integrative needs: to strength one's social ties; and (5) tension release needs: for escape and diversion. Correspondingly, some researchers have categorized gratifications into three types: (1) content gratifications: based on available online content (i.e. seeking news and information); (2) process gratifications: based on user experience of using the media (i.e. convenience); (3) social gratifications: based on social interactions it allows (i.e. connecting with friends) (Quinn, 2016).

As previously mentioned, SM offer a variety of websites, applications, and features, and its use varies from person to person. Consequently, individuals motivated by the uses and gratifications they seek and gain from SMU also varies among users based on type of engagement and level of participation (Smock et al., 2011; Malik, Dhir, & Nieminen, 2016). For instance, although there are similar features on both SNSs and content communities allowing for the same gratifications of self-presentation and self-expression, such as sharing a photo on Instagram and uploading a daily vlog on YouTube, users may receive different gratifications from virtual game worlds, such as the ability to overcome challenges. Interestingly, all three types of SM contain features which allow for the gratification of users' needs for entertainment and social connection.

In the case of SNSs specifically, a wide range of gratification can be sought and received, including information seeking, identity formation by self-presenting oneself more favorably online (Zhao, Grasmuch, & Martin, 2008), entertainment (Barker, 2009); companionship to enhance feelings of others' presence and reduce feelings of loneliness (Quinn, 2016); and affective messaging, information sharing, communication, professional advancement, and escapism (Quinn, 2016). Furthermore, social interaction needs like self-expression, self-presentation, and communication can be achieved by sharing photos on SNSs, in turn providing gratification from feedback, public approval, attention, recognition, and social rewards through "likes", comments, and face-to-face conversations regarding the shared photos (Malik, Dhir, & Nieminen, 2016). Users seeking validation and approval from others online tend to do so in order to increase their feelings of self-worth and self-esteem (Stapleton, Luiz, & Chatwin, 2017). Dating SNSs, such as Tinder, can be used to gratify physical and sexual aspirations (Kuss & Griffiths, 2017)

Self-disclosure of mental health (MH) information for self-help purposes can also provide individuals with social support and empathy online (Choudhury & De, 2014). Chung (2014) explored how online support groups for health on SNS allow for selective use of various features offered to satisfy different user needs: For instance, discussion boards allow for (1) satisfying information seeking and support needs, (2) "friending" others allow for social support opportunities and formation of one-on-one connections, and (3) sharing personal stories on blogs allow for gratifying users' needs for emotional support. In contrast, not all needs users seek to gratify through SMU are positive. Some may negatively impact the users' health and wellbeing and their relationships with others (Kuss & Griffiths, 2017), such as voyeurism (Quinn, 2016) and cyberstalking (Dreßing et al., 2014).

iii. Social Comparison Theory

Initially proposed by Festinger (1954), the third theory is social comparison theory. It is based on the idea that humans have an inner drive to compare themselves to others for the purpose of forming accurate self-evaluations. The theory suggested that individuals do so by utilizing the physical and social information available to them in the absence of objective information, to accurately assess their opinions and abilities (Festinger, 1954). While Festinger briefly mentioned social comparison orientations, later

research further expanded his original work on the social comparison theory from a self-evaluation motivation perspective to that of self-enhancement. This led to the development of the concepts of upward and downward social comparison orientations: Wheeler (1966) proposed that individuals may make upward social comparisons, by comparing themselves to those they view as slightly superior to themselves in order to motivate them to improve but ironically if the gap is perceived as too large it may result in feelings of failure or inferiority. Later, Wills (1981) proposed that individuals experiencing negative affect may employ downward social comparisons, by comparing themselves to those perceived to be inferior to them, in an attempt to improve their subjective well-being or self-esteem.

When it comes to SMU, exposure to SM content may strongly incite social comparisons among users. Some types of SM, specifically SNSs, have been suggested to be powerful sources for social comparison due to the natural uptake of SNS features involving users sharing many aspects of their personal lives (Sabatini & Sarracino, 2015); this is oftentimes presented through an exaggerated positive lens by the users in an attempt to portray extreme, and oftentimes unrealistic, perfection and happiness (Walther, 2007). This can be achieved by selecting and editing photos and posts (Wang et al., 2017) resulting in a large, and oftentimes unrealistic, availability of social and physical information on these platforms, thus allowing for other users' countless opportunities to engage in social comparison. As such, the social comparison theory has often been used in the literature to explain the association between SMU and MH and well-being (Lup et al., 2015; Wang et al., 2017; Stapleton et al., 2017; Chen et al., 2016; Fardouly & Vartanian, 2015; Krasnova et al., 2015; Hardy & Castonguay, 2018; Wang et al., 2017). Because most users engage in a hyper-positive presentation of themselves and their lives online, engaging in social comparisons based on such content can be deteriorating to their MH (Hardy & Castonguay, 2018); exposure to such perfected online content can increase the tendency for upward social comparisons, which tends to produce more negative feelings in the individual (Buunk & Gibbons, 2007), possibly resulting in users feeling personally inadequate (Jordan et al., 2011). Furthermore, passive SNS use may result in repeated engagement in an upward comparison and users making poor self-evaluations resulting in decreased self-esteem and psychological well-being (Chen et al., 2016); it can lead to negative feelings and envy, of which the later

has been found to be associated with poorer well-being and increased reactive self-enhancement online in response to feelings of inferiority triggered by envy (Krasnova et al., 2015).

In summary, Maslow's hierarchy of needs theory, uses and gratification theory, and social comparison theory provide insight on users' motivation for SMU: 1) Maslow's Hierarchy of Needs theory, proposes SMU as a means to satisfy one's safety, belongingness, self-esteem and self-realization needs; 2) Uses and Gratification theory, suggests SMU is guided by individuals' need which they actively seek to gratify; and 3) Social Comparison theory, suggests SMU allows users to build a sense of self via social comparison and self-evaluation in comparison to others' online profiles. While each motivation theory provides a unique perspective on motivation for SMU, it is interesting to note that UGT stemmed from Maslow's hierarchy of needs theory (Riva et al., 2015) and as such both theories appear similar in regard to individuals' needs shaping their behaviours. Furthermore, while it was found that the UGT and social comparison theory were frequently highlighted in the literature when exploring the motivation and consequences of SMU (especially on MH), Maslow's Hierarchy of Needs theory was also included as it was deemed relevant in relation to understanding microcelebrity behaviour, motivation, and hypothesized need to self-actualize. Understanding users' motivations for SMU may provide a better understanding of the possible impacts SMU may have on their MH and well-being.

2) Mental Health

The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity", indicating MH as a fundamental element of one's overall health and more than just the absence of mental illness or mental health disorders (MHDs) (WHO, 2018b). As such, WHO (2004) defines MH as "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community". The level of one's MH, at any point in time is determined by several social, psychological and biological factors; for instance, poor MH is associated with stressful work conditions, social change and exclusion, unhealthy lifestyles and physical ill-health (WHO,

2018b). Therefore, the protection and restoration of MH is of vital concern for many individuals and communities worldwide (WHO, 2018b).

Galderisi et al. (2015) critiqued the WHO definition of MH as impacted by the culture which defines it (i.e. North American value of self-realization), and focuses on positive emotions and functioning and as such proposed a more inclusive definition of MH that more closely reflects the human life experience which is sometimes joyful and satisfactory, and other times sad, frightening, and challenging: "MH is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; ability to recognize, express and modulate one's own emotions, as well as empathize with others; flexibility and ability to cope with adverse life events and function in social roles; and harmonious relationship between body and mind represent important components of MH which contribute, to varying degrees, to the state of internal equilibrium". This definition acknowledges the reality that possible changes may offset one's MH equilibrium, but the individual may restore the dynamic state of equilibrium (Galderisi et al., 2015). It also allows for the recovery movement perspective, which views recovery from an illness which impaired certain functions as a process to attain a valued and fulfilled life by utilizing those functions which were unaffected by the illness (Galderisi et al., 2015).

While MH and mental illness are often times assumed to mean the same thing, MH refers to one's state of mental well-being and equilibrium, meanwhile a mental illness, or MHD, is an illness which disturbs or offsets one's MH state or equilibrium. MHDs are characterized by a combination of abnormal thoughts, perceptions, emotions, behaviours and relationships with others (WHO, 2019) and are associated with increased morbidity and mortality. There exist many types of MHDs including depression, anxiety, eating disorders, schizophrenia, bipolar disorder, and personality disorders (American Psychiatric Association, 2013). According to the World Health Organization (2001), MHDs are among the leading causes of global ill health and disability, with 1 in 4 people affected by MHDs worldwide. Similarly, the Mental Health Commission of Canada (2010), found that each year 1 in 5 Canadians will experience a MH illness, with almost everyone in Canada being affected when impacts on families and caregivers are

accounted for (*note: statistics mentioned are prior to COVID-19 pandemic which has been found to have further impacted individuals MH*). The global burden of MHDs on health, society, and economy continues to rise (WHO, 2019). While treatments for MHDs include psychotherapy and/or mediation, barriers to treatment access include stigma, discrimination and neglect (WHO, 2001), lack of resources, and/or trained healthcare professionals (WHO, 2021). Furthermore, in low- and middle-income countries, approximately 76% to 85% of people do not receive treatment for their MHDs (Wang et al., 2007).

a. Mood Disorders

According to the International Classification of Diseases for Mortality and Morbidity Statistics 11th Revision (ICD-11), mood disorders are a categorization of MHDs which include bipolar disorders and depressive disorders and are defined by the type and pattern of mood episodes presented (WHO, 2018a). Bipolar and related disorders involve the occurrence of Manic, Mixed, or Hypomania episodes or symptoms, which typically alternate with depressive episodes or symptoms over the course of these disorders (WHO, 2018a). Reviewed in the DSM-V, risk factors for bipolar disorders include genetics or family history, living in a high-income country, and/or being separated, divorced or widowed (American Psychiatric Association, 2013).

Depression affects nearly 300 million people worldwide and is a main cause of disability involving feelings of sadness, low self-worth, tiredness, loss of interest or pleasure, difficulties in daily functioning and coping, and at its worst may even lead to suicide (WHO, 2019); note that suicide is the second leading cause of death among 15- to 29-year-olds, with approximately 800,000 people dying due to suicide yearly, worldwide (WHO, 2021). According to the DSM-V, common features of depressive disorders, such as Major Depressive Disorder (MDD) or commonly referred to as depression, are the presence of sad, empty or irritable mood, and somatic and cognitive changes that significantly impact the individual's ability to function (American Psychiatric Association, 2013). With MDD specifically, common symptoms include depressed mood (feelings of sadness, hopelessness), significant diminished interested or pleasure in almost all activities, significant changes in weight and/or increased appetite, insomnia, psychomotor agitation, fatigue or loss of energy, feelings of worthlessness or excessive guilt, decreased ability to think, concentrate,

or indecisiveness, and recurrent suicidal thought or ideation. As reviewed in the DSM-V, risk factors include the personality trait neuroticism, adverse childhood experiences, stressful life events, genetics, and the presence of other non-mood disorders (i.e. anxiety) (American Psychiatric Association, 2013). The DSM-V also discusses prevalence of MDD among females appearing to be 1.5 – 3 times higher than in males, and Americans among the 18-29-year-old age group appearing to have higher prevalence of MDD compared to those 60 or older (American Psychiatric Association, 2013).

b. Anxiety Disorders

Anxiety disorders are the most prevalent MHDs, with up to 33.7% of the population being affected by an anxiety disorder during their lifetime, according to large population-based surveys (Bandelow & Michaelis, 2015). Anxiety disorders, such as generalized anxiety disorder (GAD), are characterised by excessive fear (emotional reaction to perceived imminent threat) and anxiety (anticipation of future threat) and related behavioural disturbances (American Psychiatric Association, 2013), with severe symptoms which may result in significant distress or impairment in many important areas of functioning including personal, social, and occupational functioning (WHO, 2018a). Panic attacks appear among anxiety disorders as a type of fear response (American Psychiatric Association, 2013). GAD includes common features of excessive anxiety and worry about various activities like work or school performance, perceived difficulty controlling worry, physical symptoms such as restlessness, fatigue, difficulty concentrating or mind-blanking, irritability, muscle tension, and sleep disturbances, and the anxiety, worry, or physical symptoms cause significant impairment in social, occupational, or other important areas of functioning (American Psychiatric Association, 2013). Reviewed in the DSM-V, prevalence of GAD has been found to be twice as high among females compared to males, more frequently occurs among those of European decent compared to non-European and those from developed countries compared to non-developed countries, and peaks in middle age and declines later in life (American Psychiatric Association, 2013). With respect to risk factors, GAD has been noted in the DSM-V to be associated with behavioural inhibition, neuroticism, and harm avoidance, childhood adversities, parental overprotection, and genetics (American Psychiatric Association, 2013).

c. Eating Disorders

Eating disorders can be deadly, having the highest mortality rates of any other mental illness (Smink, van Hoeken, & Hoek, 2012). Eating disorders, such as bulimia nervosa and binge-eating disorders, are characterized by persistent abnormal eating behaviour, preoccupation with food, and prominent body weight and shape concerns resulting in significant impairment of one's physical health or psychosocial functioning (WHO, 2018a; American Psychiatric Association, 2013). Symptoms of bulimia nervosa include recurrent episodes of binge eating (eating in a distinct period of time an amount of food that is larger than what most would eat during similar circumstances) accompanied with recurrent inappropriate behaviors to compensate for binge eating (i.e. self-induced vomiting or misuse of laxatives) or excessive exercise to prevent weight gain (American Psychiatric Association, 2013). As reviewed in the DSM-V, prevalence of bulimia nervosa is highest among young adults and ten times more common among females than males (American Psychiatric Association, 2013), and its risk factors include genetics, childhood obesity, early puberty, weight concerns, internalized thin-body ideals, low self-esteem, depressive symptoms, and social anxiety disorder (American Psychiatric Association, 2013). In contrast, symptoms of binge-eating disorders include recurrent episodes of binge eating only (no compensatory behaviour) where the individual eats large amounts of food when not physically hungry, eats more rapidly than normal, until they are uncomfortably full, eats alone due to embarrassment of how much food is eaten, and/or feels depressed, guilty or disgusted with oneself afterwards, and the person is distinctly distressed with regards to the presence of binge eating (American Psychiatric Association, 2013). Prevalence of binge-eating disorders is more common among those seeking weight-loss treatment compared to the general population, is less skewed between males and females in comparison to bulimia nervosa alone and is found to be as common among females of racial and ethnic minorities as it is among white females, and has genetic risk factors, as reviewed in the DSM-V (American Psychiatric Association, 2013).

3) Social Media Use and Mental Health

Users' continuous exposure to photo, text, and video-sharing SM platforms has had many professionals question the effects of this practice on MH. The concurrent rise in both the use of SM and the prevalence of MH and well-being issues, has resulted in academic investigation of whether or not they are linked (McCrae et al., 2017; Twenge et al., 2018). Numerous studies on SMU and MH have been conducted to assess associations, yet the findings are not clear cut, with some studies noting the advantages of SMU while others discussing the disadvantages and worsening effects it may have on users' MH and wellbeing.

a. Advantages and Disadvantages of SMU

SM has allowed for a plethora of positive opportunities for users. Firstly, it has revolutionized social interactions and connectivity as SM allows for individuals to fulfill their need to belong (Nadkarni & Hofmann, 2012) providing opportunities for individuals to build, maintain and strengthen relationships (Muscanell & Guadagno, 2012), increase social capital (Johnston et al., 2013) and social support (Hardy & Castonguay, 2018; Seabrook et al., 2016) despite differences in users' time and space. Furthermore, SNSs allow for users to self-disclose, which increases perceived social support and therefore increases users' well-being (Lee et al., 2013). Secondly, via SMU there is the potential for increased social connectivity and involvement (Khan et al., 2014). For example, SM has allowed for online activism such as the rise in momentum in the Black Lives Matter (BLM) movement against police brutality when a video of George Floyd went viral sparking global outrage (Kansara, 2020). Thirdly, SM has also allowed for users to quickly and conveniently attain and share information on numerous topics (Khan et al., 2014), such as local news, critical world events, and health awareness. Note that there is a risk of false and misleading information being presented when SM is used as an information source due to lack of information verification and accuracy, as many have witnessed during the COVID-19 pandemic, with efforts made to stop the spread of misinformation (WHO, n.d.). Fourthly, SM has also allowed for an increase in career opportunities due to the potential for online networking and the possibility of starting a small online business, such as selling baked goods or artwork via Instagram. Online marketing and advertising have also allowed for users to take advantage of sales and save on purchases. Finally, SMU has also allowed individuals to fulfill their need

for self-presentation and portray their idealized selves online, and further construct and develop their identities (Nadkarni & Hofmann, 2012). Such advantages of SMU may potentially have positive impacts on users' self-esteem, well-being and overall MH.

In contrast, the use of SM may also include disadvantages and risks for users. Firstly, due to the nature of sharing personal information on SM (especially on SNSs) there is a risk for privacy concerns as users may lose control over the use of such information without their knowledge or permission (Khan et al., 2014; Featherman & Pavlou, 2003). Secondly, time risks are also associated with SMU as it can be a waste of time and can become addictive, risking being unproductive in other life necessities as a result of SM use (Khan et al., 2014; Featherman & Pavlou, 2003). Thirdly, SMU may also be associated with social risks such as losing friends, because one's SM presence making them appear foolish or untrendy (Khan et al., 2014; Featherman & Pavlou, 2003). Furthermore, displaying risk-taking behaviour publicly, online, over SNSs can be potentially professionally and socially damaging (Pujazon-Zazik & Park, 2010). Fourthly, a potential disadvantage and risk for users is online harassment and humiliation, or cyberbullying, which has become an international health concern and poses a threat to adolescent health and well-being (Nixon, 2014). Finally, the use of SM may induce psychological risks, which Khan et al. (2014) defined in the context of SM as the "concern or uncertainty by a user that their usage of SM results in loss of self-esteem contributing to a negative effect on feelings and peace of mind." Such risks can be taken when SMU results in personal information being shared publicly, exposing users to negative attacks or remarks from others online which in turn can lead to negative satisfaction and psychological impacts (Khan et al., 2014).

Other disadvantages of SMU include feelings of envy due to engagements in social comparison orientations (Krasnova et al., 2015), poor sleep quality (Woods & Scott, 2016), victims of cyberstalking which can negatively impact well-being (Dreßing et al., 2014), potentially revealing personal information to sexual predators (Pujazon-Zazik & Park, 2010), higher feelings of FOMO, or the Fear of Missing Out on rewarding experiences due to one's absence, and potential addictive use of SM (Kuss & Griffiths, 2017). In addition, certain types of SMU may result in negative influences on users' offline behaviours. For instance, Cavazos-Rehg et al. (2017) explained that while some studies have found that while users utilizing

suicide and self-harm websites used them as supportive communities for coping purposes, such use of SNS may be dangerous as they may normalize risk-taking behaviours like self-harm and suicide. Moreover, Bates (2015) explains that research shows users who were regular members of pro-anorexia communities and groups on SNSs and those who self-identify as pro-anorexia, show a longer and more persistent attachment to anorexia, and higher levels of disordered eating and impairment of quality of life. Pujazon-Zazik & Park (2010) argued that adolescent SM users who lack parental monitoring, may be at a greater risk of exposure to pornography, engaging in risk-taking behaviours, and unintentionally attracting cyberbullies and sexual predators, ultimately negatively impacting their health outcomes.

Finally, contradictory findings exist regarding whether SMU may result in decreased or increased communication and social skills and academic performances (Taylor, 2020). The conflicting findings on the effects of SNS use on individuals was theorized by Clark et al. (2018) to be explained through an interpersonal-connection-behaviours framework approach, which suggests SNSs benefit users when used to make meaningful social connections, yet harm users when their use results in isolation and social comparison.

b. Differing Impacts of SMU and MH

The literature has noted differing findings in the relationship between SMU and MH. Some studies have found positive associations between certain SMU and increased MH issues and poorer wellbeing, including greater symptoms of depression and anxiety (Primack et al., 2017; Woods & Scott, 2016), increased reports of depressive symptoms and suicide-related outcomes (Twenge et al., 2018), poorer sleep quality (Woods & Scott, 2016), lower self-esteem (Woods & Scott, 2016), reduced cognitive and affective well-being (Krasnova et al., 2015), higher drive for thinness, muscularity, compulsive exercise, and bulimia (Holland & Tiggemann, 2017), greater body and facial dissatisfaction (Tiggemann et al., 2018), and body dissatisfaction (Tiggemann & Barbato, 2018). Meanwhile others have indicated that certain SMU can be associated with improvements in psychological wellbeing, including decreased loneliness (Deters & Mehl, 2013; Seabrook et al., 2016), increased social support (Lee et al., 2013), and greater self-esteem and life satisfaction (Seabrook et al., 2016). Due to this apparent duality of SM being a place of stress while

simultaneously providing social support to reduce said stress (Haimson et al., 2015), SMU may be both a risk factor and a protective factor for depression and psychological wellbeing among the general population as it can provide either positive or negative experiences (Escobar-Viera et al., 2018). The different types of SM and available features allow it to be used differently, potentially resulting in differing effects. Interestingly, some studies did not find any such associations, for example an experience sampling method (ESM) study conducted by Jelenchick et al. (2013) used real-time assessments of SNS use amongst older adolescent university students over a period of one week and concluded that no association was found between SNS use and clinical depression among participants.

Many studies have also noted mixed findings in the relationship between SMU and MH (Seabrook et al., 2016; Escobar-Viera et al., 2018; Hardy & Castonguay, 2018; Lup et al., 2015; Rae & Lonborg, 2015; Chen et al., 2016; Burke & Kraut, 2016; Cohen et al., 2017; Fardouly & Vartanian, 2015; Holland & Tiggemann, 2017; Kim & Lee, 2011; Tandoc et al., 2015; Vidal et al., 2020; Tian et al., 2019; Wang et al., 2017) suggesting that there may be multiple factors and pathways which determine the type of impact users may have from certain SMU. For instance, a systematic review of SNS use and depression and anxiety revealed interesting but mixed results; lower levels of depression and anxiety were found among those who experienced positive interactions, social support, and social connectedness on SNSs, whereas higher levels of depression and anxiety were reported among those who experienced addictive SMU, negative interactions, and upward social comparisons (Seabrook et al., 2016). As such, Seabrook et al. (2016) concluded that the type of effect from SNS use is dependent on social factors of SNS, like positive or negative interaction quality. Similarly, a systematic review of evidence on SMU and depression among LGB individuals concluded mixed findings of SMU being protective when online support minimized feelings of geographic isolation and loneliness, but risky when it resulted in negative patterns of use and cyberbullying (Escobar-Viera et al., 2018). Nadkarni & Hofmann (2012) also found that frequent use of Facebook was associated with lower academic performance but potentially greater self-esteem and feelings of belonging.

c. Potential Contributing, Mediating, and Moderating Factors of SMU and MH

Certain factors have been theorized and studied to further understand the mixed findings and differing association in the relationship between SMU and MH. Evidence has suggested several mediators and moderators (i.e. age, self-esteem, social support) to be associated with SMU and MH and wellbeing. For instance, Hardy & Castonguay (2018) noted that age may moderate the relationship between SNS use and MH as they found that the number of SNSs used was positively related to respondents reporting feelings of having a nervous breakdown only among those 30 years old and older, but negative among those aged 18 to 29 years. The authors explained that this may be due to several reasons including differences in generational experiences and norms, or potential increases in social comparison with age as middle adulthood has been theorized to be a phase of reviewing one's accomplishments and SNSs allow for unrealistic comparison (Hardy & Castonguay, 2018). A cross-sectional survey of Chinese college students found that passive SNS use was negatively associated with subjective wellbeing and this relationship was mediated by self-esteem (Chen et al., 2016). Furthermore, this mediating process of self-esteem was found to be moderated by one's effortful control; those with lower effortful control had a stronger mediating effect of self-esteem compared to those with high effortful control (Chen et al., 2016). Another potential mechanism involved in the association between SMU and MH outcomes is the role of social support as a mediator in the association between self-disclosure on SNS and well-being where those who self-disclose on SNS were found to have increased well-being due to their increased perception of social support (Lee, Noh, & Koo, 2013).

Other factors investigated for their moderating or mediating roles which were found to be associated with certain SMU and psychological outcomes and wellbeing include, negative social comparisons and rumination (Feinstein et al., 2013), social connectedness (Grieve et al., 2013), envy (Tandoc et al., 2015), mindfulness (Charoensukmongkol, 2016), number of strangers followed, users underlying motivation for use (maintaining friendship vs creating new friendships), gender, and personality (Seabrook et al., 2016), negative social comparison (marginally/non-significantly), number of strangers followed (Lup et al., 2015), self-esteem and effortful control (Chen et al., 2016), general appearance

comparisons, frequency of comparisons to close friends and distant peers, and upward social comparisons to celebrities and distant peers (Fardouly & Vartanian, 2015), FOMO (Fear of Missing Out on rewarding experiences others may be enjoying), rumination, insomnia (partially), cyberbullying victimization and perpetration, age, gender, parental involvement (monitoring SMU or direct engagement with adolescents) (Vidal et al., 2020), medium differences or specific SM platform (Instagram vs YouTube) (Tian et al., 2019), and upward social comparisons, self-esteem, and social comparison orientation (Wang et al., 2017).

Other potential contributing factors include the use of multiple SM platforms, which was found to be associated with symptoms of depression and anxiety, with those who used between 7 – 11 platforms having increased levels of depression and anxiety symptoms compared to those who used 0 – 2 platforms (Primack et al., 2017), greater overall and nighttime-specific SMU and higher emotional investment which were found to predict poorer sleep quality, lower self-esteem and higher levels of depression and anxiety among Scottish adolescents (Woods & Scott, 2016), and number of friends and type of self-presentation strategies (positive vs. honest) of which all had positive associations with subjective well-being, but positive self-presentation had a direct effect, honest self-presentation had an indirect direct affect via perceived social support, highlighting the importance of self-disclosure in online relationship development (Kim & Lee, 2011). As reviewed by Vidal et al. (2020) factors including number of SM accounts, frequency of checking SM, and problematic SMU, were also associated with MH effects such as symptoms of depression. Additionally, Cohen et al. (2017) identified appearance-focused SNS use (as opposed to overall SNS use) to be related to body image concerns among young women: On Facebook, greater engagement in photo activities was associated with greater thin-ideal internalisation and body surveillance, whereas general use was not. Furthermore, on Instagram, following appearance-focused accounts was associated with thin-ideal internalisation, body surveillance, and drive for thinness, as opposed to following appearance-neutral accounts having no such implications (Cohen et al., 2017). Finally, specific patters of SMU, such as type of communication (targeted and composed communication vs one-click communication) and tie strength of SNS friend (strong vs weak) have been found to be associated with improvements in mental wellbeing (Burke & Kraut, 2016).

