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The Association Between Social Media, Toxic Masculinity, and Depression in Young Adult Males

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The Doctorate Program in Clinical Psychology
Illinois School of Professional Psychology
at National Louis University

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*The Association between Social Media, Toxic Masculinity,
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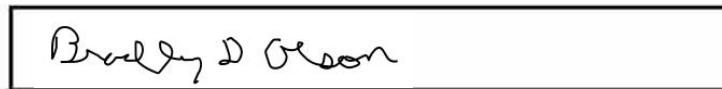
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The Association Between Social Media, Toxic Masculinity, and Depression in
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A Clinical Research Project submitted to the faculty of The Illinois School of Professional Psychology at National Louis University in partial fulfillment of the requirements for the degree of Doctor of Psychology in Clinical Psychology.

Chicago, Illinois
July 2024

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Abstract

The world is shaped by diverse influences that significantly affect individuals' internal landscapes, leading to both positive and negative effects with profound implications for society. Role models play a pivotal role in shaping the aspirations of young adult males by providing direct and indirect lessons that leave lasting impressions and influence their worldview. In recent years, social media use, toxic masculinity, and mental health have garnered significant attention in understanding the experiences of young adult males. The focus in this study was to examine the relationships between social media use, toxic masculinity, and depression in young adult males ranging in age from 18–25 years. The study involved a quantitative analysis of social media usage patterns and depression symptoms alongside an exploration of perceptions and experiences related to toxic masculinity. Specifically, the study was designed to examine whether the relationship between social media use and depression is moderated by toxic masculinity. The findings show social media use had a direct effect on depression and on toxic masculinity, but the results did not provide evidence of an interaction. The findings and implications of the results are discussed.

The Association Between Social Media, Toxic Masculinity, and Depression in Young Adult Males

Introduction

Society plays a role in our social and personality development from early childhood (R. Thompson, 2024). A combination of social influences, biological maturation, and a child's conceptions of the social world and the self shapes childhood social and personality development (R. Thompson, 2024). A discussion of the influence of significant relationships, the development of social understanding, the formation of personality, and the development of social and emotional competence in childhood exemplifies this interaction (R. Thompson, 2024).

Masculinity is a social construct that is defined differently in cultures to reflect traditional male traits. According to Zevallos (2013), masculinity is predominantly defined in Western societies by notions of dominance and physical strength over women, men, and children. Education, media, the economy, and politics are all cultural institutions that promote a singular view of what masculinity "should" be (Zevallos, 2013). Throughout our socialization, we encounter this restricted concept of masculinity. For example, in Greek mythology, Mars was the God of War and his masculinity symbolized power, leadership, and honor. This restricted view of masculinity can lead to problematic toxic masculinity. In academic scholarship, "toxic masculinity" (also sometimes referred to as hegemonic, unhealthy, orthodox, or traditional, among other terms) refers to what some scholars perceive to be "toxic practices" of masculinity that have resulted in the oppression of men, women, and transgender diverse people (Connell & Messerschmidt, 2005; de Boise, 2019). Toxic masculinity is believed to be one cause of aggressive and predatory heterosexual behavior resulting in sexual and domestic violence

committed by men (Bhana, 2012) and the suppression of men's emotions leading to emotional and mental health issues such as depression and anxiety (Addis & Cohane, 2005).

One place where toxic masculinity may be seen and possibly exacerbated is on social media (Christopherson, 2007). The term "social media" refers to the wide range of internet-based and mobile services that allow users to participate in online exchanges, contribute user-created content, or join online communities (Statista, 2021). The kinds of internet services commonly associated with social media (sometimes referred to as "Web 2.0") include the following: blogs, wikis, social bookmarking, social network sites, status update services, virtual world content, and media-sharing sites. These categories overlap to some degree. For example, X (formally known as Twitter), is a social network as well as a status update service (Dewing, 2012).

A third area of focus within this study was depression. Though depression can be understood as purely biological, there are many ways in which social and personal characteristics influence depression (Seabrook et al., 2016). Increased expectations of young individuals may lead to crises, anxiety, and depression. If the world is positive, people can develop coping abilities and develop self-efficacy, which enables them to perceive themselves as capable of managing difficult circumstances and trusting others to respond to their needs (Skodol, 2010).

Existing research shows the endorsement of some traditional masculine norms is associated with poorer mental health outcomes among men (Addis & Cohane, 2005; Bradstreet & Parent, 2017; Easton et al., 2013; Hammond, 2012; Liu & Iwamoto, 2007; Wong et al., 2017). In addition, familial responsibilities, financial instability, and physical health challenges have been found to contribute to men's experiences with distress and depression (Iwamoto et al., 2012; Syzdek & Addis, 2010