Users' demographic differences may also be important to consider when evaluating the association between SMU and MH. Seabrook et al. (2016) revealed evidence suggesting that individuals with MHDs (specifically depression and social anxiety) may engage with SNSs in different patterns which may impact their symptoms and effects of SNS use. For instance, evidence suggests that while individuals with depression may miss out on the potential positive impacts of SNS use due to their misperception of positive interaction quality and social support available among SNS communication content, SNSs users with social anxiety may receive unique benefits of online social support and connectedness they may not receive during in-person interactions (Seabrook et al., 2016). Similarly, Woods & Scott (2016) discuss the potential explanation for the association between overall SMU and higher levels of depression and anxiety among adolescents as being due to anxious and depressed adolescents' tendency to use SM more, suggesting that individuals high in neuroticism have preferences for social uses of Internet and use of SM for the purposes of emotional regulation. Gender may also be important to consider as gender differences in online behaviour have been noted in the literature, such as men using SNS for relationship formation meanwhile women using SNS for relationship maintenance (Muscanell & Guadagno, 2012).

Likewise, individual differences like personality traits have been suggested to play a potential role in patterns of SMU, potentially impacting SMU outcomes. Extraversion and openness to experiences have been found to be positively related to SMU (Correa et al., 2010). Kayis et al. (2016) found a link between the big five-personality traits and internet addiction with individuals high on the neuroticism scale reporting higher levels of internet addiction (positive association), and those high on the scale for openness to experiences, conscientiousness, extraversion and agreeableness reported lower levels of internet addiction (negative association). As reviewed by Kuss & Griffiths (2017), neuroticism and extraversion predicted SNS addiction, whereas lower levels of agreeableness, conscientiousness and self-esteem may contribute to compulsive SNS use. It is further suggested that gender may interact with personality to impact SNS features used, with women low in agreeableness using SNS instant messaging features more than women high in agreeableness, while men low in openness played more games compared to men high in openness (Muscanell & Guadagno, 2012).

User personality traits may also contribute to their motivation for SMU (Bergman et al., 2011). Nadkarni & Hofmann (2012) reviewed the literature on Facebook use and proposed that the personality traits of neuroticism, narcissism, self-esteem and self-worth, contribute to the need for self-presentation, a motivation for Facebook use; high levels of neuroticism and narcissism and low levels of self-esteem and self-worth were associated with high Facebook use. Furthermore, narcissism was found to be positively related to the intensity of use of Sina Weibo, a Chinese micro-blogging website (Mo & Leung, 2015). It is also suggested that personality variables (i.e. self-esteem, neuroticism) may impact social comparison processes (Buunk & Gibbons, 2007).

Patterns of use may also play a role in the relationship between SMU and MH. An experimental study aimed to investigate the effects of photo-based activity on SNS on body image concerns. The results revealed that females exposed to thin-ideal images experienced greater body and facial dissatisfaction than those exposed to average images, with investment in number of Instagram "likes" having a positive effect on facial dissatisfaction and appearance comparison (Tiggemann et al., 2018). Similarly, Holland and Tiggemann (2017) revealed a significantly higher drive for thinness and compulsive exercise among women who post Instagram photos of fitspiration, an online trend to motivate others to eat healthy and exercise. In contrast, an experimental study assessed the psychological effects of posting status updates on Facebook, a type of active SMU; the results revealed that an increase in status updating activity reduced loneliness due to the participants feeling more connected to their friends on a daily basis, regardless of whether or not their friends responded to the status updates (Deters & Mehl, 2013). Although these studies did not note mixed findings, they provide insight on how certain patterns of use (i.e. posting fitspiration images) and/or features of certain SM (i.e. likes and status updates) may be important factors and play a role in the effects of SMU on MH and well-being.

The literature also presents risks associated with SMU which can have an impact on users' MH. These include (1) cyberstalking victimization which has been found to have negative implications on victims' well-being (Dreßing et al., 2014); (2) cyberbullying victimization which has resulted in increased depressive symptoms, anxiety, loneliness, suicidal behaviour and even somatic symptoms (Nixon, 2014);

(3) risks of becoming addicted to SNSs or more specifically the positive feelings that SNS bring about for users when connecting with others and receiving positive feedback, and this almost instantly via likes and comments; this can result in compulsive use and in extreme cases it can result in consequences and symptoms similar to those of substance addictions including withdrawal, relapse, and mood modifications (Kuss & Griffiths, 2017). There are also several factors that have been suggested to play a protective role in the MH and well-being of SNS users. These include feelings of social support, social connectedness, and positive interaction quality (Seabrook et al., 2016). Facebook friendships with parents have also been found to be potentially protective against problematic internet use among college students (Kerr et al., 2020).

Although evidence supports a relationship between SMU and MH issues with several factors potentially impacting and further explaining this relationship; however, most studies evaluating this association have been cross-sectional in nature and therefore its directionality cannot be determined (Woods & Scott, 2016; Primack et al., 2017). This means evidence can be explained as either those with MH issues may be more drawn to certain SMU or certain SMU can result in greater MH issues.

4) Rationale

a. Microcelebrity

Along with a variety of SM users online comes a range in one's online following. While some users have little to no followers, others have thousands and even millions. The Internet has changed celebrity culture through SM, fostered its own celebrity circuits and practices, and allowed for the celebrification of regular people via the sharing of UGC (Jerslev, 2016). These Internet celebrities who have gained fans or large online followings were first termed “microcelebrities” by Theresa Senft (2008) in her book on the ethnography of Camgirls - women who personally broadcast themselves online for public viewing meanwhile attempting to attain a measure of celebrity status. Senft (2008) defined microcelebrity as a type of online performance involving the use of webcams, video, audio, blogs, and SM platforms (like YouTube and Instagram) to gain popularity among others online. Examples of microcelebrities, those who engage in microcelebrity practices, include professional video gamers, bloggers, YouTube vloggers, political activists

(Marwick, 2013), and SM influencers (SMIs) (Hearn & Schoenhoff, 2015). Oftentimes, microcelebrities have gained high earnings from ad revenues and product sponsorship deals, and in some cases have also earned television, film, and book deals (Johnston, 2017). In brief, while microcelebrity can refer to the *status* of being famous online among a specific niche group of people (Marwick, 2017; Raun, 2018), it is also further understood as a *practice* one continues to engage in (Marwick, 2015; Marwick, 2017).

It is important to note that microcelebrities are distinct from traditional Hollywood celebrities. Celebrification via SM is "characterized by continuous and multiple uploads of performances of a private self; it is about access, immediacy, and instantaneity" (Jerslev, 2016). As reviewed by Raun (2018), both Senft (2008) and Marwick (2015) argued the two are different because while microcelebrities must sustain a connection and direct interaction with their audiences and maintain their attention by sharing private information, traditional celebrities appear distanced from their audiences and are expected to protect their privacy. While traditional celebrities' online behaviours usually cultivate distance, scarcity and privacy (Jerslev, 2016), Marwick (2015) also acknowledges how SM has changed the way traditional celebrities interact with fans online as some will at times perform authenticity by sharing insider content online while still maintaining a public face. Despite their differences, Senft (2008) argues that both microcelebrities and mainstream celebrities share a common strategy in which both must continuously brand themselves to maintain their status.

b. Practices of Microcelebrity and Self-branding

Microcelebrities engage in different self-presentation strategies in order to maintain their microcelebrity status and online audience. Self-presentation is a part of the broad range of behaviours called impression management and refers to the ways people present themselves to control how others perceive them (Baumeister & Vohs, 2007). Two commonly adopted individual self-presentation strategies used online to gain status and attention are (1) microcelebrity: a mind-set and practice in which individuals view and present themselves as public personas to be consumed by others, use strategic intimacy to appeal to and collect followers, create affective ties with their audience, and view their audience as fans (Marwick, 2017; Marwick & boyd, 2011; Senft 2008; Senft 2013) and (2) self-branding: a mind-set and practice in

which individuals present themselves as edited and curated salable commodities or "personal brands" to potential clients or employers, for the purposes of commercial gain or social capital (Marwick, 2013; Marwick, 2017; Khamis et al., 2017). Practices of microcelebrity can be enforced via a personal blog, Instagram or Twitter posts, or YouTube videos. Using SM, microcelebrities present a "self-conscious, carefully constructed persona" (Marwick, 2015) and commit to maintaining their online identity as if it were a branded good (Senft, 2013).

Practices of microcelebrity used to retain attention and appeal to audiences include interacting directly with followers, appealing to multiple audiences, creating a friendly brand and sharing personal information, which have been found to be encouraged and rewarded on SNSs through analytical insights and metrics such as increased follower counts and engagement insights such as "likes" (Marwick & Boyd, 2011). Microcelebrities also often use multiple SNSs to expand their reach, increase their popularity, remain relevant, and increase revenue opportunities.

Intimacy and authenticity are essential key elements in microcelebrity practices, and commodification and branding have been argued to be dependent on them (Raun, 2018). Microcelebrities utilize strategic intimacy to appeal to an audience (Marwick, 2013) and this practice of constructing intimacy subsequently builds trust among microcelebrities' audiences (Marôpo et al., 2020). Raun (2018) discusses the affective labour microcelebrities perform to maintain their audience that rely on intimacy, such as displaying accessibility, availability, presence, connectedness, and authenticity; while these strategies are time-and energy-consuming yet not necessarily economically profitable, Raun (2018) proposes intimacy works as a currency within SM and thus can be capitalized on for economic and social capital as it allows for status and social recognition. Authenticity is also important as appearing authentic (i.e. by self-disclosing personal information) allows for microcelebrities to create an emotional relationship with their audience (Whitmer, 2015). Bloggers practice microcelebrity to maintain their audience by presenting a self that continues to appear both authentic and worthy of visibility, or being viewed, by engaging in self-branding through selective self-disclosure and positive self-presentation when sharing content (Whitmer, 2015). Therefore, performances of a private and authentic self create and maintain

audiences' attention and as such these performances are of the most valuable commodities in SM for microcelebrities (Jerslev, 2016).

Microcelebrity product endorsement has become a valuable economic phenomenon due to the strong influencing power microcelebrities have on their audiences (Yang & Sia, 2020), resulting in companies increasingly considering turning to microcelebrities for product endorsements in their marketing efforts (Schouten et al., 2020). Traits of intimacy and authenticity are valuable in this domain as they allow microcelebrities to grow their social capital by increasing attention, views, and maintaining an emotional and trustworthy relationship among their audience, which potentially allows for gains in monetary capital by receiving commissions from affiliate sales when conducting product advertising campaigns. In sum, an audience will more likely purchase products microcelebrities recommend when they trust them and their opinions.

The relationship between microcelebrities and their audience can be explained by Senft's (2008) social concept of "strange familiarity", whereby a person (i.e. member of audience) feels as though they know someone intimately without the other person (i.e. microcelebrity) knowing who they are. This one-sided relationship is similar to Horton and Wohl's (1956) concept of parasocial relationship, which can be emotionally gratifying as it creates feelings of intimacy and familiarity among audience (Marwick, 2015). Microcelebrity extends the one-sided nature of parasocial relationships and recontextualizes it within SM where actual interactions between the microcelebrity and fans occur via instant messaging, replies, and comments, and even face-to-face meetings (i.e. YouTuber Meet & Greet events) (Marwick, 2015; Marwick & Boyd, 2011). This increased access and simulated real interactions between the audience and microcelebrity can deepen the relationship between them (Johnston, 2017). Lou (2021) suggested an updated theorization called "trans-parasocial relation" which is defined as "a collectively reciprocal, (a)synchronously interactive, and co-created relation between influencers and their captive followers".

SMIs are a specific type of microcelebrity that are oftentimes referred to simply as 'influencers' due to the behavioural and purchasing influence they have on their fans and followers. SMIs gather large online followings by publicly sharing their personal lives and, like microcelebrities, depend on the capitalization

of the private self (Mulvey, 2019). As reviewed by Khamis et al. (2017), SMIs practice microcelebrity strategies (such as self-branding) to gain social capital, build an authentic personal brand, and develop intimate and trustworthy relationships with their followers on SNSs and online communities like YouTube, of which these can then be used and capitalised on by companies, advertisers, and marketers for consumer outreach. Interestingly, SMIs refer to their audience as "followers" as opposed to "fans" in order to create a sense of community with their audience (Abidin, 2015) allowing the SMI to appear trustworthy to review and recommend products (Mulvey, 2019). SMIs monetize their personal lives via brand partnerships and advertisements and receive compensation for their opinions and expertise (Abidin, 2015). SMIs' value as advertising partners is related more to the level of interaction SMIs receive from their followers via likes, comments, and shares, than a certain following size (Mulvey, 2019).

c. Microcelebrity YouTubers

YouTube is a SM platform or online community, where users can personally upload videos onto their YouTube channel where it can be viewed, shared, and commented on by the public. YouTube has become increasingly popular and is the second largest search engine in the world, after Google (Wagner, 2017). YouTubers, or YouTube creators, are content creators who post online videos, or engage in videoblogging also referred to as vlogging, on YouTube for public viewing. While anyone can upload videos on YouTube and be regarded as a YouTuber, there appears to be a rise in the amount of microcelebrity YouTubers, or YouTubers who practice microcelebrity and self-branding. Raun (2018) highlights how YouTube has become heavily commercialized and has popularized the celebrity process by encouraging users to "broadcast themselves" while promising the freedom of self-representation and promoting self-commodification. In order to achieve and maintain a popular status as a YouTuber via views, clicks, and subscriptions, (which can potentially mean opportunity for monetary gain), one is expected to "sell oneself", engage in self-promotion using links to their other videos and encouraging channel subscriptions (Raun, 2018). The commercialization of YouTube has allowed for many content creators to uptake YouTube as their main profession via the YouTube Partner Program, ad revenues and sponsored content (Raun, 2018; Simonsen, 2011). In addition to their advertisement's earnings, YouTube creators can benefit from a

secondary revenue opportunity via fees from YouTube Premium Memberships, which allows members to watch and download YouTube videos without ads (*Your Content & YouTube Premium - YouTube Help*, n.d.). In sum, the rise in commercial opportunities via YouTube has encouraged many users to grow their YouTube platforms, seek microcelebrity status, and access the entrepreneurial gains microcelebrity YouTubers have.

Senft (2013) argues that all SNS users (oftentimes unintentionally) practice microcelebrity regardless of their following size in an attempt to maintain their online identity and presentation. Similarly, all YouTubers technically practice microcelebrity in some way even if they have not yet attained microcelebrity status via attention, popularity, and/or subsequent monetary opportunities. Thus, it is important to note that similar to how not all YouTube users (those with YouTube accounts consuming content) are YouTubers (content creators on YouTube), not all YouTubers are considered microcelebrities (with regards to status) nor self-identify as one.

d. Motivation to Upload YouTube Videos

Motivation to upload videos on YouTube could be hypothesised based on the three theories for motivation for SMU mentioned previously: to satisfy self-realization needs, to gratify certain individual needs, and/or to build a sense of self through social comparison and self-evaluation. The relevance and inclusion of these three motivation theories in this thesis are as follows: (1) Maslow's Hierarchy of needs allows for a unique perspective on microcelebrity motivation to meet their needs regarding belonging and self-esteem, by gathering large followings and attaining fame, as well as self-actualization needs by presenting themselves the way they wish to be perceived by others, or in other words self-brand. Furthermore, microcelebrities can satisfy self-actualization needs as they build a community for themselves and their fans where they can offer social support to their online followers. On the other hand, although the hierarchy of needs emphasizes a fixed order, Maslow (1943) points out that some individuals appear to be exceptions with respect to the order of their needs, depicting an apparent reversal in the hierarchy; as such, these people (in this case, microcelebrities) may also be innately creative people with a need for creativity which appears before the satisfaction of their basic needs; this need to fulfill creativity appears not as self-

actualization following the satisfaction of their basic needs, but in spite of the lack of basic needs satisfaction (Maslow, 1974); (2) UGT provides for the perspective that microcelebrities seek to gratify their entrepreneurial, monetization, and fame needs by pursuing their YouTube journey. In addition, using YouTube and SNSs allows for microcelebrities to receive instant gratification of affective needs (receiving admiration and support from followers through comments, likes, and personal messages), personal integrative needs (engaging in self-presentation and self-branding), and social integrative needs (connecting with fans through likes, comments, and view counts); (3) Social comparison theory allows for the assumption that ordinary people may be motivated to become microcelebrities in order to build a greater sense of self via SM, in terms of popularity and social ties, and thus self-evaluate their progress positively in comparison to the profiles of others online who have smaller followings. In addition, this theory allows for the assumption that microcelebrities continue to take on this role by comparing themselves to similar others (other microcelebrities) and wanting to continue to grow their platforms and remain relevant. Furthermore, being a microcelebrity allows individuals to engage in downward social comparisons when comparing themselves to regular SM users, who usually have smaller number of followers and less likes, which could allow them to feel better about themselves for having more followers and SM interaction.

During the early years of YouTube some YouTubers unintentionally gained popularity. This "unintentional celebrification" can be explained by Cirucci (2018) who posits that SM users eventually, and even unknowingly, learn to engage in self-branding because SM platforms are celebrification utilities designed to promote self-branding of users to extract user information in order to simplify its consumption by advertisers. However, the growth of media entrepreneurialism has changed the perspective and added fame (via attention and status) and monetary gain via microcelebrity status as potential motivating factors for continued YouTube use.

Although Marwick (2013) argues that microcelebrity status does not equate to more income and concludes that "attention and status" appear to be the primary motivating factors for pursuing microcelebrity, the monetary opportunities provided through SM (i.e. YouTube) have allowed for the additional assumption that media entrepreneurialism has become the main motivation for a majority of

individuals pursing and maintaining microcelebrity status since the late 2010s (Zhang & de Seta, 2018). Therefore, an additional motivation for individuals to become YouTubers and for users to consistently share UGC on YouTube after the proven prospects of fame (via attention and status) and monetary success and the introduction of content monetization on YouTube (via YouTube Partner Program, advertising campaigns, sponsored content, and YouTube Premium memberships), can be assumed to be to become a microcelebrity; ultimately microcelebrities are promised attention and status, which subsequently allow for the possibility of monetary gain and entrepreneurial pursuits.

According to the literature, in studying the motivation to use YouTube, one group found that perceived ease of use was important in terms of intention to use YouTube; female user intention was strongly influenced by usefulness and social norms, whereas male user intention was influenced by interpersonal norms (Chyan Yang et al., 2010). However, this study did not consider such motivating factors as the desire for fame, microcelebrity status and attention, or monetary success; the YouTube Partner Program (YPP) allows for content monetization for YouTubers with at least 1000 subscribers and 4000 public watch hours in the last 12 months (*YouTube Partner Program Overview & Eligibility - YouTube Help*, 2021). Thus, the motivation with which an individual begins their YouTube channel may be a predictor to future MH issues.

e. Difficulties of YouTubers and Microcelebrities

Benefits of microcelebrities include associated online attention and status, building a sense of community, and potential economic gains. However, there also appears to be potential adverse effects of microcelebrity practices. While microcelebrities' attention and status can allow for instant gratification, feelings of accomplishment, social gains, sense of community, connection with fans, and potential monetary success, there appear to be potential adverse effects of microcelebrity practices. In her book *Status update: celebrity, publicity, and branding in the social media age*, Alice E. Marwick (2013) explains how microcelebrity practices, specifically self-branding, involves emotional labor that requires "revealing personal information, sometimes to the point of extreme discomfort or vulnerability…creating a self that is simultaneously authentic and carefully edited…using real emotional affect when presenting oneself and interacting with others…ongoing self-monitoring, a thick skin, and an ongoing awareness and evaluation

of the audience" (Marwick, 2013, p. 196). In addition, informants revealed to Marwick (2013) how self-branding had "significant negative emotional costs… including anxiety, information overload, lack of time, and hurt feelings due to audience comments and interactions…. was often exhausting and time consuming… [and meant] neglecting other aspects of life." (Marwick, 2013, p. 196). Although constantly improving self-branding and only presenting the best version of oneself helps maintain microcelebrities' following, relevance, and influence, it can be mentally exhausting (Jacobson, 2017). Khamis et al., (2017) describe how microcelebrity-audience relationship requires microcelebrities to have an "always-on" work mode in order to maintain popularity, involving the constant monitoring of the microcelebrity's authentic self that is both edited and real (Khamis et al., 2017). As such, the emotional labor required for microcelebrity practice can have adverse effects on individuals (Khamis et al., 2017) and may result in potential impacts on overall MH and wellbeing.

Most microcelebrity YouTubers have corresponding Instagram, Twitter, and TikTok accounts for the purposes of growing their reach, interacting with their audience, and self-branding; note that they may be continuously using and exposed to SM. In addition, while YouTube allows these YouTubers to receive instant gratification and validation for their content through increasing number of views, likes, comments, and subscribers, displaying themselves online and self-disclosing personal information reduces the microcelebrity YouTubers' privacy and makes them easy targets for critique, judgement, and hateful comments. Being online, YouTubers may also have to deal with social pressures, such as having to fit viewers' expectations of appearance and behaviour, which oftentimes includes aspects related to fitting certain beauty standards and appearing appealing, specifically for microcelebrity YouTubers of the beauty community. While a larger social reach can result in more social and monetary gain, it also means more exposure and greater risk for targeting and cyberbullying.

Being a YouTube Creator can be exciting and enjoyable as it allows for one to use their creativity to create content, but it also requires commitment and can cause great pressure due to the relentlessness and uncertain nature of the job (Alvarez, 2018). Many microcelebrity YouTubers have in fact posted videos addressing the pressures of being a successful YouTuber; they have to continuously produce creative and

entertaining content to maintain views and ensure online relevancy and this may lead to burnout (Alexander, 2018c; Alvarez, 2018), defined as "a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment which can occur among individuals who work with other people in some capacity" (Maslach, 1993). YouTubers must continuously maintain and ensure their digital visibility (the value of their own brand) which is determined by the YouTube Algorithm; the processes or set of rules which impact and determine one's views and relevance regardless of how successful the YouTuber is (Bishop, 2018a). When a YouTuber becomes inconsistent with posting their content, which for some can mean only skipping a day or two, this can result in lower placement in YouTube rankings and lower earnings, because YouTubers' earnings are mostly dependent on the number and length of ads in their videos and how many viewers are watching them (Alvarez, 2018). In addition, updates and changes to Google's advertising guidelines and algorithms can be stressful and worrisome for YouTubers as they have resulted in inoffensive videos being demonetized or removed (Alvarez, 2018). Bucher (2017) argued that a relationship exists between algorithm and users and that the algorithm not only impacts users' experiences, but the "algorithmic imaginary" or users' perceptions of algorithms and their functions, and thus users' online practices in turn also impact the algorithm. Therefore, it is hypothesized that YouTubers learn the mechanical decision-making processes of the YouTube algorithm and begin to embody them into their practices such as type of content to include in their videos, types of self-presentation strategies to use, use of certain words or sentences, and even changing their tone of voice, to ensure visibility and relevancy, as even the most successful YouTubers' visibility is reliant on the platform's algorithm (Bishop, 2018a). Although it is necessary to take a mental break when burnt-out, YouTubers have noted that a break can have a serious impact on earnings (Alvarez, 2018), resulting in additional stress and fear of unacceptance to take well-needed breaks.

Many of YouTube's most popular creators claiming burnout has led to a conversation on the effects of YouTubing on MH among mainstream news outlets, such as the Guardian and the NY Times (Parkin, 2018; Lorenz, 2021). Chloe Ting is a successful microcelebrity YouTuber with 22.6 million subscribers and is known for her free workout programs and fitness video content on YouTube (Ting, n.d.). In her video titled

I've had enough., Chloe Ting open ups about the effects of cyberbullying, harassment, and defamation on her MH and the legal proceedings she filed in court against an individual and a media company that have published material and "very hurtful things" about her (Chloe Ting, 2021):

> *"Hey guys it's been awhile. So, a lot has happened in the last couple of months that I don't talk about but* ***I've been thinking about quitting YouTube once and for all*** *and just being done with it if I'm being honest. I'm sure some of you have noticed that* ***I've been burnt-out*** *and that I've been burnt-out for some time now. Like* ***the stress, the pressure, and the hate****. Sometimes I just- I don't know if it's worth it. I feel like I'm walking on eggshells on YouTube.* ***I have to watch every little thing I say****. Like something really simple like me enjoying chocolate or liking chocolate can turn into an eating disorder.* ***But I'm really proud of our community and what we have built****. This channel has given me such a great sense of accomplishment. And look everyone on social media gets hate and its normalized but it gets really challenging and hurtful when some people try to villainize me. Sometimes I can't block off all the hate you know.* ***And on top of that there are brands that are trying to take advantage of me. There are people selling merch or apps using my name that has nothing to do with me and also people trying to hold trademarks over my name*** *– my name. But you know all that doesn't affect me as much.* ***What affects me the most is the persistently hurtful content because it affects my mental health*** *and I'll get into that in a sec(ond). And yeah, it just gets a little bit too much and I'm just losing passion for making content at this point."*

More microcelebrity YouTubers are increasingly disclosing issues of MH via their posts, and many people have come to believe there is a growing MH crisis among video creators on YouTube (Parkin, 2018). Elle Mills, a popular YouTube creator with over 1.2 million subscribers, disclosed her struggles with MH and burnout in a confession video:

> "My life just changed so fast. My anxiety and depression keep getting worse and worse. I'm literally just waiting for me to hit my breaking point… This is all I ever wanted. And why the fuck am I so unfucking unhappy? Because, like, this is literally my fucking dream. And I'm fucking so unfucking happy. It doesn't make any fucking sense." (ElleOfTheMills, 2018; Alexander, 2018c)

Some YouTubers appear to be more vulnerable to the negative impact of SMU on their MH; some have discussed how hate comments from viewers have led to symptoms of depression and anxiety, while others appear to be more resilient. Resiliency refers to an individual's ability to successfully cope with and overcome negative or traumatic experiences and avoid the negative effects of risk exposure, which occur due to the presence of promotive factors that either promote a positive outcome or reduce or avoid a negative outcome (Fergus & Zimmerman, 2005). Different factors may impact these microcelebrity YouTubers' susceptibility towards or resiliency against the adverse effects of engaging in microcelebrity practices and YouTube use.

f. Microcelebrities and YouTubers in Literature

Abidin & Brown's (2018) book *Microcelebrity Around the Globe: Approaches to Cultures of Internet Fame* discusses the many studies on microcelebrity cultures in the literature including the different methodological approaches that have been used such as content analyses, interviews, netnographies (or Internet ethnographies), case studies, and the various disciplines interested in this phenomenon such as anthropology, sociology, psychology, business and marketing. While microcelebrity practices such as self-branding and other types of self-presentation strategies have been investigated (Jacobson, 2020; Khamis et al., 2017; Raun, 2018; Marôpo et al., 2020; Jerslev, 2016), along with brief narrations of the mental and emotional labour these practices place on microcelebrities (Marwick, 2013; Jacobson, 2017), the MH effects of SMU on microcelebrities and microcelebrity YouTubers specifically have yet to be thoroughly investigated.

Some studies have begun exploring the consequences of being a microcelebrity such as feelings of anxiety, worry, and unease with their fame (Smith, 2017), inequalities in YouTube's Algorithm and its consequences on certain YouTubers' visibility (Bishop, 2018a), YouTuber practices such as active and performative emotional and authenticity labour required for digital visibility and maintaining one's brand on YouTube (Bishop, 2018b), development of negative subcultures of blogging anti-fan communities (McRae, 2017), use of unwilling microcelebrities as tools to spread important content for the online harassment campaign, GamerGate, and its aggressive activism (Trice & Potts, 2018), and SMIs being victims of cyberbullying including harassment, dissing, trolling, and catfishing (Hassan et al., 2018). In contrast, a netnography of YouTube military-related trauma vlogging for the purposes of MH self-management, social support and connection among veteran YouTubers (Schuman et al., 2018) presents the potential benefits in the vlogging on YouTube, although the authors made no mention of microcelebrity status or practices among vloggers.

Most of the literature on microcelebrities are content analyses, case studies, interviews, or netnographies. While a survey measuring the effects of exposure to content by microcelebrities on regular users' social comparison levels and feelings of envy has been conducted (Chae, 2018), to the best of our

knowledge a largescale survey on the MH effects of being a microcelebrity, specifically a microcelebrity YouTuber, has yet to be conducted. In sum, while the association between SMU and MH among regular users has been explored, research on the effects of its use on the MH of microcelebrities, specifically microcelebrity YouTubers, is lacking.

5) Research Question

Can being a YouTuber or microcelebrity YouTuber have an impact on one's MH?

6) Objectives

The purpose of this study is to gain a better understanding of how SMU affects YouTubers' MH by:

1. Observing what motivates individuals to become YouTubers;
2. Observing the rate of MHDs among YouTubers vs microcelebrity YouTubers and the overall effect of YouTubing on MH status of YouTubers vs microcelebrities (symptoms worsen, improve, no effect, or unsure);
3. Identifying any protective factors that may make some YouTubers more resilient to negative influences of SMU on MH;
4. Identifying any susceptibility factors that make some YouTubers more vulnerable to negative influences of SMU on MH.

7) Hypothesis

- Firstly, although multiple motivational factors for becoming a famous YouTuber potentially exist, such as fame, profit, and power, we hypothesize that the most popular motivation will be for purposes of entertainment as YouTube allows for a wide range of creativity.
- Secondly, we hypothesize that being a YouTuber will generally have a negative effect on MH due to the mental labor associated with constant positive self-presentation and exposure to multiple SNSs resulting in greater risk of engaging in upward social comparison and envy. Furthermore,

popular YouTubers have greater exposure to cyberbullying due to viewers' online disinhibition allowing them to make harsh comments online that they may not otherwise express in person (Joinson, 1998).

- Finally, while different factors may increase or decrease YouTubers' risk of MH issues, we further hypothesize that the type of content the YouTuber creates will be a significant factor to consider. Individuals who create beauty-related content and daily vlogs would be more susceptible to negative effects of YouTube use on their MH due to the pressures of having to 1) comply with beauty standards and 2) self-objectification through product sponsorships for the former, and 3) having to deal with the strain and potential burnout of being on camera every day, continuous editing and uploading of videos for the latter. Meanwhile, we hypothesize that those who create comedy videos would be more protected as they are exposed to positive and uplifting content, the same way the popular YouTuber Lilly Singh, explained that she began making comedy videos on YouTube because she was depressed, and her videos and YouTube journey helped her become happy and get out of her depression (Bilyeu, 2018).

CHAPTER 2: METHODOLOGY

1) Sample

The study methodology consisted of a cross-sectional online survey of YouTubers from various countries, aged 18 years and older (Figure 1). Participants were recruited using two approaches: (1) indirectly through SM posts, online advertisements, etc. and (2) directly via email and by commenting on their most recent SM posts. Participants were also asked to refer the survey to their friends upon completion in a form of snowball sampling. Data collection period occurred between September 18th, 2019 – September 30th, 2020.

a) Rationale for Intended Number of Participants

To the best of our knowledge, a large-scale study on microcelebrity MH has not yet been completed. Recently published research that has addressed MH in the SM user/consumer have had participant numbers ranging from 117 to 1787. Number of participants in Internet use and MH past studies:

- 1787 (Lin et al., 2016; Primack et al., 2017)
- 1765 (Sidani et al., 2016)
- 702 (Escobar-Viera et al., 2018)
- 259 (Cohen et al., 2017)
- 117 (Lup et al., 2015)

Thus, our study was aimed to YouTube content creators exclusively, and no other SM platforms. The intended number of participants for this study was 300 YouTubers. This estimated number of participants was needed to achieve sufficient power to detect any significant relationships of interest in this study; sample size was based on values pertaining to YouTubers alone. According to OMNICORE, there were approximately 50 million YouTube content creators world-wide, of which 9% of small businesses are on YouTube (Aslam, 2021). Small businesses were removed without greatly changing the population size enough to alter the sample size. Using a confidence level of 95% and a 5% margin of error, the ideal sample size would be 385 participants.

However, the estimation of 385 participants is an overestimation, given that not all YouTube content creators are English-speaking and may not be able to participate in answering the English

questionnaire; YouTube can be used in 80 languages (YouTube, n.d.). As such, the number was lowered to a feasible and appropriate sample size of 300 participants. To the best of our knowledge, there were no statistics for the number of English-speaking YouTubers online. We attempted to find a statistic on the total number of English-speaking YouTube content creators by searching for statistics on the number of YouTube content creators per country and add up those from countries with English as a primary language, but we were unsuccessful.

b) Inclusion and Exclusion Criteria

The general inclusion criteria applied during direct and indirect recruitment included: Anyone that identified as a YouTuber (including YouTubers from any content category, and of any popularity level; as such anyone who uploads videos on YouTube), was 18 years of age or older (parental consent not required), was of any gender, from any nationality/country, was an English speaker/writer (as the survey was only available in English), and provided electronic consent to participate in the study. The exclusion criteria included anyone who did not identify as a YouTuber, was less than 18 years of age (i.e. child YouTubers), could not speak/write in English, and/or did not provide electronic consent.

In addition to the criteria listed above, several additional inclusion and exclusion criteria were used when directly contacting YouTubers to participate. The YouTubers who were directly contacted to participate in this online survey were selected from Social Blade's list of the Top 500 YouTube Channels sorted by subscriber count on April 15, 2020 (SocialBlade, n.d.). The following inclusion and exclusion criteria were applied when developing a directly recruited pool of YouTubers:

Inclusion criteria:

- Content for children: channels run by adults, but include content for children, were included. Note: These channels also did not depict the YouTuber's face nor speak.
- Not showing faces: channels (i.e. gaming channels) where the YouTuber speaks but does not reveal their face were included. Often their personalities are depicted, despite not showing their faces. Channels that did not depict the YouTuber's face nor speak were also included.

- Language: channels which fit the original inclusion criteria, but the YouTuber is not speaking in English in their videos, were included. This was due to the possibility that the YouTuber may in fact speak and understand English, allowing them to potentially participate and complete the survey, but their channel may be run in a non-English language.
- Family Channels: Channels run by families (include parents and children) were included as parents may participate.
- YouTuber Personality: Channels that belong to already known singers (i.e. when Googled are said to be musical artists/singers etc.) and/or appear to be used only to promote their music (i.e. only post official music videos) were excluded as they were assumed to function as business channels. But, if a channel belonged to a YouTuber personality (also posts vlogs, Q&As, sit downs, lifestyle videos, pranks, tutorials, etc.) who is also a singer, musician, producer, and/or professional soccer player they were included. Thus, a channel belonging to professional soccer players was included despite they may be considered celebrities, as they depicted YouTuber personalities and posted YouTuber-related content (i.e. pranks and tutorials).

Exclusion criteria:

- Autogenerated Channels: Channels automatically generated by YouTube were excluded.
- Businesses: Channels operated by a company/celebrity/musician (that does not depict a YouTuber personality) and/or appear to be run by a business (even if unsure), were excluded. Channels that belonged to singers/musicians were excluded based on the assumption that their channels were used to promote their music- hence, the channel was assumed to be a business channel. But, if the channel belonged to a YouTuber personality and the YouTuber was also a singer and/or musician, the channel was included. For example, a channel run by a musical artist who posted dance choreography of songs and does not post YouTuber-related content was considered a business channel and excluded from the pool.

- Children: Channels run by child YouTubers (<18 years of age) were excluded. While family channels were included when directly recruiting participants, channels mainly run by children, but their parents also appeared in some of their videos were excluded.
- Duplicate Channels: When multiple channels were run by the same YouTuber, the channel with the highest subscriber count (if it met the inclusion criteria) was included and the remaining duplicate channels were excluded.

2) Steps for Recruitment

a. Recruitment Timeline

The following timeline depicts the series of events and steps taken during study recruitment in chronological order:

1. Ethics approval was received on September 17, 2019
2. Questionnaire went live on September 18, 2019
3. Study recruitment flyer and survey link were posted on researchers' personal SM accounts (family and friends were asked to share) on September 18, 2019
4. Study recruitment flyer and survey link were emailed to family and friends asking them to share with others on September 18, 2019, and October 3rd, 2019.
5. Began tagging YouTube-related pages to posts on September 28, 2019
6. Began replying to posts by YouTube accounts on Twitter and Facebook on October 2, 2019
7. Ethics modification for online advertisements received on November 18th, 2019.
8. Posts including recruitment flyer and survey link were shared on Facebook groups between September 19, 2019, and July 31, 2020. Groups included: private Facebook group for uOttawa psychology graduates; private Facebook group for MSc class; Dissertation Survey Exchange – Share Your Research Study, Find Participants; Research Participation - Dissertation, Thesis, PhD, Survey Sharing; Student Survey Exchange; and Dissertation Survey Exchange.

9. Commented on photo from the Facebook page “YouTube Creators” on October 13, 2019, and added a photo post (recruitment flyer) to “YouTube Creators” page on January 28 2020.
10. Posts asking for participation in study along with the recruitment flyer were made on YouTuber-related Reddit threads between November 10, 2019, and July 24, 2020. Reddit threads posted to include YouTube Creators, YouTuber, youtuberchat, YouTube_Vloggers, YouTubeGamers, SmallYouTubers, TravelVloggers, and YTVloggerFamilies.
11. Facebook and Instagram online advertisements went live on November 20, 2019. The ad campaigns ran on and off from November 20, 2019, until August 21, 2020.
    a. 5 Ad Campaigns
        i. 20/11/2019 to 24/11/2019
        ii. 2/12/2019 to 6/12/2019
        iii. 16/12/2019 to 18/12/2019
        iv. 15/1/2020 to 19/1/2020
        v. 4/2/2020 to 9/2/2020
    b. 1 Boosted post on Facebook and Instagram
        i. 24/01/2020 to 29/01/2020
    c. 4 Extensions of the successful Ad Campaign which ran from 4/2/2020 to 9/2/2020
        i. 9/2/2020 to 14/2/2020
        ii. 7/3/2020 to 14/3/2020
        iii. 14/3/2020 to 21/3/2020
        iv. 21/8/2020 to 15/9/2020
12. Online survey questionnaire was shortened on January 15, 2020, to increase completion rate
    a. 2 survey sections were removed: YouTube Motivation, and Self-Esteem
    b. A total of 44 questions were removed
13. Ethics modification to directly contact select YouTubers from Social Blade’s list of the Top 500 YouTube Channels sorted by subscriber was approved on April 8th, 2020

14. Began directly contacting YouTubers via email on June 12, 2020. Second email including the YouTube video of the primary investigator describing the study was sent to select YouTubers on September 18, 2020 (YouTubers who had replied to 1st email were excluded and not contacted a second time).
15. Direct recruitment via commenting on latest Instagram posts of select YouTubers via study Instagram page began on June 30th, 2020
16. Direct recruitment via commenting on latest YouTube videos of select YouTubers via study's YouTube profile began on July 3rd, 2020
17. Direct recruitment via replying to most recent Tweet of select YouTubers via study's Twitter account began on August 7th, 2020.
18. Recruitment and data collection for the purposes of this thesis project was seized on September 30th, 2020.

b. Indirect vs. Direct Recruitment

Due to an unanticipated low recruitment rate, multiple steps were taken to increase study participation, including changes in recruitment strategies. Two methods were used to recruit participants for this study: (1) indirect recruitment through SM posts, online advertisements, etc. and (2) direct recruitment of most popular YouTubers via email and by commenting on their most recent SM posts. While the study began with indirect recruitment followed by direct recruitment, some indirect recruitment strategies were still used during direct recruitment, but not vice versa. Throughout the study, participants were asked to refer the survey to others upon completion in a form of snowball sampling.

(1) **Indirect Recruitment Strategies:** Initially, participants were recruited indirectly by sharing the study recruitment poster (Figure 2) on researchers' personal accounts on SM platforms such as Twitter, Instagram, Facebook, Pinterest, and Reddit, using relevant hashtags such as, "#YouTube", "#YouTuber", and "#YouTubeCreator"; a general statement was placed on the poster that it can be shared. The recruitment poster was also posted on YouTube-related pages or groups on the aforementioned SM sites. Along with posting on SM, online advertisements on Facebook and

Instagram were used next to indirectly recruit participants. Advertising on Facebook and Instagram required a Facebook page, which was named "uOttawa Research on YouTube and Mental Health". The page's posts (including the recruitment flyer and a general statement on the research project) were promoted. These ads appeared on the selected target audience's Facebook and Instagram timelines, between stories, etc., and by clicking on the ad they were redirected to the online survey. The target audience for Facebook and Instagram ads included: 18+ year olds, of all genders, in North America, South America, Asia, Africa, Europe, Australia, and Antarctica, and people who had expressed an interest in or liked pages related to YouTube. Snowball sampling was also used throughout the study by asking participants to share the survey link with others whom they believed may be interested in participating in the study. No participants were contacted directly to participate at this point in the study.

(2) **Direct Recruitment Strategies:** Along with the above indirect recruitment methods, direct recruitment of participants began by contacting the most popular YouTubers based on Social Blade's statistics of popular YouTubers sorted by subscriber count, who met the study inclusion criteria. Selected YouTubers were contacted via email, replying to their latest Tweets on Twitter, and commenting on their latest SM posts/videos on Instagram and YouTube. Emails were sent using the primary investigator's uOttawa email addresses in order to increase the email and survey's perceived validity and legitimacy. Twitter replies and Instagram and YouTube comments were done using the survey-related SM accounts (Twitter: @ProjectUottawa; Instagram: @uOttawa_research_project, YouTube: uOttawa Research Project) allowing users quick and easy access to the study's pages, and thus recruitment flyer and link to survey. The survey link was included in the study pages' biographies/page descriptions. When directly contacting potential participants, the recruitment flyer was included (only, when possible, i.e. via email and Twitter replies). Since photos cannot be posted on YouTube pages, a recruitment YouTube video including the same information on the recruitment poster being written on the screen was posted with additional information and the survey link in the video description box. A second YouTube video

of the principal investigator explaining the survey on camera to the viewers was posted and attached to a second email sent out to the selected YouTubers in an attempt to come across more personal than a recruitment notice/flyer and increase response rate. When emailing the YouTubers, a general statement was included stating that the YouTubers were being contacted only due to their unique popularity on YouTube, and that the researchers did not suspect them to have a MH condition (Figure 3). Snowball sampling was also used by asking participants to share the survey link with their followers, friends, and family, who they believe may be interested in participating in the study.

(3) **Ethics Approval and Modifications:** Ethics approval was sought and obtained before recruiting participants. Ethics approval for the study was obtained on September 17th, 2019. Multiple ethics modifications were obtained throughout the study due to changes in recruitment strategies: (1) An ethics modification was sought for the use of SM advertisements during indirect recruitment and was received on November 18th, 2019; (2) A second modification was also requested in order to allow for directly recruiting participants and was received on April 8th, 2020. Several ethics inquiries were also made throughout the recruitment process in order to ensure that some strategies were permissible (i.e. Tagging a YouTube-related Facebook page to a study recruitment post so it can also appear on said page)

3) Questionnaire

Participants were asked to complete a one-time study questionnaire (Figure 4), which was accessed online using the online survey tool, Survey Monkey. Due to difficulties with recruitment, the original questionnaire was altered to produce a shortened version which was later used in the study to increase the survey completion rate. The original version of the online survey was published on September 18th, 2019, and consisted of 169 questions and the following 8 sections: (1) Demographics, (2) Health Demographics, (3) Social Media (a) Demographics, (b) Cyberbullying, (4) YouTube (a) Demographics, (b) Microcelebrity, (c) Motivation, (5) Personality, (6) Self-Esteem, (7) Life Satisfaction, and (8) Resiliency. In comparison, the shortened version of the questionnaire included only 125 questions and the following sections were

excluded sections: (4c) YouTube Motivation and (6) Self-Esteem. Both versions of the questionnaire included a final optional section for participants who wished to leave any additional comments. Online debriefing resources were also provided to participants at the end of the survey. Survey questions consisted of close-ended (multiple choice) questions, open-ended questions, and Likert-scaled questions.

a. Research Objectives and Corresponding Questionnaire Measures and Scales

To answer the overall research question, **"**Can being a YouTuber or microcelebrity YouTuber have an impact on one's MH?", various questionnaire measures and scales were used to obtain data corresponding to each research objective:

- **Research Objective 1:** Observe what motivates individuals to become YouTubers.

  - To meet this aim, survey measures of Social Media Demographic data, YouTube Demographics, YouTube Microcelebrity, and YouTube Motivation were collected. Note that YouTube Motivation was removed when survey was shortened on January 15, 2020

- **Research Objective 2:** Observing the rate of MHDs among YouTubers vs microcelebrity YouTubers and the overall effect of YouTubing on MH status of YouTubers vs microcelebrities (symptoms worsen, improve, no effect, or unsure).

  - To meet this objective, survey measures of Health Demographics and YouTube Microcelebrity were collected.

- **Research Objectives 3 and 4:**

  - Identify any protective factors that may make some YouTubers more resilient to negative influences of SMU on MH.

  - Identifying any susceptibility factors that make some YouTubers more vulnerable to negative influences of SMU on MH.

  - To meet both objectives, survey measures of Demographic data, Health Demographic data, Social Media Demographics, Social Media Cyberbullying, YouTube Demographic data, YouTube Microcelebrity, YouTube Motivation, Personality, Self-Esteem, Life Satisfaction, and Resiliency were collected. Note that YouTube Motivation and Self-Esteem sections were

removed when the survey was shortened on January 15, 2020, and Resiliency measures were also excluded due to failure to obtain permission to use CD-RISC.

b. Questionnaire Measures and Scales

(1) Demographics: survey measure will cover participant background information including gender, age, relationship status, sexual orientation, race/ethnicity, country of residency, education level, employment status, income level, and languages spoken.

(2) Health Demographics: measure will include semi-closed questions regarding participants' diagnosed and self-diagnosed mental and physical health with the option to specify and/or include additional items not listed "(Yes/No). If yes, please specify which condition(s) (if multiple, please include all) and when you were diagnosed." One open-ended question will also be included: "Have you ever had, or do you currently have a medical condition or disability? (Yes/No). If yes, please specify *(if multiple, please include all).*" Finally, the following closed questions will be also used, "Do you believe the symptoms of your mental health condition/cognitive condition/learning disability were impacted by your use of YouTube?"; "Do you believe there is a relationship between your physical medical condition and YouTube?"; and "Do you believe there is a relationship between your disability and YouTube?"

(3) Social Media:

a. Demographics: survey measure will include closed questions regarding frequency of use for work vs leisure purposes, time spent on SM for work vs leisure purposes, SM platforms used, purpose of SMU, if the respondent is a full-time YouTuber, and if they have an additional job other than YouTube.

b. Cyberbullying: will also be measured by asking closed questions such as "Have you ever been a victim of cyberbullying?"; "how often do you receive hate comments/experience cyberbullying?"; "Does being a victim of cyberbullying and/or receiving hate comments affect your online activity?"; and "Does being a victim of cyberbullying and/or receiving hate comments affect your life offline?" One semi-closed question will also be included,

"Have you tried to avoid receiving cyberbullying on your YouTube channel? (Yes/No) If yes, how?", with listed responses and the option to add an unlisted response.

(4) YouTube:

a. **Demographics:** will be gathered including YouTube channel name, how long the participant has been active on YouTube, number of subscribers, average lengths of videos, content category, uploading frequency, number of hours spent creating a single video, and viewers age range(s). Additional closed questions include, "Do you portray yourself, lifestyle and/or personality as a YouTube personality?"; "How open do you believe you are about your personal life online?"; "How private do you believe you are about your personal life online?"; "Do you make sponsored videos?"; "Do you receive commission or advertise products in your videos?"; "How often do you upload a sponsored video on your channel?"; and "How often do you receive commission from companies for advertising products in your videos?". In addition, open-ended questions will be asked including, "Why did you start your YouTube channel?"; "Have you ever thought of or do you currently think of quitting YouTube or taking a break off of YouTube? Why or why not?". Semi-closed questions such as, "What difficulties do you face as a YouTuber?" and "What advantages do you have because you are a YouTuber?", will also be used.

b. **YouTube Microcelebrity:** measure aims to assess whether the participant self-identifies as a microcelebrity and their motivation to become a microcelebrity. This measure includes mostly close-ended questions and some semi-closed questions with the option to include additional answer(s) not listed.

c. **YouTube Motivation:** to assess the participants' motivation to upload videos on YouTube and conducted using the 16-item Situational Motivation Scale (SIMS), a brief, versatile, and validated self-report measure of intrinsic motivation, identified regulation, external regulation, and amotivation which can be used in field and laboratory studies (Guay et al., 2000). It is composed of a 7-item Likert Scale of 1 (*corresponds not all*), 2 (*corresponds a*

very little), 3 (*corresponds a little*), 4 (*corresponds moderately*), 5 (*corresponds enough*), 6 (*corresponds a lot*), and 7 (*corresponds exactly*). Studies have also found the SIMS to have adequate reliability and construct validity (Kowal & Fortier, 1999; Blanchard & Vallerand, 1996; Brunel et al., 2000; Standage et al., 2003). Note that this section was removed when the survey was shortened on January 15, 2020.

(5) Personality was measured by administering the 50-item IPIP (International Personality Item Pool) representation of Goldberg (1992) markers for the Big-Five factor structure at http://ipip.ori.org. This questionnaire uses a 5-item Likert Scale to measure participants Openness to Experience (or imagination or intellect), Conscientiousness, Extroversion, Agreeableness, and Neuroticism (or emotional stability). This IPIP scale was found to have good internal consistency and related strongly to major dimensions of personality assessed by the two leading questionnaires (NEO-FFI and EPQ-R Short Form) (Gow et al., 2005), and along with all other IPIP items and scales, is a free, public-domain measure instantly available online (Goldberg et al., 2006).

(6) Self-esteem was measured using Rosenberg's 10-item Self Esteem Scale using 4-item Likert Scale (Rosenberg, 1965). This widely used scale has been found to have effective reliability and validity in many languages (Martín-Albo et al., 2007; Beeber et al., 2007; Mimura & Griffiths, 2007). Note that this section was removed when the survey was shortened on January 15, 2020.

(7) Life Satisfaction was measured using the 5-item Satisfaction with Life Scale (SWLS) using a 7-item Likert Scale (Diener et al., 1985). This scale has been found to have good reliability and validity (Diener, 2009; Galanakis et al., 2017).

(8) Resiliency was measured using the 25-item Connor-Davidson Resilience Scale (CD-RISC) using a 5-item Likert Scale. In a review of 19 resilience measures, the CD-RISC was of the top 3 scales to receive the best psychometric ratings (Windle et al., 2011). Note that all data collected from this section were excluded due to failure to obtain permission to use CD-RISC. As such, resiliency data was not analysed and will not be presented in this paper.

c. Changes to Questionnaire

As previously mentioned, the study questionnaire was shortened soon after it was published in an attempt to increase completion rate. The shortened survey allowed for a reduction in the number of questions from 169 to 125, and the exclusion of the survey sections (4c) YouTube Motivation and (6) Self-Esteem. In addition, some sections were also rearranged to increase the probability of completion of some scales, by placing the scales with less questions before those with more: The survey sections, (7) Life-Satisfaction (composed of 5 questions) and (8) Resiliency (25 questions), were placed before (5) Personality (50 questions). Therefore, the shortened survey included the following sections in the following order: (1) Demographics, (2) Health Demographics, (3) Social Media (a) Demographics, (b) Cyberbullying, (4) YouTube (a) Demographics, (b) Microcelebrity, (5) Life Satisfaction, (6) Resiliency, and (7) Personality.

While questions were removed to shorten the survey, several were also added to help direct recruitment strategies during data collection, and to apply inclusion and exclusion criteria during data analysis. Firstly, a question asking participants where they heard about the survey was added on November 17, 2019, to help with directing the researchers' recruitment strategies during data collection; this question was presented at the beginning of the survey. Secondly, the mandatory question "Are you a YouTuber?" was added on September 20, 2019 (survey went live on September 18, 2019) and helped ensure that only YouTubers were completing the survey (114 non-YouTubers attempted to complete the survey), preventing skewed results. A third question related to health demographics was also added on June 5, 2020, asking participants when they were first diagnosed with their disorder, condition, and/or disability, if applicable. This question was important as it shed light on whether the YouTuber was diagnosed before or after starting their YouTube channel, allowing for further data analyses.

4) Data Analysis

Survey data collected using Survey Monkey were downloaded and stored at the University of Ottawa. Participant data were coded and extracted to an Excel spreadsheet where the data were cleaned (i.e. missing data) to allow for statistical analyses of quantitative data using the softwares GNU PSPP, version 1.4.0-2

(GNU Project, 2020) and IBM SPSS Statistics for Windows, version 27 (IBM Corp., Armonk, N.Y., USA). We first assessed mean values for the demographic data that were collected. Then we cross-tabulated some of these data. Data were analyzed using a Chi-square test of independence to assess a relationship between some of the variables; given the small, expected frequencies we applied the Fisher-Freeman-Halton exact test. These assessments were done to help answer our research question. Participants were also given the opportunity to provide additional responses (different from options already listed) in the form of open-ended responses to some of the survey questions. Qualitative data from open-ended responses were assessed to identify emergent themes via inductive thematic analysis. Thematic analysis was done for each question separately since the open-ended responses were relevant to the specific question posed. First, responses were examined to see if they could be grouped with any of the responses already listed for the specific survey question. Next, remaining responses or parts of responses which could not be grouped were examined for new themes. Similar themes were then recategorized and grouped together.

CHAPTER 3: RESULTS

1) Study Sample

After excluding respondents who did not meet the inclusion criteria (i.e. 5 participants were excluded as they were less than 18 years old), and outliers (i.e. 1 participant was excluded because they reported to be 100 years old), a total of 66 YouTubers participated in the study, of which 24 provided complete survey responses while 42 provided incomplete responses. As such, the number of participants who completed a survey question may differ from question to question. The descriptive analysis results of the study sample are presented in Tables 1 to 9.

2) Descriptive Analysis of Results

Demographics

Participants ranged between 18 to 45 years of age, with the majority being young adults (between 18 – 35 years old), as noted in Table 1. Note that age was calculated using participants' reported date of

birth and the end of the data collection period: September 30th, 2020. The study sample consisted of more males (61.1%) than females (35.2%). Majority of respondents were single (45.6%), white (35.7%) or Asian (25%), had completed high school education or more (89.5%), and had an income level of less than $25K, including no income (49.1%).

Health Demographics

The majority of participants (67.9%) self-reported that they had not been diagnosed with a MHD, cognitive condition, learning disability and/or physical disability by a medical health professional, while 32.1% reported they had (presented in Table 2). Of the 18 participants who disclosed a diagnosed condition, the most common conditions were depression (72.2%), anxiety (77.8%), eating disorders (11.1%), ADHD (11.1%), and dyslexia (11.1%), meanwhile the least common included schizophrenia (5.6%) and PTSD (5.6%); none of the participants disclosed having substance abuse disorders, ASD, nor a physical disability. One participant disclosed having a diagnosed condition but preferred not to specify which. Furthermore, of those with diagnosed conditions, 55.6% reported having two conditions, such as anxiety and depression.

In terms of suspected conditions, similarly, most respondents (63.6%) reported that they did not suspect having a MHD, cognitive condition, learning disability and/or physical disability, while 36.4% did. Of the 20 participants who suspected having a condition, the most commonly reported suspected conditions included depression (55%), anxiety (60%), ADHD (30%), and dyslexia (15%). The least reported suspected conditions included eating disorders (5%), ASD (10%), physical disability (5%), and bipolar disorder (5%). One participant suspected having a condition but preferred not to specify which. Of those who suspected to have a condition, 50% reported suspecting having two conditions such as both depression and anxiety.

In terms of medical conditions and disabilities, again the majority of respondents reported not having any (75.9%), meanwhile 24.1% did. Of the 13 participants with a reported medical condition or disability, most preferred not to identify their condition(s) (30.8%), while others reported being hard of hearing (7.7%), having thalassemia minor (7.7%), glaucoma (7.7%), diabetes (7.7%), heart arrhythmia (7.7%), high blood pressure (7.7%), adult whooping cough (7.7%), and a physical disability (15.4%). The majority of those reporting a medical condition or disability had a single condition (69.2%) rather than

multiple. Note that the majority of participants who disclosed being diagnosed with or suspected having a MHD, medical condition, or disability were not presented with the question asking whether they were diagnosed or suspected to have said condition before or after beginning their YouTube journey, because the question was added to the survey at a later date and as such only a few respondents reported on the matter.

Health Demographics: Impacts of YouTube Use on Health Conditions

When asked whether YouTube use had an impact on participants' (1) MH condition(s), cognitive condition(s)/learning disability, (2) physical medical condition(s), or (3) physical disability, most reported that "No, YouTube had no effect on my symptoms"; (1) 48.2%, (2) 52.2%, and (3) 50% respectively (see Table 2). Moreover, similar statistics were found for those who reported use of YouTube (slightly to strongly) improved symptoms (18.5%) of their MH condition(s), cognitive condition(s)/learning disability, (slightly to strongly) worsened symptoms (14.8%), and those who were unsure of the effect on symptoms (18.5%). In regard to physical medical conditions, 8.7% of respondents reported YouTube use (slightly to strongly) improved symptoms, 8.7% reported it (slightly to strongly) worsened symptoms, while 30.4% were unsure. Finally, when assessing the effects of YouTube use on symptoms of disability, 16.7% reported improvement in symptoms, 12.5% reported worsening of symptoms, and 20.8% reported they were unsure.

SM Demographics

As presented in Table 3, most participants reported using SM daily for work purposes (68.7%) and leisure (87.2%). Apart from YouTube, the most commonly used SM platforms were Instagram (80.8%) and Facebook (72.3%), but participants may have used multiple other platforms as well with most participants reporting using between 3 (23.4%) to 4 (34%) SM platforms. Participants were able to select multiple motivating factors to describe their motivation for use of SM platforms (i.e. maintain friendships, increase popularity, entertainment), with most reporting between 2 – 3 motivations (43.5%) for SMU, but 29.3% of responses pertain to social connection, 16.4% of responses pertain to self-branding, and 54.2% pertain to produce and consume UGC. Finally, the majority of the study sample were not full-time YouTubers (86.4%).

SM Cyberbullying

Most YouTubers reported rarely or never receiving hate comments or experiencing cyberbullying (58.3%). Consequentially, most responded that being a victim of cyberbullying rarely or never affects their online activity (64%) and life offline (62.5%) (see Table 4).

YouTube Demographics

Experience level, referring to length of activity that the participant had on YouTube, was categorized as beginner (started their YouTube journey 1 year or less ago), intermediate (has been on YouTube for 2 to 4 years), and experienced YouTuber (has been on YouTube for 5 or more years), with 43.6%, 25.6%, and 30.8% of participants pertaining to each category respectively (see Table 5). In terms of popularity level, most participants (78.9%) presented low popularity (1K subscribers or less), with 50% of all participants having less than 100 subscribers. In addition, 10.5% of participants were of medium popularity (1001-100K subscribers), and 10.5% were of high popularity (>100K subscribers). Note: This popularity categorization was based on study responses and YouTube statistics that approximately 13.1% of YouTube channels (4.4M) have over 1K subscribers (eligible for monetization) and 0.42% of channels (153,770) have over 100K subscribers (Stokel-Walker, 2020). For YouTube content categories, 16.3% of responses pertained to Entertainment and 13% of responses pertained to Gaming, although participants could provide multiple responses. Regarding uploading frequency, 40.5% of participants reported frequent activity (uploading videos weekly or more often), while 40.5% reported infrequent activity (uploading biweekly or less), and 16.2% reported not having a fixed uploading schedule. The length of time taken to create a single video ranged from less than 1 hour to 15 hours or more, with YouTubers most frequently reporting it requiring 4 – 5 hours (21.6%) or 1 – 2 hours (16.2%).

In terms of self-presentation techniques, when asked if participants portrayed themselves, lifestyles and/or personalities online, respondents were almost split with 55.3% reporting not self-portraying, while 44.7% reporting they did. Furthermore, on a 5-point Likert scale from ‘very open’ to ‘not at all open’, most participants reported being ‘somewhat open’ (34.2%) or ‘neutral’ (26.3%) about their personal life online. When re-categorized as open, neutral, or not open, most appeared to be open (47.4%).

Regarding difficulties one faces as a YouTuber, respondents reported several including burnout (20.6%), feeling misunderstood or misinterpreted (14.7%), staying on brand (11.8%), constant criticism (11.8%), and cyberbullying (5.9%). In contrast, results for advantages of being a YouTuber included working from home (30.5%), flexible work hours (22.2%), social support from fans (22.2%), good pay (11.1%), and popularity or fame (8.3%) (note: participants could choose multiple answers). Finally, most participants (56.7%) reported having thought of quitting or taking a break off of YouTube.

YouTube Microcelebrity

With respect to online status (referring to whether a participant identified as a YouTuber or microcelebrity YouTuber), only one third (33.3%) of participants considered themselves to be microcelebrities, with the most frequent responses for motivation to continue taking on the role of a microcelebrity being joy or passion for it (25.7%) and being self-employed (22.8%), with some participants selecting more than one motivational factor (i.e. joy or passion for it, being self-employed, advantages outweigh the disadvantages, and not wanting to let fans down), as presented in Table 6. Most frequent responses to motivation to become a YouTuber or microcelebrity were for purpose of entertainment (26.7%), altruism (20%), and it occurred unintentionally or accidentally (20%), with some participants selecting more than one motivational factor (i.e. entertainment, fame, and monetary success).

Life Satisfaction

Study sample's mean score on the SWLS was 19.96, when rounded up to 20 corresponded to Neutral. The median score was 19, corresponding to slightly dissatisfied with life. The satisfaction level with the highest frequency was satisfied with 25% of participants' scores corresponding to that category. When re-categorized as satisfied, neutral, and dissatisfied, 46.9% of respondents were (slightly to extremely) satisfied with their life, 3.1% were neutral, and 50% were (slightly to extremely) dissatisfied. Table 7 presents the summary of participants' life satisfaction scores.

Personality

The authors of the IPIP questionnaire that we used suggest that individuals' scores be interpreted via two methods (*Interpreting Individual IPIP Scale Scores*, n.d.) The first method interprets individuals'

scores on each personality trait as low, average (if scores within one-half SD of the mean), or high, but this method is recommended for use on a sample of the same sex and age range. Nonetheless, as seen in Table 8.1, 36% of participants scored high on extraversion, 40% presented average agreeableness, 40% presented high conscientiousness, 40% had average scores for neuroticism, and 44% percentage average degree of openness to experience. The alternative method suggested for interpretation of IPIP scores is via quintiles to present where respondents stand on each personality trait scale with regard to the study sample. Results shown in Table 8.2 depict 8% of participants were introverted, 28% were average, and 16% were extroverted; 4% scored within the lowest quintile for agreeableness (which is equivalent to meaning antagonism), 24% were average, and 32% were agreeable; none of the participants presented in the lowest quintile for conscientiousness, whereas 40% scored average, and 16% scored as conscientious; 12% of participants fell within the lowest quintile for neuroticism (which is equivalent to meaning emotionally stable), 16% scored average, and 4% (or 1 person) was considered neurotic; and none of the participants scored within the lowest quintile for openness to experience (which is equivalent to low on openness or closed to experience), 4% presented average scores, and 96% of participants appeared to be somewhat open (56%) and open to experience (40%).

Survey Recruitment Efforts

When asked how participants heard about the study, 31% of responses pertained to online advertisements (on Instagram and Facebook), 25.9% pertained to Reddit (post), and 24.1% of responses pertained to friend and/or family member shared it on SM (Twitter, Facebook, Instagram, Reddit, etc.) (see Table 9). Meanwhile, the least effective recruitment methods appeared to be Facebook (post) (1.6%), Twitter (Tweet or Hashtag) (3.4%), and email, and word of mouth which both pertained to 6.9% of responses.

3) Quantitative Data Statistical Analysis of Results

Statistical analyses were conducted to assess whether significant relationships existed among certain factors, in an attempt to answer the following study objectives: (2) Observing the rate of MHDs

among YouTubers vs microcelebrity YouTubers and the overall effect of YouTubing on MH status of YouTubers vs microcelebrities (symptoms worsen, improve, no effect, or unsure); (3) Identifying any protective factors that may make some YouTubers more resilient to negative influences of SMU on MH; (4) Identifying any susceptibility factors that make some YouTubers more vulnerable to negative influences of SMU on MH. Note: For crosstabulation analysis, participants' MH status (diagnosed, suspected, or not diagnosed with a MHD) were determined using responses to the survey questions "*Have you ever been diagnosed by a medical health professional with a mental health disorder, cognitive condition, learning disability, and/or physical disability?*" and "*Have you ever or do you currently suspect yourself to have a mental health disorder, cognitive condition, learning disability and/or physical disability but have never received an official diagnosis from a medical health professional?*". Responses were recategorized to include MH status only: those disclosing a MHD diagnosis were given "diagnosed" status, those suspecting to have a MHD were given "suspected" status, and participants disclosing not being diagnosed with a MHD, or disclosing only being diagnosed or suspecting to have a cognitive condition, learning disability (i.e. dyslexia), or physical disability were categorized as "not diagnosed" with a MHD. In addition, participants disclosing being diagnosed and also suspecting to have a MHD were categorized as "diagnosed" for the purposes of the crosstabulation analysis. Similarly, YouTube effect on MH status (worsened, no effect, improved, or unsure) of participants was determined using responses to the question "*Do you believe the symptoms of your mental health condition/cognitive condition/learning disability were impacted by your use of YouTube*?". Responses determined whether participants believed YouTube worsened, improved, had no effect, or were unsure of the effects on the symptoms of their diagnosed or suspected MHDs. Participants categorized as "not diagnosed" as they self-reported not being diagnosed nor suspecting to have a MHD were excluded from the YouTube effect on MH status analysis as it did not apply to them.

We assessed the relationship between online status, MH status, and YouTube effect on MH, evaluated two variables at a time. A chi-square analysis, using the Fisher-Freeman-Halton Exact Test, revealed that there was no significant relationship between participants' MH status (diagnosed, suspected, and not diagnosed) and online status (YouTubers vs. Microcelebrity YouTubers), X^2 (2, N=56) = 0.687, p

= 0.676. Furthermore, no significant relationship was found between online status and YouTube effect on MH status, X^2 (3, N=25) = 0.794, p = 0.734, using the Fisher-Freeman-Halton Exact Test. While these were not statistically significant, looking at the frequencies presented in crosstabulation presentations (Table 10 and 11) could help us glean some additional information regarding the rate of MHDs among YouTubers and microcelebrity YouTubers and the effect of YouTubing on their MH status and symptoms.

Firstly, in terms of MH status (Table 10), 51.8% of participants (29 participants) reported not being diagnosed nor suspecting to have any MHD(s), meanwhile 30.4% (17 participants) self-reported diagnosis of MHD(s), and 17.9% (10 participants) reported suspected to have at least one MHD. With respect to participants' online status, 76.5% of participants diagnosed with MHD(s) were YouTubers, while the remaining 23.5% self-identified as microcelebrities; similarly, 70% of participants suspected to have a MHD were YouTubers, while 30% were microcelebrities; finally, 82.8% of participants not diagnosed with a MHD were YouTubers, 17.2% were microcelebrities. Based on these data, more YouTubers (35.7%) seemingly have a diagnosed or suspected MHD compared to microcelebrities (12.5%).

Secondly, when observing YouTube effects on MH status in relation to online status (Table 11), 72.7% of participants (8 participants) reporting that YouTube had no effect on their MHD(s) were YouTubers, while the remaining 27.3% (3 participants) self-identified as microcelebrities; similarly, 80% of participants (4 participants) reporting that YouTube improved their MHD symptoms were YouTubers, meanwhile 20% (1 participant) were microcelebrities; 50% of participants (2 participants) reporting that YouTube worsened their MHD symptoms were YouTubers, while 50% (2 participants) were microcelebrities; and finally 80% of participants (4 participants) reporting being unsure if YouTube had an effect on their MHD(s) were YouTubers, while 20% (1 participant) were microcelebrities. Interestingly, all 4 of the participants that reported YouTube use worsened MHD symptoms, self-reported suspecting to have MHD(s) but were not diagnosed.

In contrast, a significant relationship was found between MH status (diagnosed vs. suspected) and YouTube effect on MH status (worsened, no effect, improved, unsure), X^2 (3, N=25) = 0.018, p = 0.020,

using Fisher-Freeman-Halton Exact Test (Table 12). Examination of the crosstabulation of these data does not provide insight into which levels of the factors contribute to the significant relationship.

When assessing factors that may deem YouTubers more protected or susceptible to the effects of YouTube on MH, several factors were assessed for significant relationships. The only significant relationship found was between MH status and life satisfaction, X^2 (4, N=32) =0.023, p = 0.039, using the Fisher-Freeman-Halton Exact Test (Table 13). No significant relationships were found between MH status and all other factors (analyses were each conducted using the Fisher-Freeman-Halton Exact Test) (Table 14). Similarly, no significant relationships were found between YouTube effect on MH status and all factors (analyses were each conducted using the Fisher-Freeman-Halton Exact Test) (Table 15). Finally, no significant relationship was observed between online status and life satisfaction, X^2 (2, N=32) = 0.421, p = 0.341, using the Fisher-Freeman-Halton Exact Test.

4) Qualitative Data Thematic Analysis of Results

Participants were able to provide open-ended responses to some of the survey questions; although 5 questions allowed for open-ended responses, only 1 received adequate number of open-ended responses (see Table 16) and thus deemed necessary to include and discuss (note: this question allowed for checkbox responses and open-ended responses, thus themes were derived from both). When participants were asked "*Have you ever thought of or do you currently think of quitting YouTube or taking a break off of YouTube? Why or why not?"*, 56.7% of respondents disclosed they had thought of taking a break while 43.3% had not (see Table 16). Participants were able to provide open-ended responses of which various themes were noted, including currently on a break (n=5), recently took a break (n=1), mood affects content (avoids working when unhappy) (n=1), taking break is acceptable but quitting is unacceptable (n=1), enjoys being a YouTuber (n=3), and complicated situation (n=1). In addition, several explanations were provided to reason taking a break from YouTube such as, due to MH (n=1), due to a lack of motivation (n=2), due to stress of creating weekly content (n=1), due to time consumption/investment (n=2), due to low gain in subscribers (n=1), due to tiring nature of job (n=1), and to refocus priorities (n=1).

CHAPTER 4: DISCUSSION

1) Main Findings

The purpose of this study was to assess whether being a YouTuber or microcelebrity YouTuber may impact one's MH. This was assessed by: (1) Observing what motivates individuals to become YouTubers: (2) Observing the rate of MHDs among YouTubers vs microcelebrity YouTubers and the overall effect of YouTubing on MH status of YouTubers vs microcelebrities (symptoms worsen, improve, no effect, or unsure); (3) Identifying any protective factors that may make some YouTubers more resilient to negative influences of SMU on MH; and (4) Identifying any susceptibility factors that make some YouTubers more vulnerable to negative influences of SMU on MH. The main findings of this study indicate that entertainment, as hypothesized, was the most common motivation to become a YouTuber or microcelebrity, and while only one third of participants self-identified as microcelebrities, the joy or passion for their career was the most common motivation to continue taking on their role of microcelebrity.

With respect to the rate of MHDs among YouTubers, our data show that most YouTubers did not have a diagnosed nor did they suspect having a MHD, cognitive condition, or learning disability. In addition, contrary to our hypothesis, main findings show that most YouTubers reported YouTubing had no effect on their symptoms of MH conditions, cognitive conditions, and/or learning disability. Interestingly, of the four participants who reported YouTube use having worsened their MHD(s) symptoms, all four self-reported suspecting to have MHD(s) but were not professionally diagnosed. Arguably, while YouTube may have had adverse effects on these participants' conditions, a lack of diagnosis and therefore lack of evidence-based treatment plan for said MH condition(s) may have contributed to worsened symptoms, not YouTube use itself. Furthermore, no significant relationships were found between being a YouTuber vs microcelebrity YouTuber (online status) on MH status (diagnosed, suspected, and not diagnosed), nor between online status and YouTube effect on MH status, indicating that microcelebrity practice and status was not seemingly associated with YouTubers' MH outcomes. Crosstabulation presentation observations indicated that almost three times as many YouTubers reported a diagnosed or suspected MHD compared to microcelebrities, although no statistically significant relationship was found between these factors. A

possible explanation for this finding could be due to the burden of having MHDs making it more difficult for YouTubers to succeed on YouTube and reach microcelebrity status, as MHDs have been reported to be the leading causes of disability worldwide (World Health Organization, 2001).

Finally, when assessing factors that may deem YouTubers more protected or susceptible to YouTube effects on MH, our main findings indicate that life satisfaction was the only noteworthy factor, as the only significant relationship found was between MH status and life satisfaction; meanwhile no relationships were found between MH status and all other factors (demographics, SM demographics, SM cyberbullying, YouTube demographics, YouTube microcelebrity). In addition, no relationship was found between YouTube effects on MH and all other factors (demographic, SM demographic, SM cyberbullying, YouTube demographics, YouTube microcelebrity, and life satisfaction). It is also worthy to note that YouTubers' MH status was also significantly related to YouTube's effect on MH, a finding that suggests that YouTube MH status may be another important factor to consider in future studies.

Although study findings suggest low frequency of diagnosed and suspected MHDs among YouTubers and microcelebrities, and a minimal (if any) effect YouTube use had on said conditions, additional indicators of work-related stress and mental wellbeing of participants were found in the open-ended responses to whether participants had thought of quitting or taking a break from YouTube. While the majority of respondents (56.7%) disclosed they had thought of taking a break, an almost equal percentage had not (43.3%). Moreover, themes drawn from responses included participants currently on a break or having recently took a break. In addition, participants disclosed reasons for taking a break from YouTube including due to MH, lack of motivation, low gain in subscribers, stress of creating weekly content, time consumption/investment, tiring nature of job, and to refocus priorities. These findings, that more than half of the respondents had thought of taking a break or even quitting YouTube are interesting to note especially since the majority of the YouTubers that participated in this study were only part-time YouTubers (86.4%) and only 33.3% considered themselves microcelebrities. These findings support the public outcry of popular YouTubers feeling burnt-out and may provide further insight into the potential stress associated with being

a YouTuber (i.e. consistent content creation may lead to burnout) and microcelebrity, and the mental toll it may bring, and the importance of taking breaks.

2) Recruitment Rate and Challenges

The intended number of participants needed for this project was 300, yet the survey only received a total of 67 responses from YouTubers, of which only 24 completed the entire survey and 43 provided incomplete responses; one person was excluded because they were an outlier (100 years old). Recruitment challenges were believed to be a result of difficulties reaching potential YouTuber participants, and participants struggling with survey completion. Both reasons combined may have resulted in a low recruitment rate. Several efforts were taken in order to increase reach to potential participants, and increasing survey completion rates including: (1) indirect recruitment by sharing recruitment flyer through SM posts via researchers personal SM accounts and the research project's Instagram, Facebook, Twitter accounts, and YouTube-related Reddit forums, online advertisements on Facebook and Instagram targeting YouTubers, requesting from friends and family members to share the recruitment flyer with others; (2) direct recruitment via emailing and commenting on the top 500 YouTubers' most recent SM posts; (3) asking participants to refer the survey to others upon completion in a form of snowball sampling; (4) creating and sharing a YouTube video featuring the principal investigator explaining the survey on camera in an attempt to come across more personal than a recruitment notice/flyer and increase response rate and to utilize YouTube, the platform YouTubers build their brands and community on, to increase recruitment; (5) shortening the survey questionnaire in an attempt to increase completion rate; (6) asking participants for their experience and additional comments while taking the survey. For instance, at the beginning of the survey, participants were asked how they heard about the study. This additional question assisted in focusing recruitment efforts to those platforms deemed most successful and effective: SM advertisements and sharing the study recruitment flyer on YouTube-related Reddit forums.

Several other reasons apart from length of the survey and low participant reach may have contributed to the study's low recruitment rate including the stigma associated with MH preventing eligible

YouTubers from participating, fear of confidentiality although the survey was anonymous, and lack of compensation for participants. In addition, it is important to note that the data collection period occurred between September 18th, 2019 and September 30th, 2020, of which the COVID-19 Pandemic coincided during a fraction of that period. While it cannot be confirmed, it may be assumed that the pandemic may have had an impact on the recruitment and/or findings of this study.

To conduct a large-scale study on microcelebrity YouTubers and MH, it may be more fruitful for the primary investigator or members of the research team to be part of the YouTuber community or YouTube company. Being a member of the YouTuber community places researchers in a distinct position allowing for greater reach, trustworthy relationships with others in the community, understanding the perspective of fellow YouTubers' experiences, method of data collection that is best suited for a microcelebrity YouTuber (i.e. survey vs. interview, length and structure of survey), appropriate compensation (if any), to increase participation rates among fellow YouTubers. Furthermore, having YouTube as a platform conduct such a study the company may have better access to potential participants (i.e. via email or notifications on YouTube Studio) and may provide its study participants with appropriate compensation in order to better encourage participation, increase recruitment, and ensure conclusions may be drawn from a representative population of YouTubers. As the majority of the participants in this study were not full-time YouTubers (86.4%), and only one third (33.3%) considered themselves microcelebrities, the sample may not have been representative of the complete microcelebrity YouTuber experience (i.e. mental burden associated with frequent self-branding, burnout, and cyberbullying victimization), impacting overall findings. Thus, for future research on microcelebrity YouTubers, the main recommendation of this study would be to take a community-based approach perhaps by ensuring a member of the research team is a YouTuber, and/or the research is conducted by YouTube.

3) **Interdisciplinary Perspectives and Significance**

This study is significant as it takes an interdisciplinary approach towards assessing the effects of certain SMU and practices on MH and wellbeing. Primarily, from a methodological perspective, survey

distribution involved interdisciplinary methods involving the use of technology including the use of online advertising (i.e. Google ads which are often utilized by businesses and marketers), use of SM platforms (i.e. Twitter, Instagram, Facebook, and YouTube) to increase participation, and even taking on the role of YouTubers by filming a YouTube recruitment video in a vlog style to appear more relatable to other YouTubers and encourage their participation. Secondly, from a health sciences perspective, this study considered multiple social determinants of health (such as demographics like gender, race, education, income, and working life conditions) and the potential susceptibility or protective roles they may play on YouTubers' MH outcomes. Social and socioeconomic factors have consistently been found to be strongly associated with health status and outcomes (Braveman & Gottlieb, 2014) and as such are important to consider when assessing MH status and outcomes. The effects of SNS use on MH and wellbeing has been found to be at least partially dependent on the quality of social factors (i.e. social support) in the SNS environment as SNS maintain and reflect the complexities of individuals' offline social environments and the risks and benefits they may pose on their MH and wellbeing (Seabrook et. al., 2016). As such, since the effect of SNS use depends partly on quality of social factors in the SNS environment (Seabrook et. al., 2016) it may be that YouTubers with a strong sense of community and support from their fans and other fellow creators/YouTubers are more resilient to the negative impacts or experience more benefits from YouTubing such as social support as opposed to cyberbullying, and therefore result in positive impacts on their MH and wellbeing. The topic of MH also takes a psychological perspective, specifically cyberpsychology, as many scholars have theorized and investigated the effects of SMU on users' MH and wellbeing (Primack et al., 2017; Woods & Scott, 2016; Seabrook et al., 2016). This study is also relevant to sociology as it is a form of netnography as it investigates the online YouTuber community, YouTube and microcelebrity culture, and its impacts. Finally, this study is also a type of communications and media study as it aims to assess type of SMU, its motivation, and its potential benefits and consequences on users. Business, marketing, and economics are also relevant as individuals have turned their microcelebrity YouTuber status into a career and business in which advertisers and marketing companies have benefited and used.

With the rise of SM there has been a shift from individuals who are now seeking entertainment from online platforms rather than from regular television programming. YouTube is the most popular video-sharing platform and the second most popular website in the world, after Google.com (Alexa, 2022). These large online audiences have allowed for some users to create successful careers via YouTube by building online personas, branding themselves, and sharing interesting content to their niche audience. This study is significant as many people are turning to "YouTubing" as a career; it can be a very profitable choice even for children, exemplified by the child YouTuber Ryan Kaji of "RyanToysReview" who made €8.5 million in 2017 by reviewing toys and sweets at only 6 years old (Prendergast, 2018) and later became the highest-paid YouTuber in 2020 earning an estimated $29.5 million at only 9 years of age (Berg, 2020). A survey of one thousand children between the ages of 6 and 17 years, conducted by travel company First Choice, found that 75% of children prefer a career in online videos, with 34.2% wanting specifically to be YouTubers; creativity of the job appears to be their biggest motivator (Dirnhuber, 2017). Khamis et al. (2017) argued that the rise in self-branding is due to three reasons: (1) SM strategically promises fame to ordinary users therefore encouraging practices of micro-celebrity; (2) Among neoliberal individualistic cultures, self-branding is encouraged as it promises reward; (3) Some SMIs' commercial success, which depends on self-branding and practices of microcelebrity, can be inspiring, repeated, and obtained by others. While there is an increasing interest in pursuing YouTubing, the effects of this profession on health have yet to be well understood. The current study is significant as little is mentioned in the literature on the effects of being a microcelebrity YouTuber on MH and it advances our knowledge as to some of the predictive and protective factors which may determine an individual's degree of impact from this type of SMU, and acts as a gateway to direct future studies on effects of microcelebrity status and practices on MH and wellbeing. As the relationship between SMU and MH has been found to be inconclusive in the literature (Jelenchick et al., 2013), the current research allows us to start further understanding the relationship between SMU and MH and the various factors (i.e. following size, microcelebrity status and self-branding practices, and motivating factors for use) which may influence the type of impact certain SMU may have on users' MH and wellbeing.

Our research findings also aim to help raise awareness and educate YouTubers and others as to the potential negative influence of these SM platforms and online practices and present factors that may be protective. Results from this work may also allow for exploring potential opportunities to advocate and support those with MH issues via SM, as previously mentioned in the literature: such as computing technologies and techniques to detect and identify SM users with MHDs such as depression, potentially allowing clinicians to provide them support (Birjali et al., 2017; Tian et al., 2018; Asad et al., 2019), use of eHealth programs to improve overall health and wellbeing (Monroe et al., 2017), use of SM to provide peer support and crisis intervention (Cheng et al., 2020), and development of suicide prevention campaign on SM (Robinson et al., 2017).

This research is significant in the field of cyberpsychology as it has been argued that all active SNS users practice microcelebrity even if not knowingly, therefore this is a potential type of SMU that is important to consider when assessing and understanding the relationship between SMU and MH. Senft (2013) describes how all SNS users practice microcelebrity regardless of their following size as they behave in ways online that maintain their online identity, such as thinking about where certain content should be shared, deleting or untagging themselves from unflattering photos posted by others, and worrying about privacy settings, to name a few. Strategies of microcelebrity are also used by those without large number of followers, for example many twitter users obtain and maintain attention by targeting tweets towards their perceived audiences' interests (Marwick & Boyd, 2011). Jacobson (2020) explains how everyone is individually branded although not everyone may realize, acknowledge, nor manage their own personal brand. Cirucci (2018) also argues that regular everyday SNS users unintentionally practice microcelebrity and self-branding as they are encouraged to be continuously engaged, easily consumable and deeply intimate online.

Finally, from an economic perspective, this study is significant as microcelebrities and careers in SM are here to stay, and even evolve. Although microcelebrities may not always be able to benefit monetarily from the attention they gain (Marwick, 2015), these SM users can benefit monetarily from influencer marketing, which allows marketers to partner with microcelebrities, such as SMIs on Instagram

and microcelebrity YouTubers, to increase their brand awareness, endorse products or services, and drive purchases within a specific target audience (Bailis, 2019). While SM algorithms, SM platforms, and audience interests and use of SM evolve, the influencer market will most likely remain and continue to grow. For example, many popular microcelebrity YouTubers used to share content on Snapchat stories regularly, but when Instagram introduced "Instagram Stories", these YouTubers began using Snapchat less and posting twice as often on Instagram due to SMIs' claims that Instagram's user-friendliness, better discoverability, and greater engagement (Parbey, 2017). Many popular YouTubers and SMIs have also joined TikTok as it continues to rise in popularity. Therefore, since most microcelebrities have accounts on multiple SM platforms to increase their audience and have built meaningful relationships and a sense of community with their audiences, SM changes will only require for them to readjust; this will allow them to benefit from influencer marketing and product endorsements across any of their SNS platforms as long as they have maintained their audiences' attention. Furthermore, as SM moves to Web 3.0, microcelebrities will be able to take part in the Metafluence platform and reach new audiences within the metaverse and benefit from its new work opportunities (Jansen, 2021). Although the influencer market is bound to remain, lack of stability in YouTubing was reported by 4 participants as a disadvantage of being a YouTuber. Thus, this study is significant in terms of the implications it allows for YouTube as a company and "employer". In order to ensure YouTubers' productivity, efficiency, and continued use of its platform, YouTube should take actionable step towards mitigating the potential negative impacts that being a content creator on YouTube may have on one's MH and wellbeing.

4) Positively Influencing Influencers: YouTubers, Microcelebrities, and the Online Future

While many popular microcelebrity YouTubers have openly disclosed their MH struggles with their followers, the overall results of the study showed minimal impacts of YouTube use on YouTubers' MH conditions, if present at all. These findings can be interpreted in a few ways. Primarily, it is very likely that the study sample was not representative of the YouTuber and microcelebrity YouTuber community or it may not have encompassed the complete experience of being a YouTuber as the majority of participants

in this study were part-time YouTubers (86.4%) and only 33.3% considered themselves microcelebrities. Furthermore, most participants (78.9%) had low popularity levels (1K subscribers or less), with 50% of all participants having less than 100 subscribers, and only 10.5% with high popularity levels (>100K subscribers). While only 0.42% of YouTube channels (153,770) have over 100K subscribers (Stokel-Walker, 2020), this study aimed to target YouTube's most popular content creators as it was believed that they may be feeling more distress in order to continue to be productive, though this way of thinking may not be correct either. A content analysis on most subscribed YouTube channels found vlogs to be the most common video genre, and more likely to contain self-disclosure, which is associated with higher levels of authenticity (Ferchaud et al., 2018). Interestingly, lower subscriber counts may have been attributed to YouTubers' level of openness with most participants reported being 'somewhat open' (34.2%) or 'neutral' (26.3%) about their personal lives online.

As mentioned earlier, the effects of SNS use are believed to depend partly on the quality of social factors in the online environment (Seabrook et. al., 2016), and so having a lower subscriber count, using YouTube on a less frequent basis (part-time), and not identifying as a microcelebrity will most likely result in different effects on MH and wellbeing in comparison to those of microcelebrity status who frequently practice microcelebrity. It can be hypothesized that having a lower online following may result in a lower risk of cyberbullying due to the lower number of viewers who are exposed to the YouTuber's content. It can also be hypothesized that creating content less frequently may result in a lower risk of burnout as YouTube is not one's primary means of income and so the YouTuber does not need to maintain consistent engagement from viewers. The majority of the YouTubers who participated in this study had such demographics, thus these factors may explain the minimal or lack of impact YouTube use had on their MH. Secondly, study findings can also be attributed to the participants personality traits. Neuroticism has been identified as a risk factor for depression and GAD (American Psychiatric Association, 2013), and only 1 participant (4%) scored high on neuroticism with 64% of participants scoring between somewhat low to low on neuroticism, though the sample size is extremely small. Also, the majority of participants scored between average to highest quintiles of extraversion, agreeableness, conscientiousness, and openness to

experience; high scores on these traits have been found to have a negative association with internet addiction, whereas high scores on the neuroticism scale had a positive association with internet addiction (Kayis et al., 2016).

An alternative perspective could be that the increase in MH disclosure among YouTubers may be strategic and performative, as explained by Bishop (2018b) in her netnography of the most popular beauty vloggers in the UK which found that the majority of her sample featured at least one video on stress, anxiety, or depression. Bishop (2018b) does not suggest that YouTubers do not have anxiety but highlights how YouTubers can restore their personal brands when needed by using anxiety videos and may take on affective and emotional labour to succeed on YouTube. Similarly, Smith (2017) explains how YouTubers' vlogs featuring discourse on anxiety and emphasizing common humanity with their viewers are simply acts aimed at achieving acceptance and preservation of their online power and celebrity status.

Another possible explanation for apparent the higher rates of MH issues among microcelebrity YouTubers may be due to a discrepancy between the curated selves YouTubers present their audiences online, and their true authentic selves offline. In his case study on three UK microcelebrity YouTubers' (Charlie McDonnell, Chris Kendall, and Benjamin Cook) unease with their celebrity status, Smith (2017) explains "all three vlogs dramatize how their self was formed through vlogging and their reception on YouTube; and they agonise about their position in this state where they have seemingly committed to a version of themselves which others have more influence in forging". Thus, being a microcelebrity may begin to impact one's MH when their self-presentation online is very different from their true authentic selves (which as noted by Smith (2017) may be dictated by YouTube's algorithm which YouTubers then internalize and create content accordingly), and as such they have to constantly perform or put on their YouTuber or microcelebrity 'masks' when engaging with their audience online to maintain views and subsequent income. It would be interesting for future studies to explore this further and investigate how certain factors such as personality traits may allow this to be easier for some to perform while more difficult and stressful for others. Similar to this, YouTubers and microcelebrities disclosing feelings of being misunderstood or misinterpreted (5 participants reported this as a disadvantage of YouTubing) can be

hypothesized to occur when their management of others' impression fails and there is an inconsistent self-presentation on the microcelebrity's part resulting in their loss of control over how their followers perceive them; that is when the microcelebrity's curated self that is presented to their audience does not align with the self that is perceived and consumed by the audience. Alternatively, being a YouTuber or microcelebrity may not necessarily be a stressful job yet may in fact be an attractive career for those who have MHDs (i.e. due to flexible hours, work from home, less in-person socializing, instant gratification from likes/views, ability to build a sense of community, and its potential use for escapism from one's reality) and so these apparent high rates of MH symptoms or disorders among popular YouTubers online may be attributed to the nature of their jobs.

For future research on microcelebrity YouTubers, the main recommendation of this study would be to ensure that a member of the research team is a part of the YouTube community, or that the research be conducted specifically by the YouTube platform in order to better encourage participation in the study and ensure conclusions may be drawn from a representative population of YouTubers. Future research should also be conducted using longitudinal and experimental study designs. Since self-report surveys are limiting due to retrospective bias (Seabrook et al., 2016) and other risks of inaccuracy, experimental research of real-world online social behaviour allows for the opportunity to determine causality and for drawing practical implications as to the conditions that allow SM use to be beneficial or risky (Deters & Mehl, 2013). It has been found that SNS users' patterns of use, language expression and profile information may at least be partial indications of their MH status (Seabrook et al., 2016). As future research may benefit from utilizing real-time observations of online social behavior and MH information personally documented by individuals on SNSs over time (Seabrook et al., 2016), conducting case studies on YouTubers' and microcelebrity YouTubers MH discourse over time in their YouTube videos may provide more accurate longitudinal insight, though this may require further ethical considerations. Similarly, the long-term effects of being a child YouTuber on MH and wellbeing in adulthood can also be assessed via case studies or self-report surveys in future research. Content analyses, netnographies, and directly interviewing YouTubers may also provide more qualitative insights and understanding of the effects of YouTubing on MH and

important predictive, protective, and susceptibility factors. In addition, while the current study along with most studies on the impact of SMU on MH are cross-sectional in design, future experimental studies on the effects of being a YouTuber on MH may provide additional insights on causation as opposed to correlation. For instance, similar to the experimental study conducted by Deters & Mehl (2013), future experimental studies can be conducted to assess the psychological effects of using SNSs such as Instagram as a microcelebrity vs. a regular user over a period of one week.

This study has significant research implications as it paves the way for further research on the topic of microcelebrity YouTubing and MH. Future research can include assessing the effects of being couple or family YouTubers (YouTubing with one's partner and/or family) on the individual and/or partner, their relationship dynamic and satisfaction, and their child(ren) or family structure. This allows for an interesting psycho-social perspective as the YouTuber is no longer only concerned with self-branding as an individual but as a partner and/or parent and must also consider the effectiveness of their partners' self-branding. However, you also have a partner or family member with whom to share the experience. Furthermore, in this situation the way the YouTubers may present themselves on camera in certain situations may serve a purpose to their viewers as to their online persona and identities, but if that behaviour and identity is not consistent with their natural offline behavior, it may impact their relationship with their partner, child(ren), and/or the entire family structure, dynamic, and overall satisfaction. There have been accounts of how the toll of YouTubing as a couple has resulted in the end of YouTuber couples' relationships (Hunte, 2018; Oppenheim, 2016), as such future research may consider whether YouTubing as a family may be a potential risk factor of being a YouTuber on negative MH outcomes. In addition, future research on MH effects of being a microcelebrity on other SM platforms, such as Instagram, Facebook, and TikTok, may provide further insights on whether associations between microcelebrity status/practice and MH are consistent across platforms, and if the primary platform used (i.e. YouTube vs. Instagram) may be a contributing factor.

a. Role of YouTubers and Microcelebrities

This study has implications for YouTubers, microcelebrities, YouTube as a company and SM platforms, advertising companies and businesses, everyday SNS users, and the overall medical community. Firstly, this research brings about the role of YouTubers and microcelebrities in their MH journey and how one's career and work life most often impact one's health (MH and wellbeing included), similar to how employment and work conditions are social determinants of health (WHO Commission on Social Determinants of Health, & World Health Organization, 2008). Awareness of the impacts of being a YouTuber or microcelebrity on one's MH allows these content creators to be more mindful of their patterns of use and work habits in order to ensure they benefit from the advantages of their careers and mitigate potential consequences. This is one of the potential benefits YouTubers may experience from having participated in this research survey; they may be more aware of the possible effects of YouTubing on their MH and wellbeing, allowing them to make the appropriate changes in YouTube use for themselves. In addition, their participation has helped to direct future research on the topic and raise awareness for other YouTubers and even YouTube itself as to the potential impacts of their platform use on MH and the potential protective and predictive factors of this SMU on MH. Research implications suggest that YouTubers start sharing their personal experiences of being a YouTuber on MH and pressuring YouTube as a company and employer to implement policies and resources to improve YouTubers' MH and wellbeing, to educate YouTubers as to the importance of MH, and to place an emphasis on the individual protective factors which may reduce the adverse effects of YouTubing.

b. Role of YouTube as a SM Platform, Brand, and Beneficiary

This study raises the discussion about the unique role YouTube may play as a platform and company to ensure that its creators are healthy and productive in their work. Many have argued that SM platforms must play a role in improving user experience and reducing risk of negative effects on wellbeing. Reports in the literature on Instagram use and MH have found that the social interactional activity of liking someone's photos on Instagram can affect body image, with findings that exposure to thin-ideal images on Instagram, in comparison with average images, led to greater body and facial dissatisfaction, as well as the

impact of the number of likes on facial dissatisfaction (Tiggemann et al., 2018). As discussed by Tiggemann et al. (2018), the number of likes a photo receives from users on Instagram is displayed underneath the photo making likes an important aspect of this SNS as it can serve as a form of peer influence or social reinforcement of attitudes and behaviours. Instagram has played a leading role in ensuring user wellness by allowing its users the option to hide the total number of likes on photo posts in an effort to improve users' mental and emotional health (Blackwood, 2020). This option accommodates those who are invested in the number of likes their photos receive, compare such statistics with that of others on Instagram, and/or associate their self-value and worth with the number of likes they collect online. While regular Instagram users can remove this means of comparison, these engagement insights (i.e. number of likes, comments, shares, and saves) are essential tools for microcelebrities to measure their influence and success on SM, especially when wanting to benefit from influencer marketing. A microcelebrity's engagement rate, referring to the percentage of their followers that engaged or interacted with a post, is the best metric for businesses to assess the influencer's marketing success (Donawerth, 2019). As such, microcelebrities require engagement tools and statistics to showcase brands interested in collaborating with them for sponsored content and advertisement campaigns, as these measure their marketing value and level of influence they have on their followers and potentially on their followers' purchasing behaviour.

From a business standpoint this study highlights the importance of ensuring that YouTubers and microcelebrities are of sound health, as when a company's employees are unhealthy and burnt-out, they will subsequently lack productivity and efficiency, resulting in reduced content and revenue, which negatively impacting the company. Since YouTubers work remotely, their YouTube channel and online community is considered to be a major aspect of their work environment, and as such YouTube as a platform and employer should promote workplace wellness for its creators. By doing such, YouTube allows its creators to create meaningful and creative content for viewers to consume and actually find entertaining, thus, increasing time spent on the platform and revenue from advertisers.

Firstly, YouTube must play a role in cyberbullying prevention, detection, and management, in order to protect its users from hate and harassment. While this study found that 58.3% of YouTubers rarely or

have never been cyberbullied, most of these participants do not represent microcelebrity status nor experience as most were not full-time YouTubers (86.4%), nor microcelebrities (66.7%), and had low popularity (50% had less than 100 subscribers). Due to the nature of their jobs, YouTubers oftentimes connect with their subscribers via the comments section of their video where YouTube users can leave comments; at times these can be negative. The comments section under a YouTube video provides viewers with additional entertainment and the ability to read through comments, reply to them, and join in on conversations oftentimes resulting in comment chains/threads regarding the same topic where viewers can connect and have discussions amongst themselves. Although, watching a YouTube video does not require creating a user account, or a YouTube channel, leaving a comment on a video does (note: making a YouTube channel account does not mean the user has to post any videos) (McCamy, 2019). Enabling comments allows for YouTubers to connect with their subscribers, and for their fans and viewers to share, discuss, and connect with them and each other allowing for the fostering of a community; on the other hand, this can also risk cyberbullying and hate comments as well. The requirement for those who want to leave a comment on a video, to have a YouTube channel is a first-step protective method for YouTube to manage and ensure that the comments being shared are not hateful nor possibly resulting in psychological distress among YouTube creators and others. In addition, to protect its community, YouTube enforces its hate and harassment policies which were created in collaboration with YouTube creators who provided unique insights and perspectives and expert organizations that study cyberbullying (*YouTube Hate Speech & Harassment Policy - How YouTube Works*, n.d.). YouTube has openly discussed its progress on managing harmful content by removing videos and comments that violate YouTube's community guidelines via automated flagging or human detection, with 29.9% of videos removed for reasons of nudity or sexual content, 16.8% for violent or graphic reasons, 14.1% for spam, misleading and scams, and 3.7% for harassment and cyberbullying (*YouTube Progress on Responsibility - How YouTube Works*, n.d.).

While it can be difficult to enforce hate speech and harassment policies on a large scale, as it requires "nuanced understanding of local languages and context" as YouTube has disclosed (*YouTube Hate Speech & Harassment Policy - How YouTube Works*, n.d.), YouTube may need to explore other methods in

ensuring their YouTube Creator community is protected. Some suggestions could be: 1) hiring additional staff members to ensure policy enforcement and review teams to more effectively remove hateful content, 2) creating a stronger more effective algorithm to detect cyberbullying and hate and harassment comments, 3) educating the general online public, or more specifically YouTube users, about cyberbullying and its adverse effects, and/or 4) providing YouTubers with tools to ensure their comments sections are safe and respectful. The difficulty that such a large company like YouTube has with protecting its creators from hate and harassment also indicates the importance for the general online public to be aware of the negative impacts that hateful comments may leave on others and the social responsibility of be more mindful of their online actions and contributions. On the other hand, from a business perspective, it may not be fruitful for YouTube to vigorously prevent all forms of negative criticism or comments left on videos as oftentimes controversial content and online drama allow for increased engagement and impressions, drive online traffic and attention from viewers, and thus resulting in greater revenue for the company. There have even been many drama channels, such as the channel DramaAlert, belonging to American YouTuber KeemStar (*DramaAlert - YouTube*, n.d.), who hosts a news show called "spilling the tea" about other microcelebrity YouTubers or Internet stars and has gained a massive following of 5.67 million subscribers and high views and attention from YouTube viewers. In addition, more stringent algorithms may be counterproductive to YouTube creators' MH as stricter guidelines may risk in the demonetization or removal of inoffensive and non-controversial videos, which can be stressful and worrisome for YouTubers making a living from their content (Alvarez, 2018).

Secondly, YouTube must provide and invest in adequate tools, resources, and benefits for their creators in order to protect and support their MH and wellbeing; 56.7% of YouTubers who participated in this study disclosed that they have thought about taking a break or quitting YouTube, and 20.6% reported burnout as a difficulty of being YouTuber. Mainstream news outlets, such as the Guardian and the NY Times, have covered the issue of popular YouTubers opening up about burnout and the effects of YouTubing on MH (Parkin, 2018; Lorenz, 2021). As such, YouTube has recognized and acknowledged many of their creators' outcry about burnout, but YouTube's efforts to support its creators who are facing this crisis is not sufficient

(Hernandez, 2018). The YouTube Help Centre explains YouTube's Suicide and self-harm policy and provides a list of organizations supporting those with depression, suicidal thoughts, and/or self-harm behaviours in various countries and regions (*Suicide & Self-Harm Policy - YouTube Help*, n.d.). In addition, YouTube made a blog post celebrating YouTube creators who shared expert knowledge and resources on the platform in 2020 during the COVID-19 Pandemic and listed some creators for others to explore such as Rashawnda James a licensed MH therapist who shares MH-related content on YouTube (The YouTube Team, 2020). While these can be helpful, they appear to be the bare-minimum and require searching for them, and thus may not be as readily accessible. YouTube also provides well-being tools for its users including "time watched profile", "take a break reminder", "bedtime reminder", and the ability to "set a timer", in order to help users understand and manage their YouTube usage and create healthy habits and disconnect when needed (*How Youtube Technology Support Wellbeing - How YouTube Works*, n.d.). Although all YouTube users (creators and consumers) may benefit from these tools, they appear to be tailored mostly to users who consume YouTube content as opposed to those who create the content itself. Similar wellbeing tools and resources specifically designed for and supporting YouTube content creators' specific needs, should also be provided to YouTubers.

According to Ryan Wyatt, the head of gaming at YouTube, YouTube's executive team takes the topic of MH and YouTube seriously and has been talking to creators about their MH in order to determine the appropriate tools to help alleviate their work stress, but Wyatt did not outline any specific tools YouTube was working on (Alexander, 2018b). YouTube claimed it was also trying to provide an educational tool that helps educate viewers about creator MH and the importance of YouTubers taking necessary breaks (Alexander, 2018b). An insider source from YouTube told Engadget, a technology blog network, that YouTube understands the demanding nature of being a YouTuber, encourages creators to take breaks similar to what is done in ordinary jobs, and wants their creators to feel excited about their channels; as such YouTube has developed videos and courses in the YouTube Creator Academy that directly address issues of MH and burnout (Alvarez, 2018).

Many popular YouTubers have claimed that their burnout is due to YouTube's algorithm requiring consistent uploads in order to maintain relevance on the platform and consequently earnings, resulting in an inability to take breaks (Alvarez, 2018), but YouTube disputes this idea and claims it to be a misconception and myth (Hernandez, 2018). In a video uploaded to Creator Insider titled *MYTHBUSTING #3: Do vacations kill your YouTube channel?,* a YouTube product manager named Todd explains that there is no single road to success on YouTube and there is no requirement for creators to post content more frequently, as some successful YouTubers upload daily while others upload monthly (Creator Insider, 2018). Todd continues to explain that YouTube does not punish a channel for taking a break, time-off, or going on vacation, and claims he analysed hundreds of YouTube channels that took at least a 2-week break and found that there were channels that received more views in their return week than in the week they left (Creator Insider, 2018). Therefore, YouTube claims that YouTube success depends on the creator's content and whether their audience is engaged in it (Creator Insider, 2018), which is important for YouTubers to take note of when building and maintaining their audience to see what works for them: an audience that prefers daily, consistent, and longer videos for them to remain engaged, or an audience that will still be interested in their content even if it is uploaded less frequently, inconsistently, and with shorter length. But, it has been argued that YouTube is not doing enough to create a space where creators feel safe taking a break nor to create audiences that do not expect constant streaming of content, and that YouTube may have even played a role in fostering this through its "auto-play" feature that automatically starts loading a new video after the first is finished, feeding into audiences' need for consumption (i.e. audiences have to keep watching and be entertained) (Hernandez, 2018).

Furthermore, YouTube should invest in benefits for their creators, such as insurance coverage for MH services or, similar to other workplaces, develop a human resources team that can guide YouTube creators to therapy, counseling, and psychiatric services when needed (Hernandez, 2018). In addition, similar to YouTube's willingness to provide physical studios where creators can record their videos, YouTube should provide tangible resources to ensure creators are healthy (Hernandez, 2018), such as in-person MH services and resources in their studios. Furthermore, YouTube should provide YouTubers with other resources, such

as workshops and courses on workplace wellness and healthy work practices, in order to protect and manage creators' MH. The YouTube Creators Channel published a series of Master Class videos by Kati Morton, a licensed therapist and YouTuber, discussing burnout, its signs and ways to prevent it from reoccurring (YouTube Creators, 2018). Although this is a step in the right direction, short introductory videos on burnout may not be effective methods to combat creator burnout especially when the videos are not being watched by many (Hernandez, 2018) and have low views (from 17K to 51K views). Since YouTube claims that YouTubers represent and are a major part of their brand it is safe to say that YouTube holds some responsibility for the health and wellbeing of their creators and as such should be doing more to protect them from burnout (Hernandez, 2018). YouTube must show greater effort in raising awareness on creators' MH (i.e. to their users and audiences) instead of forcing this difficult task on their creators to open-up about it on their platforms (Hernandez, 2018).

A blog article on Engadget (Alvarez, 2018), revealed that Jacques Slade, a YouTuber with 1.31M subscribers who posts content about sneakers and technology, claims YouTube has reached out to certain creators offering MH services like meditation but Karen North, a clinical professor of communication at USC Annenberg and expert on SM and psychology, explains that it could be problematic for YouTube to take responsibility for its creator's MH as this can result in legal liabilities for the company and pressure them into making humanitarian changes to its algorithm, which may not actually be beneficial to their creators due to the way audiences consume entertainment today. Instead, North provides the alternative approach of providing support and services that address YouTubers' emerging needs, of which YouTube is in a unique position to do (Alvarez, 2018). Although YouTube may have little incentive to effectively solve the burnout crisis among their creators, due to the large amount of talented and motivated creators who "haven't been eaten alive by the system yet" (Hernandez, 2018), and are willing to succeed on YouTube and collect millions of views, YouTube should do more to show that they care about their creators and their wellbeing (Hernandez, 2018). In conclusion, digital and physical wellbeing tools and resources along with benefits like insurance coverage, should be provided to YouTube creators by YouTube to ensure health, wellbeing and subsequent productivity and revenue.

Thirdly, YouTube must play a leading role in the scientific research of YouTube and MH and wellbeing. While YouTube has a Research Creator Program that focuses on features and designs (*Community Research and User Studies – YouTube Creators*, n.d.), it should conduct research regarding YouTube use (specifically content creation) and well-being, especially due to the positive business implications and insights it may benefit from through such research. Google collects information on its users' online history, interests, and behaviour and analyses it in order to create personalized portfolios on individuals for its advertisers to better target specific audiences. Since Google and other SM platforms analyse their users' SMU in order to improve performance, categorize users, and increase ad revenue, it is possible for Google to conduct similar research on the MH effects of SMU.

An article by The Wall Street Journal (Wells et al., 2021) discussed leaked Facebook documents posted to the company's internal message board in March of 2020 showing internal company research data on the effects of Instagram use, which found that 32% of teenaged girls expressed that when they felt bad about their bodies, Instagram made them feel worse and that "comparisons on Instagram can change how young women view and describe themselves". Although this internal research found Instagram use (owned by Facebook/Meta) was linked with anxiety, depression, suicidal thought, and body image issues (similar to findings in the literature discussed in the introduction of this paper), Facebook defended its company by stating that the data were used out of context and attempted to smear the whistleblower in order to minimize company damages (Wetsman, 2021). Thus, it can be assumed that this type of research has already been and will continue to be conducted but has not been published publicly nor accessible to YouTube creators, scientists, nor health care professionals (HCPs). This may be due to the damaging effects that such findings may have on the brand, PR, and associated legal implications. However, improved wellbeing will not only result in more meaningful productivity from creators, increasing traffic, and overall revenue for the company, but will also help YouTube with its aim to "build a YouTube for [creators], [their] audience and the world" (*Community Research and User Studies – YouTube Creators*, n.d.). As such Google, the owner of YouTube, may have already studied the effects of YouTube content creation on MH and may already be benefiting from the findings as a business, but it is also ethically important for such research to be released

and made available to the public in order to educate YouTubers and other SM users on how to protect and maintain their MH and wellbeing.

c. Role of Advertising and Marketing Companies

This study has business implications for online advertising and marketing companies recruiting microcelebrity YouTubers to target their audiences and turn them into potential customers. A study by Tian et al. (2019) exploring the moderating role of the type of SM platform used had on users' self-esteem and life satisfaction, described the different implications their findings may have for businesses when promoting their products and services on SM. Tian et al. (2019) explained how the degree to which users of a specific platform (Instagram vs YouTube) have low or high self-esteem can be important factor for companies to consider when promoting their products as their promotional campaigns can be based on the appropriate platform that caters to each platform users' self-esteem levels. For instance, makeup companies with products which are often sought out by women, assumingly with concerns with their attractiveness and therefore self-esteem, can benefit from the knowledge that users on Instagram may experience self-esteem issues, meanwhile users of YouTube tend to have higher self-esteem, and as such athletics companies with products often sought out by athletic individuals with a willingness to accept challenges potentially involving defeat and assumingly of higher self-esteem may benefit by running their campaigns on YouTube (Tian et al., 2019).

Similarly, advertising and marketing companies interested in influencer marketing on YouTube should be selective of a microcelebrity's specific audience niche in order to successfully launch a campaign in which the YouTuber's audience will be engaged in. In addition, with more and more YouTubers opening up about their MH struggles and the ways in which they cope and try to improve their MH, this type of content allows for marketing opportunities for companies with relevant MH products and services intended for improving MH and overall wellbeing (i.e. CBD oil, pharmaceuticals, online therapy services, exercising products, and gym memberships). Such companies can promote their products and services via microcelebrities on YouTube by sponsoring YouTube videos related to MH. For example, companies can

sponsor videos where YouTubers disclose their MH struggles, and have the YouTuber mention their relevant products or services to their fans and audiences as a form of promotional campaign.

d. Role of Regular Online Users

Regular SM users make up the largest percentage of the online public, indicating the power that regular users have as a mass. The collective power that regular online users possess is highlighted within cancel culture, the act of "calling out" and withdrawing any form of support, including viewership, SM follows and likes, and purchasing endorsed products, for those who are deemed to have done something unacceptable or highly problematic from a social justice perspective, such as being sexist, racist, and bullying, and is often done by a collective of people with marginalized voices towards a powerful figure (Ng, 2020). As reviewed by Ng (2020), the #MeToo movement increased cancel culture with figures accused of sexual assault such as R. Kelly, James Franco, Louis C.K. and Aziz Ansari being dramatically canceled on SM. SM users have demonstrated the power they possess when canceling someone to meet a goal, oftentimes to serve their own form of justice, and as such cancel culture is criticized by some to be a harmful tool that leads to quick consequences of destroying lives due to a single action (Haskell, 2021). Yet, while cancel culture has been argued to result in harmful punishments and to be a means for performative virtue signalling, it is difficult to find a public figure or celebrity that has truly been cancelled online or offline as they will always manage to hold onto support from some and with the passage of time return to their regular public status (Butler, 2018).

This study has implications for the role and social responsibility of regular SM users, viewers and followers of microcelebrities and YouTubers. Primarily, ordinary users must educate themselves on Netiquette or "Internet etiquette", and cyberbullying and the emotional distress it can cause to others and have a social responsibility not to engage in hate and harassment online via direct messaging and leaving negative comments on other's SM content. Secondly, there should be more awareness among regular users who follow microcelebrities and YouTubers about the difficulties of creating content online, risk of creative burnout, and to humanize their favourite YouTubers or microcelebrities and understand that they need to

take a break or go on vacation, similarly to those with "regular" jobs. Furthermore, regular users can also play a role in the consumption culture that has been created and recognize that when a content creator is healthy, they can produce better quality content to entertain others as opposed to creating many low-quality videos. Thirdly, there should be greater awareness and knowledge among regular SM users regarding microcelebrity strategies such as self-branding. Ordinary users should recognize that microcelebrities are, as previously described, strategically curated identities in which their "real and authentic" portrayals of their personal lives are another strategic performance used to build their brand and image to maintain their audience and even gain endorsements (Senft, 2013; Marwick, 2013) from ad views, promotional campaigns, and YouTube memberships. Audiences should also be aware of the behavioural influence and purchasing power that microcelebrities have on their followers, especially when YouTubers disclose sponsored content and/or perform risky or unhealthy behaviour online. Possible methods of bringing this awareness to younger audiences such as children and teenagers, can be to learn about cyberbullying, netiquette, and microcelebrity influence in schools or at home from their parents. When children are taught about cyberbullying, emphasis should be made that netiquette should be applied to all online users including those with high following, and examples of videos of YouTubers opening up about hate comments and cyberbullying can be shown to humanize them. Furthermore, as a part of online safety, children should also be taught about content creation as a job and the influence microcelebrities have on others and to not repeat nor believe everything they view online. Therefore, it is important to understand that the personas and lives of microcelebrities shared online do not always reflect the full picture of the reality of these individuals' lived experience, MH statuses, nor life satisfaction; not all successful YouTubers are happy and satisfied with their lives although they appear to have everything they once dreamt of. Recall that 30.4% of participants self-reported a diagnosis of MHD(s), and 17.9% suspected to have at least one MHD. Furthermore, 58% of microcelebrities (7 out of 12) who participated in this study reported having a diagnosed or suspected MH condition, and 45% of YouTubers (20 out of 44) (those who did not identify as microcelebrities) reported having a diagnosed or suspected MHD. This is also important for ordinary users and viewers to note especially when considering taking up YouTube as a career.

Ordinary SM users may also gain insights from this study, as it has been argued in the literature that all SNS users practice microcelebrity regardless of the number of followers/friends they possess and despite not achieving microcelebrity status (Senft, 2013). Whether they are conscious of it or not, all SNS users practice microcelebrity when they are selective of what they share on their accounts in order to maintain the image and identity they present to others witnessing their online activity (Senft, 2013). Such behaviors include deleting or untagging oneself from photos they perceive as unflattering, enabling privacy settings (Senft, 2013), and obtaining and maintaining attention by targeting content towards their perceived audience's interests (Marwick & boyd, 2011). The common practice of microcelebrity that persists among all SNS users of small and large followings has been attributed to several factors, including the way such platforms have been engineered. A discourse analysis of Facebook's functionalities and in-depth interviews with emerging adults found that the SM platforms' inherent design guides everyday regular users (that are not actively involved in self-branding) to engage in a process of unintentional celebrification by unknowingly branding themselves by extracting core selves that can collect the most attention or consumption and ignoring dynamic selves, giving up their right to anonymity, constantly being engaged and deeply intimate (Cirucci, 2018). The current study's findings related to microcelebrity MH can provide insight as to effects of the repeated and frequent practices of microcelebrity. Therefore, it may be fruitful for regular SNS users to consider and reflect on how frequent and to what degree they engage in microcelebrity self-presentation practices, regardless of the size of their following, and how this specific type of SMU may impact how they feel after each use.

Future directions in research on the complex relationship between SMU and MH and wellbeing should consider assessing individuals' frequency or degree of microcelebrity practices in addition to previously used measurements, such as frequency of SMU. Due to the nature of SM platforms encouraging self-branding and the entrepreneurial potential of being a microcelebrity YouTuber, it can be assumed that all those who are on the YouTubing journey of broadcasting themselves practice microcelebrity, even if they are still in the early stages and have not yet gained online popularity nor achieved microcelebrity status and whether they are conscious of it or not. Since microcelebrity SM users along with regular users all

engage in microcelebrity self-presentation practices and self-branding, assessing such practices in future SM studies may provide further insights regarding the effects of this specific type of SMU on MH that may not have been considered before.

e. Role of Medical Community and Health Care Professionals

Finally, this study has implications for the medical community and HCPs as it allows for the opportunity to potentially improve MH and wellbeing, even via SM and microcelebrities. Firstly, since SMU is a relatively new variable known to impact MH, and most people nowadays use SM and thus unconsciously practice microcelebrity, HCPs can play a leading role in asking patients seeking MH treatment about the frequency and type of SMU they engage in in order to assess the potential impact SMU may have on their wellbeing. Additionally, HCPs can also aid and guide patients to engage in healthy SMU. Secondly, similar to how microcelebrities have influence over their followers' buying habits, microcelebrity YouTubers' MH disclosure and experience with treatment may help minimize MH stigma and encourage their followers and fans to seek professional support via MH services and treatment. The rise of burnout in the YouTube community has led to an increase in videos sponsored by BetterHelp, a wellness app that provides online MH counselling, but viewers reported concerns that the platform appears misleading and unprofessional (Alexander, 2018a). As such, the use of SM and microcelebrity platforms to help combat MH stigma and raise awareness of MH treatments must be conducted in a professional and well-planned manner in order to be effective and avoid such controversy. Future research can be directed to the effects of following microcelebrity YouTubers on individuals' MH and social behaviours and how microcelebrities may play a helpful role to improve societal views on MH treatment and healthy coping strategies.

5) Limitations

The main limitation of this study is the low recruitment rate which likely impacted the study results and as such robust scientific conclusions could not be made. Similarly, the low participation rate of microcelebrity YouTubers specifically may have resulted in a study sample that was not reflective of the

complete YouTuber experience, despite efforts made to reach these popular YouTubers. In addition, indirect recruitment using snowball sampling method via SM posts and advertisements, along with directly contacting only YouTubers from the top 500 most subscribed YouTube channels and including only English-speaking YouTubers may have resulted in a sampling bias as non-English speaking members of the YouTuber community had a lower probability of participating in the study and may have offered different findings, further resulting in a study population that is not entirely representative of the YouTube community. Furthermore, while the survey was advertised online worldwide, it was only available in English hence to some degree cultural differences could not be measured, but this could be addressed in future work. The study design also involved self-reported survey responses which in turn brings about the risk for social desirability bias, retrospective bias, responses bias (Deters & Mehl, 2013; Seabrook et al., 2016), and risk of accuracy as there was no way to ensure that responses provided were accurate (i.e. self-reported diagnosis of MHDs could not be confirmed through medical records, nor did the authors conduct a clinical interview to assess accuracy of participants' diagnoses) (Schuman et al., 2018). The cross-sectional nature of the study also limits findings as it reflects only a period in time which cannot be deemed representative and so conclusions can only be made regarding the presence of a correlation while causality cannot be assessed. Similarly, for the majority of the responses there was no way of knowing if the MHD was present before participants started their career on YouTube or after, nor if posting on YouTube was directly related to it, increased its severity, or had no effect at all. In the original survey, participants were asked to disclose their date of diagnosis of MHDs in the following format (MM/YYYY), but when the survey was set up online via Survey Monkey several questions were excluded including this one as the date of diagnosis format was deemed difficult to recall. A relevant question was added later to the survey (on June 5, 2020, before directly recruiting participants via email) in order to identify whether the participant was diagnosed or suspected to have a MHD before or after they began posting on YouTube, but only a few participants were allowed the opportunity to respond to that question.

6) Conclusion

The findings from this study showed that entertainment and joy/passion were the most popular motivating factors for being a YouTuber and continuing to take on the role of microcelebrity, respectively, highlighting the creative opportunities YouTube allows for even its least popular content creators. Since most participants were not popular microcelebrities, their motivation for use can be explained as a means to satisfy their need for self-realization (i.e. entertainment), to gratify certain individual needs (i.e. attention), and/or to build a sense of self through social comparison and self-evaluation, or the potential to gain attention by achieving microcelebrity status and then possibly monetary gains. While study findings present a minimal impact of YouTubing on MH outcomes, and no significant associations between demographic or social factors and MH outcomes, this is likely due to inherent study limitations including low recruitment rate, small study sample size, and non-representative sample with a low rate of full-time microcelebrity YouTubers; as such our sample did not likely accurately present the potential adverse MH effects of being a microcelebrity YouTuber. Despite this, more than half of the participants disclosed having thought of taking a break or even quitting YouTube, supporting the public outcry of popular YouTubers feeling burnt-out. As careers in SM, such as microcelebrity and influencer marketing continue to grow and evolve, this study offers implications for all those impacted by microcelebrity including YouTubers, YouTube and other SM platforms, advertising and marketing companies, ordinary SM users, and health professionals. Future research on microcelebrity practices and status may be beneficial to the overall health of all SM users, including our youth who increasingly show interest in the use of SM and the career opportunities it may offer. With the increasing rate of children watching child YouTubers film their toys and play with them online, as opposed to regular TV shows and programs, it is interesting to wonder how many youths dream of being YouTubers themselves and who may one day grow to become the next popular microcelebrity.

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17/09/2019

Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number	H-08-19-4646
Titre du projet / Project Title	Exploring the relationship between YouTube content creators' microcelebrity status and mental health
Type de projet / Project Type	Thèse de maîtrise / Master's thesis
Statut du projet / Project Status	Approuvé / Approved
Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)	17/09/2019
Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)	16/09/2020

Équipe de recherche / Research Team

Chercheur / Researcher	Affiliation	Role
Lama Mohamad ZEITOUN	École interdisciplinaire des sciences de la santé / Interdisciplinary School of Health Sciences	Chercheur Principal / Principal Investigator
Anne KONKLE	École interdisciplinaire des sciences de la santé / Interdisciplinary School of Health Sciences	Superviseur / Supervisor
Sahej KAUR	École interdisciplinaire des sciences de la santé / Interdisciplinary School of Health Sciences	Assistant de recherche / Research Assistant

Conditions spéciales ou commentaires / Special conditions or comments

550, rue Cumberland, pièce 154
Ottawa (Ontario) K1N 6N5 Canada

550 Cumberland Street, Room 154
Ottawa, Ontario K1N 6N5 Canada

613-562-5387 • 613-562-5338 • ethique@uOttawa.ca / ethics@uOttawa.ca
www.recherche.uottawa.ca/deontologie | www.recherche.uottawa.ca/ethics

17/09/2019

Université d'Ottawa

Bureau d'éthique et d'intégrité de la recherche

University of Ottawa

Office of Research Ethics and Integrity

Le Comité d'éthique de la recherche (CÉR) de l'Université d'Ottawa, opérant conformément à l'*Énoncé de politique des Trois conseils* (2014) et toutes autres lois et tous règlements applicables, a examiné et approuvé la demande d'éthique du projet de recherche ci-nommé.

L'approbation est valide pour la durée indiquée plus haut et est sujette aux conditions énumérées dans la section intitulée "Conditions Spéciales ou Commentaires". Le formulaire « Renouvellement ou Fermeture de Projet » doit être complété quatre semaines avant la date d'échéance indiquée ci-haut afin de demander un renouvellement de cette approbation éthique ou afin de fermer le dossier.

Toutes modifications apportées au projet doivent être approuvées par le CÉR avant leur mise en place, sauf si le participant doit être retiré en raison d'un danger immédiat ou s'il s'agit d'un changement ayant trait à des éléments administratifs ou logistiques du projet. Les chercheurs doivent aviser le CÉR dans les plus brefs délais de tout changement pouvant augmenter le niveau de risque aux participants ou pouvant affecter considérablement le déroulement du projet, rapporter tout évènement imprévu ou indésirable et soumettre toute nouvelle information pouvant nuire à la conduite du projet ou à la sécurité des participants.

The University of Ottawa Research Ethics Board, which operates in accordance with the *Tri-Council Policy Statement* (2014) and other applicable laws and regulations, has examined and approved the ethics application for the above-named research project.

Ethics approval is valid for the period indicated above and is subject to the conditions listed in the section entitled "Special Conditions or Comments". The "Renewal/Project Closure" form must be completedfour weeks before the above-referenced expiry date to request a renewal of this ethics approval or closure of the file.

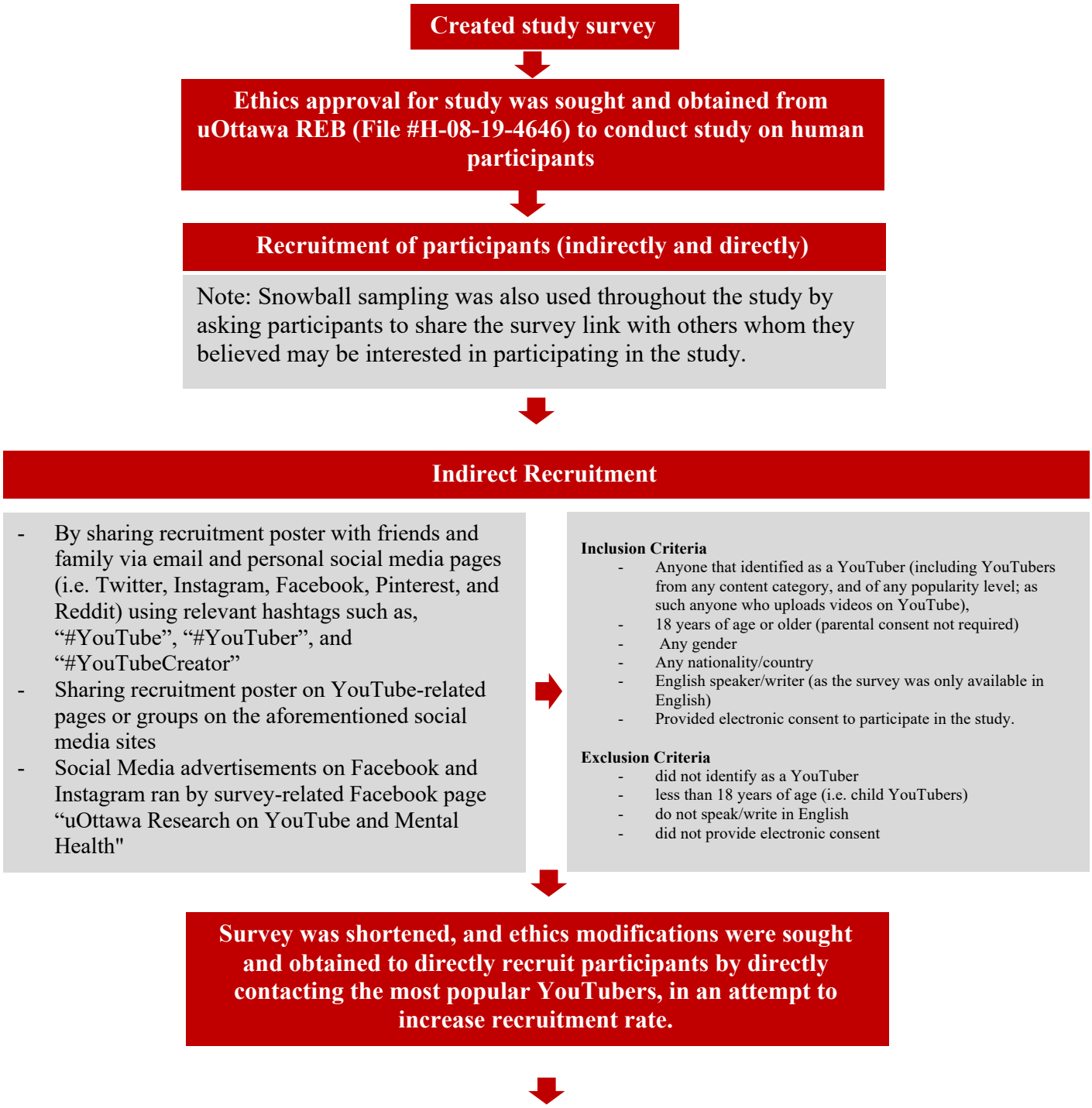
Any changes made to the project must be approved by the REB before being implemented, except when necessary to remove participants from immediate endangerment or when the modification(s) only pertain to administrative or logistical components of the project. Investigators must also promptly alert the REB of any changes that increase the risk to participant(s), any changes that considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project or the safety of the participant(s).

Kim THOMPSON
Responsable d'éthique en recherche / Protocol Officer
Pour/For **Daniel LAGAREC** Président(e) du/ Chair of the **Comité d'éthique de la recherche en sciences de la santé et sciences / Health Sciences and Sciences Research Ethics Board**

550, rue Cumberland, pièce 154 Ottawa (Ontario) K1N 6N5 Canada
550 Cumberland Street, Room 154 Ottawa, Ontario K1N 6N5 Canada

613-562-5387 • 613-562-5338 • ethique@uOttawa.ca / ethics@uOttawa.ca
www.recherche.uottawa.ca/deontologie | www.recherche.uottawa.ca/ethics

FIGURES


Created study survey
Ethics approval for study was sought and obtained from uOttawa REB (File #H-08-19-4646) to conduct study on human participants
Recruitment of participants (indirectly and directly)
Note: Snowball sampling was also used throughout the study by asking participants to share the survey link with others whom they believed may be interested in participating in the study.
Indirect Recruitment
- By sharing recruitment poster with friends and family via email and personal social media pages (i.e. Twitter, Instagram, Facebook, Pinterest, and Reddit) using relevant hashtags such as, "#YouTube", "#YouTuber", and "#YouTubeCreator"
- Sharing recruitment poster on YouTube-related pages or groups on the aforementioned social media sites
- Social Media advertisements on Facebook and Instagram ran by survey-related Facebook page "uOttawa Research on YouTube and Mental Health"
Inclusion Criteria
- Anyone that identified as a YouTuber (including YouTubers from any content category, and of any popularity level; as such anyone who uploads videos on YouTube),
- 18 years of age or older (parental consent not required)
- Any gender
- Any nationality/country
- English speaker/writer (as the survey was only available in English)
- Provided electronic consent to participate in the study.
Exclusion Criteria
- did not identify as a YouTuber
- less than 18 years of age (i.e. child YouTubers)
- do not speak/write in English
- did not provide electronic consent
Survey was shortened, and ethics modifications were sought and obtained to directly recruit participants by directly contacting the most popular YouTubers, in an attempt to increase recruitment rate.

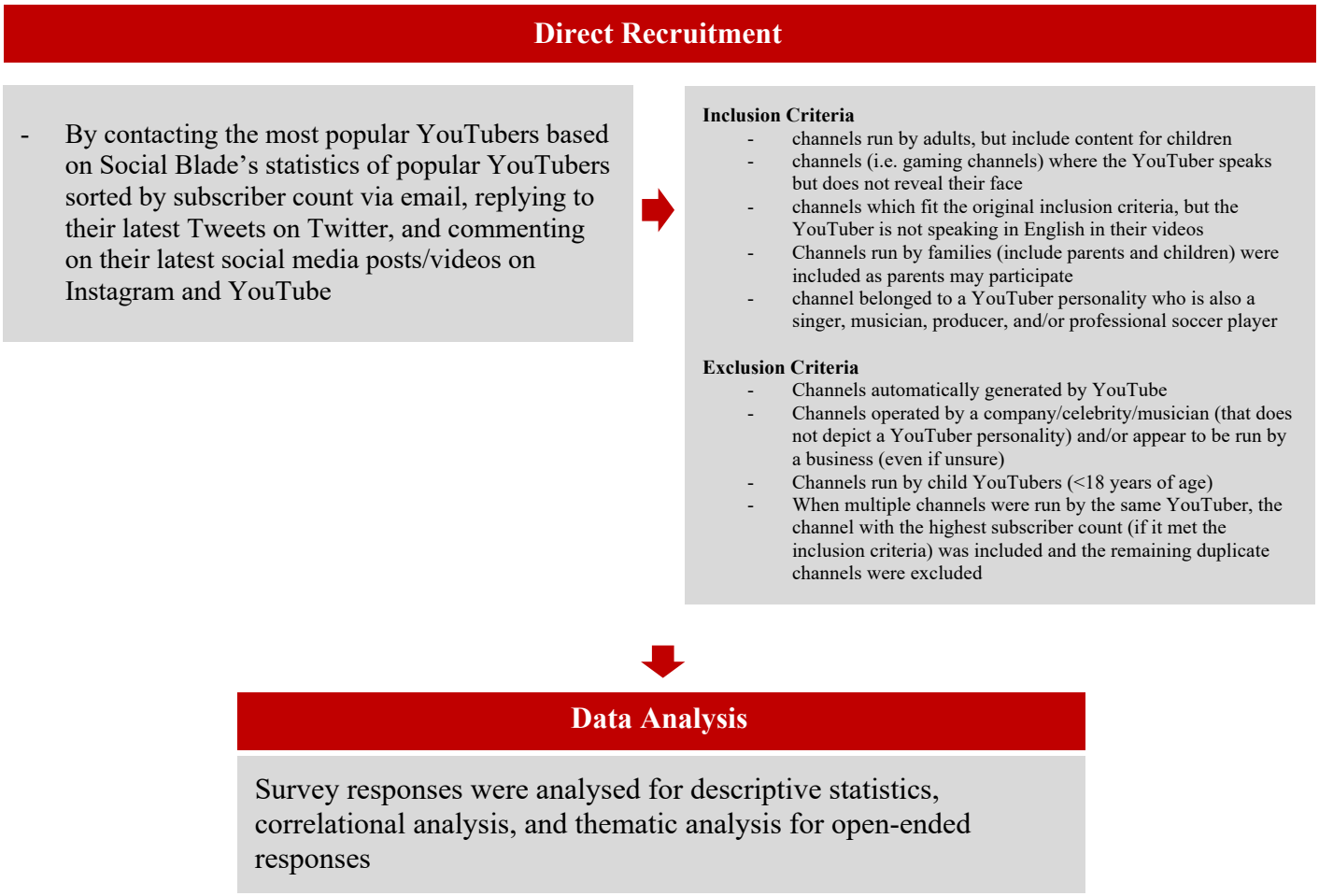


Figure 1: Methodology steps. This figure outlines the steps taken in this study.

Figure 2: Recruitment flyer. This figure depicts the recruitment flyer shared on social media posts (i.e. Facebook, Instagram Twitter, Reddit), Facebook and Instagram advertisements, and attached along with the email sent to directly recruit participants.

Participate in a Study on YouTube and Mental Health

1

LZ

Lama Mohamad Zeitoun
Fri 6/12/2020 7:10 PM

To:

Bcc:

Hello,

My name is Lama Zeitoun and I am a master's student working under the supervision of Dr. Anne TM Konkle from the Faculty of Health Sciences at the University of Ottawa in Canada. We are conducting a study on YouTube and mental health. I am emailing you to ask if you would like to complete a survey for this research project. Participation is completely voluntary, and your responses will be anonymous.

I am contacting you only due to your unique popularity on YouTube - we do not suspect you to have a mental health condition.

I am also emailing you to ask if you could please share this survey link along with the attached recruitment flyer with your family, friends, and/or followers.

If you are interested, please click on the following link for the survey and additional information: https://www.surveymonkey.ca/r/KDDMS8X

If you have any questions, please contact Dr. Konkle at Anne.Konkle@uOttawa.ca

Thank you for your time.

Lama Zeitoun
Masters of Science Candidate
University of Ottawa

Figure 3: Direct Recruitment Email Template. This figure presents the format of the recruitment email sent to YouTubers who were directly contacted to participate in this survey.

YouTube & Mental Health eSurvey
Participant Consent Form

Title of study: Exploring the relationship between YouTube content creators' microcelebrity status and mental health

Summary of Research Study: This Master's thesis study is conducted by Lama Zeitoun of the University of Ottawa, under the supervision of Dr. Anne TM Konkle, Assistant Professor in the Interdisciplinary School of Health Sciences at the University of Ottawa. The ethical aspects of this study have been reviewed and approved by the uOttawa REB (File #H-08-19-4646). The purpose of this study is to better understand the motivation to become a YouTuber and what factors may be protective or render a YouTuber more susceptible to issues of mental health.

Participation: My participation in this study will consist of completing an online survey that can be completed at a time and place of my convenience and is expected to take approximately 25 minutes of my valuable time. I will be asked personal questions relating to my social media use (particularly YouTube) as well as my health (with a focus on mental health).

Benefits of this Study: The overall goal of this study is to gain a better understanding of how social media use (SMU) affects YouTubers' mental health (MH) by: 1) Observing what motivates individuals to become YouTubers. 2) Assessing any self-identified changes in YouTubers' overall mental and physical health since starting their YouTube journey. 3) Identifying any protective factors that may make some YouTubers more resilient to negative influences of SMU on MH. 4) Identifying any susceptibility factors that make some YouTubers more vulnerable to negative influences of SMU on MH.

There is limited research on the effects of being a YouTuber on health. This study is expected to advance our knowledge as to some of the predictive and protective factors which may determine an individual's degree of impact from this type of social media use. Our research findings will aim to help raise awareness and educate YouTubers and others as to the potential negative influence of these social media platforms and present factors that may be protective. Results from this work may also allow for exploring potential opportunities to advocate and support those with mental health issues via social media. As such, by completing this survey, you may be more aware of the possible effects of YouTubing on your mental health and wellbeing, allowing you to make appropriate changes in YouTube use for yourself. In addition, by participating in this study you are potentially contributing and benefiting the online community and society by advancing scientific knowledge.

Please feel free to forward this link to any other YouTuber that you know who may be interested in participating in this study.

Confidentiality:
My survey answers will be stored online in a password-protected online survey account and extracted to data analysis software. All collected data will only be used for the purpose of this study and will be kept on a password protected computer. The information that I will provide will remain strictly confidential by using codes to safeguard my identity; personal demographic

information will be reported on in a group fashion. My responses may be quoted in presentations or publications, but my quotes may be attributed using demographic information such as: "gender, age, race, education level".

Voluntary Participation
My participation is voluntary, and I am under no obligation to participate. I may choose not to participate. If I choose to participate, I may withdraw from the study at any time. I do not have to answer any question I do not wish to answer. If I decide not to participate in this study, if I withdraw from participating at any time, or if I decide not to answer a/some question(s), I will not suffer any negative consequences.

What if I have questions later?
If you have any questions, or require more information about any part of the study, you may contact Dr Anne TM Konkle at Anne.Konkle@uOttawa.ca

If you have any questions with regards to your rights as a research participant, and/or the ethical conduct of this study, you may contact the Protocol Officer for Ethics in Research at the University of Ottawa, Tabaret Hall, 550 Cumberland St, Room 154, Ottawa, ON K1N 6N5; (tel) 613-562-5387 or ethics@uottawa.ca.

Mental Health Resources
By completing this survey, you might experience psychological or emotional discomfort (e.g., anxiety, loss of confidence, regret for disclosing personal information). In case you have negative experiences after completing this study and/or you need to consult any resources for issues regarding your mental health, we refer you to the following websites for additional information.

International resources include online information from the World Health Organization (WHO) on what you can do if you have feelings of depression or thoughts of suicide (website: https://www.who.int/campaigns/world-health-day/2017/handouts-depression/yourself/en/) and resources from the International Association for Suicide Prevention (IASP) on finding contact information for crisis centers in Africa, Asia, Europe, North America, Oceania, and South America (website: https://www.iasp.info/resources/Crisis_Centres/).

North American resources include online information on health and emotional wellness from the American Psychology Association (website: https://www.apa.org/helpcenter/wellness/index) and online fact sheets on mental health issues by the Canadian Psychological Association (website: https://cpa.ca/psychologyfactsheets/).

Thank you for your time and consideration.

Dr. Anne TM Konkle and Ms Lama Zeitoun
Interdisciplinary School of Health Sciences
University of Ottawa

ELECTRONIC CONSENT:
Please select your choice below. Clicking on the "agree" button below indicates that:

- You have read and understand the information for participants taking part in this YouTube & Mental Health Survey
- You understand that taking part in this study is voluntary and that you may withdraw from the study at any time
- You know who to contact if you have any questions about the study
- You are at least 18 years of age

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button. The information we receive will be of great use in our research study.

Thank you.
* must provide value

- o Agree
- o Disagree

Part 1: Demographics:
Select the option that describes you best.

1. Are you a YouTuber? (Yes/No)
2. How did you hear about this survey?
    a. Friend and/or family member shared it on social media (Twitter, Facebook, Instagram, Reddit, etc.)
    b. Word of mouth
    c. Facebook Advertisement
    d. Instagram Advertisement
    e. YouTube Advertisement
    f. YouTube Comment
    g. Email
    h. Other: _____
3. Gender:
    a. Female
    b. Male
    c. Transgender Female
    d. Transgender Male
    e. Gender Variant/Non-conforming
    f. Not Listed (please specify): _____
    g. Prefer Not to Answer
4. Date of Birth (DD/MM/YYYY): _____
5. Relationship status:
    a. Single
    b. Committed relationship
    c. Married
    d. Divorced/separated
    e. Widowed
    f. Prefer Not to Answer
6. Race/ethnicity:
    a. Indigenous peoples
    b. White/Caucasian
    c. Black/African American
    d. Asian
    e. Arab
    f. Latino/Hispanic
    g. Multiracial
    h. Other: _____
    i. Prefer Not to Answer
7. Education level:
    a. less than high school
    b. completed high school
    c. college degree
    d. university undergraduate degree
    e. university graduate degree
    f. Prefer Not to Answer
8. Income level: (USD)
    a. less than $25K
    b. $25K to $50K

c. $51K to $100K
d. $101K to $200K
e. $201K to $300K
f. $301K to $400K
g. $401K to $500K
h. $501K to $750K
i. $750K to $1M
j. Over $1M
k. Other: _____
l. Prefer Not to Answer

Part 2: Health demographics

1. Have you ever been diagnosed by a medical health professional with a mental health disorder, cognitive condition, learning disability, and/or physical disability? (Yes/No).
   If yes, please specify which condition(s) (if multiple, please include all)
   a. Depression
   b. Anxiety
   c. Eating disorder
   d. Substance abuse disorder
   e. Autism Spectrum Disorder
   f. ADD/ADHD
   g. Dyslexia
   h. Other(s):
   i. Physical disability

When were you first diagnosed with said disorder(s), condition(s), and/or disability?

A. Before starting my YouTube channel
B. After starting my YouTube channel

2. Have you ever or do you currently suspect yourself to have a mental health disorder, cognitive condition, learning disability and/or physical disability but have never received an official diagnosis from a medical health professional? (Yes/No).
   If yes, please specify which condition(s) (If multiple, please include all).
   a. Depression
   b. Anxiety
   c. Eating disorder
   d. Substance abuse disorder
   e. Autism Spectrum Disorder
   f. ADD/ADHD
   g. Dyslexia
   h. Other(s): _____
   i. Physical disability

When did you first suspect yourself to have said disorder(s), condition(s), and/or disability?

A. Before starting my YouTube channel
B. After starting my YouTube channel

3. Have you ever had or do you currently have a medical condition or disability? (Yes/No).
   If yes, please specify *(if multiple, please include all)*:
   _____
   _____

When did you start to have said medical condition(s), and/or disability?

A. Before starting my YouTube channel
B. After starting my YouTube channel

4. Do you believe the symptoms of your mental health condition/cognitive condition/learning disability were impacted by your use of YouTube?
    a. Yes, YouTube strongly improved my symptoms
    b. Yes, YouTube improved my symptoms
    c. Yes, YouTube slightly improved my symptoms
    d. Yes, YouTube slightly worsened my symptoms
    e. Yes, YouTube worsened my symptoms
    f. Yes, YouTube strongly worsened my symptoms
    g. No, YouTube had no effect on my symptoms
    h. I am unsure
    i. This question does not apply to me
5. Do you believe there is a relationship between your physical medical condition and YouTube?
    a. Yes, YouTube strongly improved my symptoms
    b. Yes, YouTube improved my symptoms
    c. Yes, YouTube slightly improved my symptoms
    d. Yes, YouTube slightly worsened my symptoms
    e. Yes, YouTube worsened my symptoms
    f. Yes, YouTube strongly worsened my symptoms
    g. No, YouTube had no effect on my symptoms
    h. I am unsure
    i. This question does not apply to me
6. Do you believe there is a relationship between your disability and YouTube?
    a. Yes, YouTube strongly improved my symptoms
    b. Yes, YouTube improved my symptoms
    c. Yes, YouTube slightly improved my symptoms
    d. Yes, YouTube slightly worsened my symptoms
    e. Yes, YouTube worsened my symptoms
    f. Yes, YouTube strongly worsened my symptoms
    g. No, YouTube had no effect on my symptoms
    h. I am unsure
    i. This question does not apply to me

Part 3: Social Media

a. Demographics

1. How often do you use social media for work purposes?
    a. Daily (5 mins – 60 mins per day)
    b. Daily (1 hour – 5+ hours per day)
    c. Every other day
    d. Once a week (weekly)
    e. Biweekly
    f. Monthly
2. How often do you use social media for your own leisure or entertainment?
    a. Daily (5 mins – 60 mins per day)
    b. Daily (1 hour – 5+ hours per day)
    c. Every other day
    d. Once a week (weekly)
    e. Biweekly
    f. Monthly

3. Which social media platforms do you use? You may select multiple.
    a. Instagram
    b. Snapchat
    c. Facebook
    d. YouTube
    e. Twitter
    f. Tumblr
    g. Reddit
    h. Pinterest
    i. Other(s): _____

4. Why do you use social media platforms? You may select multiple.
    a. Maintain friendships
    b. Form friendships
    c. Increase popularity
    d. Entertainment
    e. News
    f. Profit (from advertisements)
    g. Altruism (to help others)
    h. Inspiration
    i. Peer Support
    j. Self-help
    k. Other(s): _____

5. Are you a full-time YouTuber (i.e. is posting content on YouTube your full-time job)? (Yes/No)

Part 3b: Social Media Cyberbullying

6. How often do you receive hate comments/experience cyberbullying?
    a. Always (daily)
    b. Almost always (2 – 3 times a week)
    c. Sometimes (weekly – biweekly)
    d. Every once in a while (monthly)
    e. Rarely (a few times per year)
    f. Never

7. Does being a victim of cyberbullying and/or receiving hate comments affect your online activity?
    a. Almost always
    b. Sometimes
    c. Every once in a while
    d. Rarely
    e. Never
    f. Not applicable

8. Does being a victim of cyberbullying and/or receiving hate comments affect your life offline?
    a. Almost always
    b. Sometimes
    c. Every once in a while
    d. Rarely
    e. Never
    f. Not applicable

Part 4: YouTube
a. Demographics:
Fill in the blank or select the option that best describe your activity on YouTube.

1. YouTube channel URL/username *(If you do not wish to answer this question you may leave it blank. If you wish to answer this question and you have multiple channels please list all usernames beginning with your main channel)*::
   _____
2. How long have you been active on YouTube?:
   a. 0 – 1 month
   b. 1 – 3 months
   c. 3 – 6 months
   d. 6 – 12 months
   e. 1 year
   f. 2 years
   g. 3 years
   h. 4 years
   i. 5 years
   j. 6 years
   k. 7 years
   l. 8 years
   m. 9 years
   n. 10 years
   o. 10+ years
3. How many subscribers do you have? *(please round: i.e. 100, 1k, 10k, 100k, 1M, 10M.)*
   a. Less than 100
   b. 101-1000
   c. 1001-10 000
   d. 10 001-100 000
   e. 100 001-1 000 000
   f. 1 000 001 – 2 000 000
   g. 2 000 001 – 3 000 000
   h. 3 000 001 – 4 000 000
   i. 4 000 001 – 5 000 000
   j. 5 000 001 – 10 000 000
   k. 10 000 001 – 15 000 000
   l. 15 000 001 – 20 000 000
   m. 20 000 001 – 25 000 000
   n. Over 25 million
   o. Other: _____
4. Content category: *(You may select more than one category)*
   a. Auto & Vehicles
   b. Beauty & Fashion
   c. Comedy
   d. Education
   e. Entertainment
   f. Family Entertainment
   g. Film & Animation
   h. Food
   i. Gaming
   j. How-to & Style
   k. Music
   l. News & Politics
   m. Non-profits & Activism
   n. People & Blogs
   o. Pets & Animals
   p. Science & Technology
   q. Sports
   r. Travel & Events
5. Uploading frequency:
   a. Daily
   b. Once a week
   c. 2-3 times a week
   d. Biweekly
   e. Monthly
   f. Other (i.e. varies) please specify:
      _____

6. How many hours does it take you to create a single video (this includes research, filming, editing, and uploading)?
    a. ≤ 1 hour
    b. 1- 2 hours
    c. 2 – 3 hours
    d. 4 – 5 hours
    e. 6 – 7 hours
    f. 8 – 9 hours
    g. 10 – 11 hours
    h. 12 – 13 hours
    i. 14 – 15 hours
    j. 15+ hours
    k. Other:_____

7. Do you portray yourself, lifestyle, and/or personality on YouTube or identify as a YouTube personality?
    a. Yes
    b. No
8. How open do you believe you are about your personal life online?
    a. Very open
    b. Somewhat open
    c. Neutral
    d. Not very open
    e. Not at all open

9. What difficulties do you face as a YouTuber?
    a. Burnout
    b. Cyberbullying
    c. Feeling misunderstood/misinterpreted
    d. Constant criticism
    e. Staying on brand
    f. Lack of privacy
    g. Lack of stability
    h. Isolating nature of the job
    i. Other(s):
10. Have you ever thought of or do you currently think of quitting YouTube or taking a break off of YouTube? (Yes/No)

---

11. What advantages do you have as a YouTuber? Please select all that apply.
    a. Flexible work hours
    b. Working from home
    c. Good pay
    d. Business opportunities
    e. Brand deals/trips
    f. Popularity/fame
    g. Social support from fans
    h. Other(s):

Part 4 b. YouTube Microcelebrity

A microcelebrity is defined as a social media user who personally broadcasts online content and has gained fans or mainstream online following (Senft, 2008). A social media influencer is considered as a type of microcelebrity.

1. Do you consider yourself a microcelebrity?
    a. Yes (please enter 'yes'):
    b. No (please enter 'no'): _____
2. If yes, what type of microcelebrity do you consider yourself?
    a. Social media influencer
    b. Content creator
    c. YouTuber
    d. Other: _____
3. What motivated you to want to become a YouTuber or microcelebrity? Please select all that apply.
    a. Entertainment
    b. Fame
    c. Monetary success
    d. Altruism
    e. It was unintentional/happened by accident
    f. Other(s): _____

4. What motivates you to continue to take on the role of a microcelebrity? Choose all that apply
    a. I enjoy/love it
    b. I am my own boss
    c. I don't want to let my fans down
    d. I can't stop
    e. The financial benefits
    f. The advantages outweigh the disadvantages
    g. Other(s):

    _____

Part 5: Life Satisfaction

Satisfaction with Life Scale (SWLS) – *Below are five statements you may agree or disagree with. Answer each item according to the scale provided.*

1. In most ways my life is close to my ideal.
    a. Strongly disagree
    b. Disagree
    c. Slightly disagree
    d. Neither agree nor disagree
    e. Slightly agree
    f. Agree
    g. Strongly agree

2. The conditions of my life are excellent.
    a. Strongly disagree
    b. Disagree
    c. Slightly disagree
    d. Neither agree nor disagree
    e. Slightly agree
    f. Agree
    g. Strongly agree
3. I am satisfied with my life.
    a. Strongly disagree
    b. Disagree
    c. Slightly disagree
    d. Neither agree nor disagree
    e. Slightly agree
    f. Agree
    g. Strongly agree
4. So far I have gotten the important things I want in life.
    a. Strongly disagree
    b. Disagree
    c. Slightly disagree
    d. Neither agree nor disagree
    e. Slightly agree
    f. Agree
    g. Strongly agree
5. If I could live my life over, I would change almost nothing.
    a. Strongly disagree
    b. Disagree
    c. Slightly disagree
    d. Neither agree nor disagree
    e. Slightly agree
    f. Agree
    g. Strongly agree

Part 6: Personality

The Big Five Personality Test: *For each statement below mark how much you agree with it using the scale provided*

I…

1. Am the life of the party.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree

2. Feel little concern for others.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
3. Am always prepared.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
4. Get stressed out easily.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
5. Have a rich vocabulary.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
6. Don't talk a lot.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
7. Am interested in people.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
8. Leave my belongings around.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
9. Am relaxed most of the time.
    a. Disagree
    b. Slightly disagree
    c. Neutral

d. Slightly agree
e. Agree

10. Have difficulty understanding abstract ideas.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
11. Feel comfortable around people.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
12. Insult people.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
13. Pay attention to details.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
14. Worry about things.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
15. Have a vivid imagination.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
16. Keep in the background.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
17. Sympathize with others' feelings.
    a. Disagree

b. Slightly disagree
c. Neutral
d. Slightly agree
e. Agree

18. Make a mess of things.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
19. Seldom feel blue.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
20. Am not interested in abstract ideas.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
21. Start conversations.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
22. Am not interested in other people's problems.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
23. Get chores done right away.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
24. Am easily disturbed.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree

25. Have excellent ideas.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
26. Have little to say.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
27. Have a soft heart.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
28. Often forget to put things back in their proper place.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
29. Get upset easily.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
30. Do not have a good imagination.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
31. Talk to a lot of different people at parties.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
32. Am not really interested in others.
    a. Disagree
    b. Slightly disagree
    c. Neutral

d. Slightly agree
e. Agree

33. Like order.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
34. Change my mood a lot.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
35. Am quick to understand things.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
36. Don't like to draw attention to myself.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
37. Take time out for others.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
38. Shirk my duties.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
39. Have frequent mood swings.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
40. Use difficult words.
    a. Disagree

b. Slightly disagree
c. Neutral
d. Slightly agree
e. Agree

41. Don't mind being the center of attention.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
42. Feel others' emotions.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
43. Follow a schedule.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
44. Get irritated easily.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
45. Spend time reflecting on things.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
46. Am quiet around strangers.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
47. Make people feel at ease.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree

48. Am exacting in my work.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
49. Often feel blue.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree
50. Am full of ideas.
    a. Disagree
    b. Slightly disagree
    c. Neutral
    d. Slightly agree
    e. Agree

Part 7: Additional Comments
Is there anything you would like to add or comment on?

_____

_____

_____

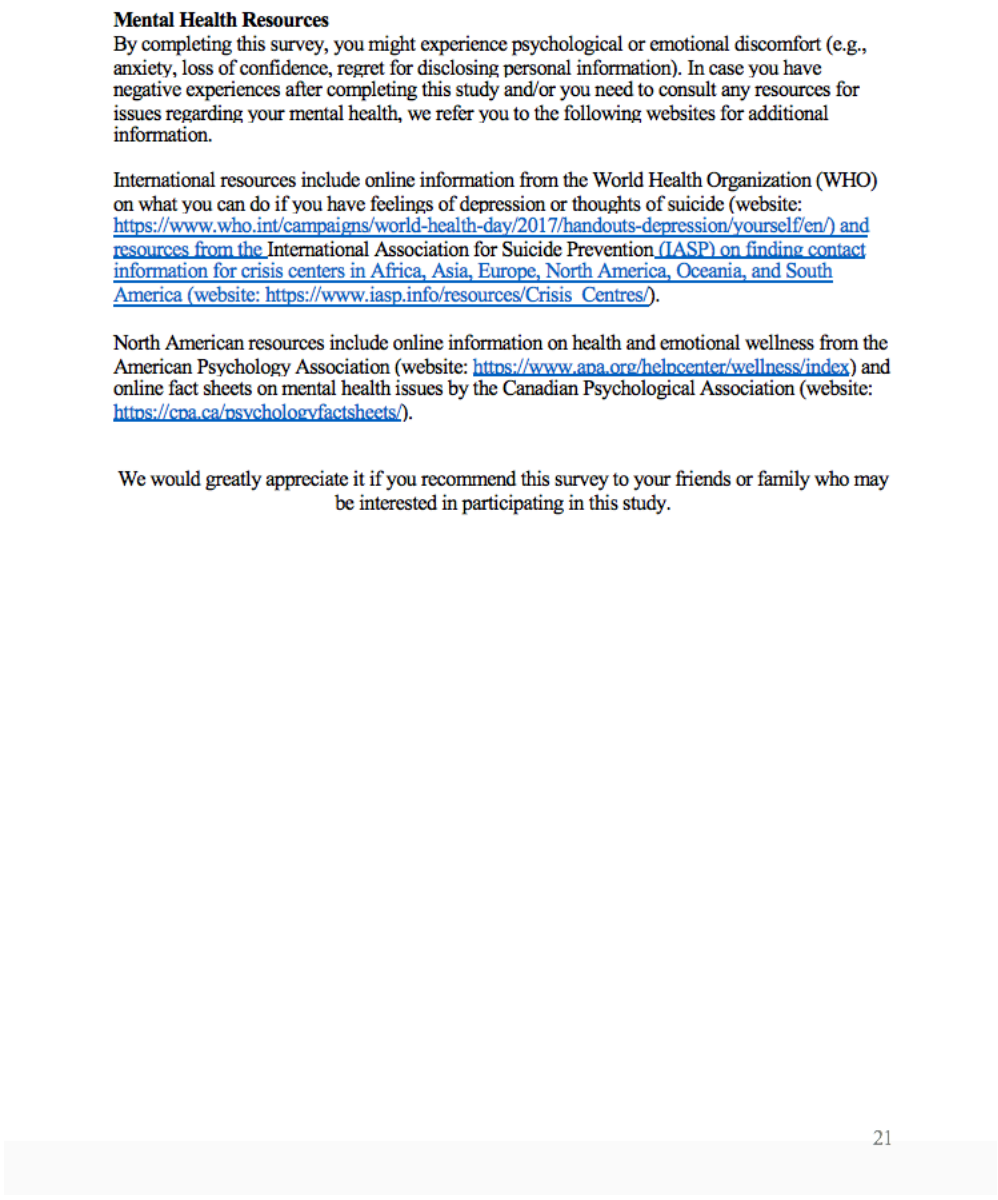
Part 8: Debriefing Participants

Title of study: Exploring the relationship between YouTube content creators' microcelebrity status and mental health

Study Purpose: The overall goal of this study is to gain a better understanding of how social media use (SMU) affects YouTubers' mental health (MH) by: 1) Observing what motivates individuals to become YouTubers. 2) Assessing any self-identified changes in YouTubers' overall mental and physical health since starting their YouTube journey. 3) Identifying any protective factors that may make some YouTubers more resilient to negative influences of SMU on MH. 4) Identifying any susceptibility factors that make some YouTubers more vulnerable to negative influences of SMU on MH.

Thank you for participating in a study on the mental health of YouTubers.

Your participation is not only greatly appreciated by the researchers involved, but the data collected could possibly aid people to better understand some of the mental health consequences of becoming a YouTuber.



Mental Health Resources

By completing this survey, you might experience psychological or emotional discomfort (e.g., anxiety, loss of confidence, regret for disclosing personal information). In case you have negative experiences after completing this study and/or you need to consult any resources for issues regarding your mental health, we refer you to the following websites for additional information.

International resources include online information from the World Health Organization (WHO) on what you can do if you have feelings of depression or thoughts of suicide (website: https://www.who.int/campaigns/world-health-day/2017/handouts-depression/yourself/en/) and resources from the International Association for Suicide Prevention (IASP) on finding contact information for crisis centers in Africa, Asia, Europe, North America, Oceania, and South America (website: https://www.iasp.info/resources/Crisis_Centres/).

North American resources include online information on health and emotional wellness from the American Psychology Association (website: https://www.apa.org/helpcenter/wellness/index) and online fact sheets on mental health issues by the Canadian Psychological Association (website: https://cpa.ca/psychologyfactsheets/).

We would greatly appreciate it if you recommend this survey to your friends or family who may be interested in participating in this study.

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Figure 4: Study questionnaire. This figure outlines the shortened version of the study survey presented to participants.

TABLES

PART A: DESCRIPTIVE ANALYSIS RESULTS

Table 1: *Demographics summary table listing the number of respondents and percentages in different categories (n=53 to 57). Categories include: gender, age range (in years), relationship status, race/ethnicity, education levels, and income levels (USD).*

Gender	**Number of Respondents**	**%**	**Number of participants who completed this question**
Female	19	35.2	54
Male	33	61.1	54
Prefer not to answer	1	1.9	54
Transgender Female	1	1.9	54
Age range (in years)	**Number of Respondents**	**%**	**Number of participants who completed this question**
18 - 25	25	47.2	53
26 - 30	14	26.4	53
31 - 35	8	15.1	53
36 - 40	3	5.7	53
41 - 45	3	5.7	53
46 - 50	0	0	53
51 - 55	0	0	53
56 - 60	0	0	53
61 - 65	0	0	53
66 - 70	0	0	53
71 - 75	0	0	53
76 - 80	0	0	53
81 - 85	0	0	53
86 - 90	0	0	53
91 - 95	0	0	53
Relationship Status	**Number of Respondents**	**%**	**Number of participants who completed this question**
Single	26	45.6	57
Committed relationship	11	19.3	57
Married	18	31.6	57
Divorced/separated	1	1.8	57
Widowed	0	0	57
Prefer not to answer	1	1.8	57
Race/Ethnicity	**Number of Respondents**	**%**	**Number of participants who completed this question**
Indigenous peoples	2	3.6	56

White	20	35.7	56
Black	5	8.9	56
Asian	14	25	56
Arab	9	16.1	56
Latino/Hispanic	1	1.8	56
Multiracial	2	3.6	56
Prefer Not to Answer	1	1.8	56
Other (please specify):	2	3.6	56
NZ Pakeha	1	1.8	56
Arab and Italian	1	1.8	56
Education level	**Number of Respondents**	**%**	**Number of participants who completed this question**
Less than high school	3	5.3	57
Completed high school	11	19.3	57
College degree	11	19.3	57
University undergraduate degree	13	22.8	57
University graduate degree	16	28.1	57
Prefer Not to Answer	3	5.3	57
Income Level (USD)	**Number of Respondents**	**%**	**Number of participants who completed this question**
Less than $25K	22	38.6	57
$25K to $50K	12	21.1	57
$51K to $100K	3	5.3	57
$101K to $200K	4	7.0	57
$201K to $300K	0	0	57
$301K to $400K	0	0	57
$401K to $500K	0	0	57
$501K to $750K	0	0	57
$750K to $1M	2	3.5	57
Over $1M	3	5.3	57
Prefer Not to Answer	5	8.8	57
Other:	6	10.5	57
No income	6	10.5	57

Table 2: Health Demographics summary table listing the number of respondents and percentages in different categories (n= 1 to 56). Categories include: Has received a diagnosis of a mental health disorder, cognitive condition, learning disability, and/or physical disability by a medical health professional, Diagnosed Condition(s), Number of Diagnosed Condition(s), When first diagnosed with said disorder(s), condition(s), and/or disability?, Has a suspected mental health disorder, cognitive condition, learning disability and/or physical disability, Suspected Condition(s), Number of Suspected Condition(s), When first suspected to have said disorder(s), condition(s), and/or disability?, Had or currently has a medical condition or disability, Medical condition or disability, Number of medical condition(s) or disabilities, When started to have said medical condition(s), and/or disability?, Do you believe the symptoms of your mental health condition/cognitive condition/learning disability were impacted by your use of YouTube?, Do you believe there is a relationship between your physical medical condition and YouTube?, and Do you believe there is a relationship between your disability and YouTube?

Has received a diagnosis of a mental health disorder, cognitive condition, learning disability, and/or physical disability by a medical health professional	**Number of Respondents**	**%**	**Number of participants who completed this question**
Yes	18	32.1	56
No	38	67.9	56
Diagnosed Condition(s)	**Number of Respondents**	**%**	**Number of participants who completed this question**
Depression	13	72.2	18
Anxiety	14	77.8	18
Eating Disorder	2	11.1	18
Substance abuse disorder	0	0	18
ASD	0	0	18
ADHD	2	11.1	18
Dyslexia	2	11.1	18
Physical disability	0	0	18
Prefer not to answer/unspecified*	1	5.6	18
Other(s): *	2	11.1	18
PTSD	1	5.6	18

Schizophrenia	1	5.6		18
Number of Diagnosed Condition(s)	**Number of Respondents**	**%**	**Number of respondents to diagnosed MH question**	**Number of participants who said they had a diagnosed condition**
0	38	67.9	56	18
1	3	5.4	56	18
2	10	17.9	56	18
3	4	7.1	56	18
Prefer not to answer/unspecified*	1	1.8	56	18
When first diagnosed with said disorder(s), condition(s), and/or disability?	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Before starting my YouTube channel	4	100		4
After starting my YouTube channel	0	0		4
Has a suspected mental health disorder, cognitive condition, learning disability and/or physical disability	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Yes	20	36.4		55
No	35	63.6		55
Suspected Condition(s)	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Depression	11	55		20
Anxiety	12	60		20
Eating Disorder	1	5		20
Substance abuse disorder	0	0		20
ASD	2	10		20
ADHD	6	30		20
Dyslexia	3	15		20

Physical disability	1	5		20
Prefer not to answer/unspecified*	0	0		20
Other(s): *	1	5		20
Bipolar Disorder	1	5		20
Number of Suspected Condition(s)	**Number of Respondents**	**%**	**Number of respondents to suspected health issues question**	**Number of participants who said they had a diagnosed condition**
0	35	63.6	55	20
1	7	12.7	55	20
2	10	18.2	55	20
3	2	3.6	55	20
4	1	1.8	55	20
Prefer not to answer/unspecified*	0	0	55	20
When first suspected to have said disorder(s), condition(s), and/or disability?	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Before starting my YouTube channel	3	100		3
After starting my YouTube channel	0	0		3
Had or currently has a medical condition or disability	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Yes	13	24.1		54
No	41	75.9		54
Medical condition or disability	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Hard of Hearing	1	7.7		13
Thalassemia minor	1	7.7		13
Physical disability (i.e. disabled vet, cripple)	2	15.4		13
Glaucoma	1	7.7		13
Diabetes	1	7.7		13

Minor atrial ectopics (heart arrhythmia)	1	7.7	13	
Adult whooping cough*	1	7.7	13	
High blood pressure	1	7.7	13	
Prefer not to answer/unspecified	4	30.8	13	
Number of medical condition(s) or disabilities	**Number of Respondents**	**%**	**Number of conditions/disabilities respondents**	**Number of participants who completed this question**
0	41	75.9	54	13
1	9	16.7	54	13
Prefer not to answer/unspecified*	4	7.4	54	13
When started to have said medical condition(s), and/or disability?	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Before starting my YouTube channel	1	100	1	
Do you believe the symptoms of your mental health condition/cognitive condition/learning disability were impacted by your use of YouTube?	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Yes, YouTube strongly improved my symptoms	2	7.4	27	
Yes, YouTube improved my symptoms	1	3.7	27	
Yes, YouTube slightly improved my symptoms	2	7.4	27	
Yes, YouTube slightly worsened my symptoms	3	11.1	27	
Yes, YouTube worsened my symptoms	1	3.7	27	
Yes, YouTube strongly worsened my symptoms	0	0	27	
No, YouTube had no effect on my symptoms	13	48.2	27	
I am unsure	5	18.5	27	

Do you believe there is a relationship between your physical medical condition and YouTube?	Number of Respondents	%	Number of participants who completed this question
Yes, YouTube strongly improved my symptoms	1	4.4	23
Yes, YouTube improved my symptoms	0	0	23
Yes, YouTube slightly improved my symptoms	1	4.4	23
Yes, YouTube slightly worsened my symptoms	1	4.4	23
Yes, YouTube worsened my symptoms	1	4.4	23
Yes, YouTube strongly worsened my symptoms	0	0	23
No, YouTube had no effect on my symptoms	12	52.2	23
I am unsure	7	30.4	23
Do you believe there is a relationship between your disability and YouTube?	**Number of Respondents**	**%**	**Number of participants who completed this question**
Yes, YouTube strongly improved my symptoms	1	4.2	24
Yes, YouTube improved my symptoms	1	4.2	24
Yes, YouTube slightly improved my symptoms	2	8.3	24
Yes, YouTube slightly worsened my symptoms	1	4.2	24
Yes, YouTube worsened my symptoms	2	8.3	24
Yes, YouTube strongly worsened my symptoms	0	0	24
No, YouTube had no effect on my symptoms	12	50	24
I am unsure	5	20.8	24

Table 3: Social media demographics summary table listing the number of respondents and percentages in different categories (n=44 to 48). Categories include: Frequency of SMU for work purposes, Frequency of SMU for personal leisure or entertainment, SM platforms used, Number of SM Platforms used, Motivation to use SM platforms, and Are you a full-time YouTuber?

Frequency of SMU for work purposes	**Number of Respondents**	**%**	**Number of participants who completed this question**
Daily (5 mins - 60 mins per day)	19	39.6	48
Daily (1 hour - 5+ hours per day)	14	29.2	48
Every other day	4	8.3	48
Once a week (weekly)	2	4.2	48
Biweekly	2	4.2	48
Monthly	7	14.6	48
Frequency of SMU for personal leisure or entertainment	**Number of Respondents**	**%**	**Number of participants who completed this question**
Daily (5 mins - 60 mins per day)	19	40.4	47
Daily (1 hour - 5+ hours per day)	22	46.8	47
Every other day	4	8.5	47
Once a week (weekly)	1	2.1	47
Biweekly	0	0	47
Monthly	1	2.1	47
SM platforms used	**Number of Respondents**	**%**	**Number of participants who completed this question**
Instagram	38	80.9	47
Snapchat	15	31.9	47
Facebook	34	72.3	47
YouTube	46	97.9	47
Twitter	20	42.6	47
Tumblr	3	6.4	47

Reddit	23	48.9	47	
Pinterest	8	17.0	47	
Other(s):	3	6.4	47	
TikTok	2	4.3	47	
Twitch	1	2.1	47	
Number of SM Platforms used	**Number of Respondents**	**%**	**Number of participants who completed this question**	
1	0	0	47	
2	6	12.8	47	
3	11	23.4	47	
4	16	34.0	47	
5	5	10.6	47	
6	8	17.0	47	
7	0	0	47	
8	1	2.1	47	
Motivation to use SM platforms	**Number of Respondents**	**%**	**Number of responses/choices to this question**	**Number of participants who completed this question**
Social Connection	**59**	**29.3**	**201**	**46**
maintain friendships	*25*	12.4	201	46
form friendships	*12*	6.0	201	46
peer support	*12*	6.0	201	46
altruism	*10*	5.0	201	46
Self-Branding	**33**	**16.4**	**201**	**46**
increase popularity	*21*	10.4	201	46
profit	*10*	5.0	201	46
marketing	*1*	0.5	201	46
connect with fans	*1*	0.5	201	46
Produce/Consume UGC	**109**	**54.2**	**201**	**46**
entertainment	*39*	19.4	201	46

news	*31*	15.4	201	46
inspiration	*24*	11.9	201	46
self-help	*12*	6.0	201	46
produce content	*1*	0.5	201	46
DIYs & Other reasons	*1*	0.5	201	46
Art, Fashion, and Humour	*1*	0.5	201	46
Are you a full-time YouTuber?	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Yes	6	13.6	44	
No	38	86.4	44	

Table 4: Social media cyberbullying summary table listing the number of respondents and percentages in different categories (n=24 to 36). Categories include: Frequency of receiving hate comments/experiencing cyberbullying, Does being a victim of cyberbullying and/or receiving hate comments affect your online activity?, and Does being a victim of cyberbullying and/or receiving hate comments affect your life offline?

Frequency of receiving hate comments/experiencing cyberbullying	**Number of Respondents**	**%**	**Number of participants who completed this question**
Always (daily)	4	11.1	36
Almost always (2 – 3 times a week)	0	0	36
Sometimes (weekly – biweekly)	7	19.4	36
Every once in a while (monthly)	4	11.1	36
Rarely (a few times per year)	10	27.8	36
Never	11	30.6	36
Does being a victim of cyberbullying and/or receiving hate comments affect your online activity?	**Number of Respondents**	**%**	**Number of participants who completed this question**
Almost always	1	4	25
Sometimes	2	8	25
Every once in a while	6	24	25
Rarely	11	44	25
Never	5	20	25
Not applicable	0	0	25
Does being a victim of cyberbullying and/or receiving hate comments affect your life offline?	**Number of Respondents**	**%**	**Number of participants who completed this question**
Almost always	0	0	24
Sometimes	5	20.8	24
Every once in a while	4	16.7	24
Rarely	7	29.2	24
Never	8	33.3	24
Not applicable	0	0	24

Table 5: YouTube demographics summary table listing the number of respondents and percentages in different categories (n=30 to 46). Categories include: Length of being active on YouTube?, Number of subscribers, Content category, Uploading frequency, Length to create a single video (includes research, filming, editing, and uploading), Do you portray yourself, lifestyle, and/or personality on YouTube or identify as a YouTube personality?, How open do you believe you are about your personal life online?, Difficulties one faces as a YouTuber, Have you ever thought of or do you currently think of quitting YouTube or taking a break off of YouTube?, and Advantages one has as a YouTuber.

Length of being active on YouTube?:	**Number of Respondents**	**%**	**Number of participants who completed this question**
0 – 1 month	7	17.9	39
1 – 3 months	4	10.3	39
3 – 6 months	1	2.6	39
6 – 12 months	0	0	39
1 year	5	12.8	39
2 years	3	7.7	39
3 years	5	12.8	39
4 years	2	5.1	39
5 years	4	10.3	39
6 years	3	7.7	39
7 years	2	5.1	39
8 years	1	2.6	39
9 years	0	0	39
10 years	0	0	39
10+ years	2	5.1	39
Number of subscribers	**Number of Respondents**	**%**	**Number of participants who completed this question**
Less than 100	19	50	38
101-1000	11	28.9	38
1001-10 000	3	7.9	38

10 001-100 000	1	2.6		38
100 001-1 000 000	1	2.6		38
1 000 001 – 2 000 000	1	2.6		38
2 000 001 – 3 000 000	0	0		38
3 000 001 – 4 000 000	0	0		38
4 000 001 – 5 000 000	0	0		38
5 000 001 – 10 000 000	0	0		38
10 000 001 – 15 000 000	1	2.6		38
15 000 001 – 20 000 000	1	2.6		38
20 000 001 – 25 000 000	0	0		38
Over 25 million	0	0		38
Other	0	0		38
Content category:	**Number of Respondents**	**%**	**Number of responses to this question**	**Number of participants who completed this question**
Auto & Vehicles	1	1.1	92	38
Beauty & Fashion	6	6.5	92	38
Comedy	8	8.7	92	38
Education	7	7.6	92	38
Entertainment	15	16.3	92	38
Family Entertainment	5	5.4	92	38
Film & Animation	3	3.3	92	38
Food	2	2.2	92	38
Gaming	12	13.0	92	38
How-to & Style	1	1.1	92	38
Music	8	8.7	92	38
News & Politics	1	1.1	92	38
Non-profits & Activism	2	2.2	92	38
People & Blogs	9	9.8	92	38
Pets & Animals	1	1.1	92	38

Science & Technology	2	2.2	92	38
Sports	3	3.7	92	38
Travel & Events	6	6.5	92	38
Uploading frequency:	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Daily	3	8.1	37	
Once a week	8	21.6	37	
2-3 times a week	4	10.8	37	
Biweekly	3	8.1	37	
Monthly	9	24.3	37	
Other	10	27.0	37	
Not a fixed schedule	6	16.2	37	
Yearly	2	5.4	37	
Every other month	1	2.7	37	
No	1	2.7	37	
Length to create a single video (includes research, filming, editing, and uploading)	**Number of Respondents**	**%**	**Number of participants who completed this question**	
1 hour or less	3	8.1	37	
1- 2 hours	6	16.2	37	
2 – 3 hours	4	10.8	37	
4 – 5 hours	8	21.6	37	
6 – 7 hours	2	5.4	37	
8 – 9 hours	2	5.4	37	
10 – 11 hours	3	8.1	37	
12 – 13 hours	2	5.4	37	
14 – 15 hours	3	8.1	37	
15 hours or more	3	8.1	37	
Other	1	2.7	37	

Do you portray yourself, lifestyle, and/or personality on YouTube or identify as a YouTube personality?	**Number of Respondents**	**%**	**Number of participants who completed this question**
Yes	17	44.7	38
No	21	55.3	38
How open do you believe you are about your personal life online?	**Number of Respondents**	**%**	**Number of participants who completed this question**
Very open	5	13.2	38
Somewhat Open	13	34.2	38
Neutral	10	26.3	38
Not very open	5	13.2	38
Not at all open	5	13.2	38
Difficulties one faces as a YouTuber	**Number of Respondents**	**%**	**Number of participants who completed this question**
Burnout	7	20.6	34
Cyberbullying	2	5.9	34
Feeling misunderstood/ misinterpreted	5	14.7	34
Constant criticism	4	11.8	34
Staying on brand	4	11.8	34
Lack of privacy	1	2.9	34
Lack of stability	4	11.8	34
Isolating nature of the job	3	8.8	34
Other	4	11.8	34
Have you ever thought of or do you currently think of quitting YouTube or taking a break off of YouTube?	**Number of Respondents**	**%**	**Number of participants who completed this question**
Yes	17	56.7	30
No	13	43.3	30

Advantages one has as a YouTuber	Number of Respondents	%	Number of responses to this question
Flexible work hours	8	17.4	46
Working from home	11	23.9	46
Good pay	4	8.7	46
Business opportunities	3	6.5	46
Brand deals/trips	1	2.2	46
Popularity/fame	3	6.5	46
Social support from fans	8	17.4	46
Other	8	17.4	46

Table 6: *YouTube microcelebrity summary table listing the number of respondents and percentages in different categories (n=11 to 36). Categories include: Do you consider yourself a microcelebrity?, What motivated you to want to become a YouTuber or microcelebrity?, Motivation to continue to take on the role of a microcelebrity.*

Do you consider yourself a microcelebrity?	**Number of Respondents**	**%**	**Number of participants who completed this question**	
Yes	12	33.3	36	
No	24	66.7	36	
What motivated you to want to become a YouTuber or microcelebrity?	**Number of Respondents**	**%**	**Number of responses to this question**	**Number of participants who completed this question**
Entertainment	8	26.7	30	14
Fame	4	13.3	30	14
Monetary success	4	13.3	30	14
Altruism	6	20	30	14
It was unintentional/ happened by accident	6	20	30	14
Others	2	6.7	30	14
Motivation to continue to take on the role of a microcelebrity	**Number of Respondents**	**%**	**Number of responses to this question**	**Number of participants who completed this question**
I enjoy/love it	9	25.7	35	11
I am my own boss	8	22.9	35	11
I don't want to let my fans down	5	14.3	35	11
I can't stop	3	8.6	35	11
The financial benefits	5	14.3	35	11
The advantages outweigh the disadvantages	5	14.3	35	11
Others	0	0	35	11

Table 7: Life satisfaction summary table listing the corresponding satisfaction levels based on the Satisfaction with Life Scale (SWLS), frequency, and number of participants who completed this scale (n=32).

Corresponding Satisfaction Level	Frequency	%	Number of participants who completed this question
Extremely satisfied (score: 31 - 35)	3	9.4	32
Satisfied (26 - 30)	8	25	32
Slightly satisfied (21 - 25)	4	12.5	32
Neutral (20)	1	3.1	32
Slightly dissatisfied (15 - 19)	6	18.8	32
Dissatisfied (10 - 14)	4	12.5	32
Extremely dissatisfied (5 - 9)	6	18.8	32

Table 8.1. Frequency and percentage of YouTubers corresponding to degree of each personality trait quintile (n=25). Personality traits include extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to Experience
Low	8 (32%)	7 (28%)	8 (32%)	7 (28%)	5 (20%)
Average	8 (32%)	10 (40%)	7 (28%)	10 (40%)	11 (44%)
High	9 (36%)	8 (32%)	10 (40%)	8 (32%)	9 (36%)

Table 8.2. Frequency of YouTubers corresponding to each personality trait quintile (n=25). Personality traits include extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to Experience
Lowest (0 to 8)	2 (8%)	1 (4%)	0	3 (12%)	0
Somewhat (9 to 16)	6 (24%)	0	4 (16%)	13 (52%)	0
Average (17 to 24)	7 (28%)	6 (24%)	10 (40%)	4 (16%)	1 (4%)
Somewhat (25 to 32)	6 (24%)	10 (40%)	7 (28%)	4 (16%)	14 (56%)
Highest (33 to 40)	4 (16%)	8 (32%)	4 (16%)	1 (4%)	10 (40%)

Table 9. Survey recruitment summary table listing the number of respondents and percentages in different categories (n=56). Categories include: Friend and/or family member shared it on social media (Twitter, Facebook, Instagram, Reddit, etc.), Word of mouth, Online Advertisement (Instagram or Facebook), email, Reddit (post), Facebook (post), Twitter (Tweet or Hashtag).

How did you hear about this survey?	**Number of Respondents**	**%**	**Number of responses/choices to this question**	**Number of participants who completed this question**
Friend and/or family member shared it on social media (Twitter, Facebook, Instagram, Reddit, etc.)	14	24.1	58	56
Word of mouth	4	6.9	58	56
Online Advertisement (Instagram or Facebook)	18	31.0	58	56
Email	4	6.9	58	56
Reddit (post)	15	25.9	58	56
Facebook (post)	1	1.7	58	56
Twitter (Tweet or Hashtag)	2	3.4	58	56

PART B: QUANTITATIVE DATA STATISTICAL ANALYSIS RESULTS

Table 10. Online status and MH status crosstabulation summary table listing the count and percentages within online status category (n=56). No significant relationship was found between participants' MH status and online status, X^2 (2, N=56) = 0.687, p = 0.676, using the Fisher-Freeman-Halton Exact Test.

			MH Status			Total
			Diagnosed	Suspected	Not Diagnosed	
Online Status	YouTuber	Count	13	7	24	44
		% within Online Status	29.5%	15.9%	54.5%	100%
	Microcelebrity	Count	4	3	5	12
		% within Online Status	33.3%	25%	41.7%	100%
Total		Count	17	10	29	56
		% within Online Status	30.4%	17.9%	51.8%	100%

Table 11. Online status and YouTube effect on MH status crosstabulation summary table listing the count and percentages within YouTube effect on MH status category (n=25). No significant relationship was found between online status and YouTube effect on MH status, X2 (3, N=25) = 0.794, p = 0.734, using the Fisher-Freeman-Halton Exact Test.

			YouTube Effect on MH Status				Total
			Worsened	No effect	Improved	Unsure	
Online Status	YouTuber	Count	2	8	4	4	18
		% within YouTube Effect on MH Status	50%	72.7%	80%	80%	72%
	Microcelebrity	Count	2	3	1	1	7
		% within YouTube Effect on MH Status	50%	27.3%	20%	20%	28%
Total		Count	4	11	5	5	25
		% within YouTube Effect on MH Status	100%	100%	100%	100%	100%

Table 12. MH status and YouTube effect on MH status crosstabulation summary table listing the count and percentages of total (n=25). A significant relationship was found between MH status and YouTube effect on MH, X^2 (3, N=25) = 0.018, p = 0.020, using Fisher-Freeman-Halton Exact Test.

			YouTube Effect on MH Status				Total
			Worsened	No effect	Improved	Unsure	
MH Status	Diagnosed	Count	0	9	4	2	15
		% of total	0%	36%	16%	8%	60%
	Suspected	Count	4	2	1	3	10
		% of total	16%	8%	4%	12%	40%
Total		Count	4	11	5	5	25
		% of total	16%	44%	20%	20%	100%

Table 13. MH status and life satisfaction crosstabulation summary table listing the count and percentages of total (n=32). A significant relationship found was between MH Status and life satisfaction, X^2 (4, N=32) =0.023, p = 0.039, using the Fisher-Freeman-Halton Exact Test.

			Life Satisfaction			Total
			Satisfied	Neutral	Dissatisfied	
MH Status	Diagnosed	Count	4	1	7	12
		% of total	12.5%	3.1%	21.9%	37.5%
	Suspected	Count	1	0	6	7
		% of total	3.1%	0%	18.8%	21.9%
	Not Diagnosed	Count	10	0	3	13
		% of total	31.3%	0%	9.4%	40.6%
Total		Count	15	1	16	32
		% of total	46.9%	3.1%	50%	100%

Table 14. MH status correlation analysis summary table listing chi-square values and p-values for MH status and different factors using the Fisher-Freeman-Halton Exact Test (n= 24 to 54). No significant relationships were found between MH status and the following factors: gender, age, relationship status, race and ethnicity, education level, income level, frequency of SMU for work, frequency of SMU for leisure, SM platforms used, YouTuber employment status, cyberbullying victim, cyberbullying effect on online activity, cyberbullying effect on life offline, experience level, popularity level, uploading frequency, self-portrayal, level of openness online, difficulties being a YouTuber, feelings of burnout, and microcelebrity status.

Factor	**X^2**	**p-value**
Gender	X^2 (2, N=51) = 0.339	p = 0.330
Age	X^2 (8, N=51) = 0.492	p = 0.397
Relationship status	X^2 (2, N=54) = 0.294	p = 0.240
Race and ethnicity	X^2 (12, N=51) = 0.479	p = 0.524
Education level	X^2 (4, N=52) = 0.400	p = 0.504
Income level	X^2 (4, N=50) = 0.157	p = 0.136
Frequency of SMU for work	X^2 (2, N=48) = 0.553	p = 0.499
Frequency of SMU for leisure	X^2 (2, N=47) = 0. 691	p = 0.469
SM platforms used	X^2 (12, N=47) = 0. 527	p = 0.511
YouTuber employment status	X^2 (2, N=44) = 1.000	p = 0.910
Cyberbullying victim	X^2 (2, N=46) = 0.207	p = 0.176
Cyberbullying effect on online activity	X^2 (2, N=25) = 0.220	p = 0.171
Cyberbullying effect on life offline	X^2 (2, N=24) = 0.743	p = 0.622
Experience level	X^2 (2, N=39) = 0.121	p = 0.107
Popularity level	X^2 (4, N=38) = 0.964	p = 0.932
Uploading frequency	X^2 (2, N=30) = 0.340	p = 0.319
Self-portrayal	X^2 (2, N=38) = 0.088	p = 0.088
Level of openness online	X^2 (4, N=38) = 0.816	p = 0.803
Difficulties of being a YouTuber	X^2 (14, N=30) = 0.856	p = 0.774
Feelings of burnout	X^2 (2, N=30) = 0.893	p = 0.804
Microcelebrity status	X^2 (2, N=36) = 1.000	p = 0.954

Table 15. YouTube effect on MH status correlation analysis summary table listing chi-square values and p-values for YouTube effect on MH status and different factors using the Fisher-Freeman-Halton Exact Test (n= 15 to 25). No significant relationships were found between YouTube effect on MH status and the following factors: gender, age, relationship status, race and ethnicity, education level, income level, frequency of SMU for work, frequency of SMU for leisure, SM platforms used, YouTuber employment status, cyberbullying victim, cyberbullying effect on online activity, cyberbullying effect on life offline, experience level, popularity level, uploading frequency, self-portrayal, level of openness online, difficulties being a YouTuber, feelings of burnout, microcelebrity status, and life satisfaction.

Factor	**X^2**	**p-value**
Gender	X^2 (3, N=25) = 0.124	p = 0.088
Age	X^2 (9, N=25) = 0.902	p = 0.827
Relationship status	X^2 (3, N=25) = 0.519	p = 0.428
Race and ethnicity	X^2 (12, N=23) = 0.341	p = 0.241
Education level	X^2 (6, N=24) = 0.277	p = 0.086
Income level	X^2 (3, N=23) = 0.919	p = 0.840
Frequency of SMU for work	X^2 (3, N=25) = 0.790	p = 0.747
Frequency of SMU for leisure	X^2 (3, N=25) = 1.000	p = 0.620
SM platforms used	X^2 (15, N=25) = 0.830	p = 0.734
YouTuber employment status	X^2 (3, N=25) = 0.641	p = 0.493
Cyberbullying victim	X^2 (3, N=25) = 0.180	p = 0.149
Cyberbullying effect on online activity	X^2 (3, N=15) = 1.000	p = 0.709
Cyberbullying effect on life offline	X^2 (3, N=15) = 1.000	p = 0.930
Experience level	X^2 (3, N=20) = 0.393	p = 0.261
Popularity level	X^2 (6, N=20) = 0.574	p = 0.500
Uploading frequency	X^2 (3, N=16) = 0.436	p = 0.314
Self-portrayal	X^2 (3, N=20) = 0.442	p = 0.367
Level of openness online	X^2 (6, N=20) = 0.709	p = 0.582
Difficulties of being a YouTuber	X^2 (15, N=15) = 0.765	p = 0.457
Feelings of burnout	X^2 (3, N=18) = 0.528	p = 0.284
Microcelebrity status	X^2 (3, N=20) = 1.000	p = 0.900
Life satisfaction	X^2 (6, N=19) = 0.739	p = 0.567

PART C: QUALITATIVE DATA THEMATIC ANALYSIS RESULTS

Table 16. Summary table listing the themes extracted from open-ended responses to the survey question: "Have you ever thought of or do you currently think of quitting YouTube or taking a break off of YouTube? Why or why not?" (n=31). Note: this question allowed for checkbox responses and open-ended responses, thus themes presented here were derived from both.

Themes	Frequency
Yes, thought of taking break	17
No thought of taking break	14
Flexible work schedule (i.e. film only when feel like it, only when inspired)	2
No pressure to produce content	2
Frequently taking breaks	1
Mood affects content (avoid working when unhappy)	1
Takes breaks to refocus priorities	1
Difficulty of being YouTuber (creating content and growing on platform)	1
Sometimes advantages do not outweigh disadvantages	1
Currently on a break	5
Recently took break	1
Has taken SM break in general	1
Due to mental health	1
Due to lack of motivation	2
Due to stress of creating weekly content	1
Due to time consumption/investment	2
Due to low gain in subscribers	1
Due to tiring nature of job	1
Due to college workload	1

Taking break is acceptable, but quitting is unacceptable	1
Will only quit YouTube if no longer enjoys it	1
Few benefits received for effort put in	1
Importance of consistency for content creation (taking breaks results in inconsistency)	1
No need for taking break	1
Not a famous YouTuber	1
Enjoys being a YouTuber	3
Beginner YouTuber	1
Complicated situation	1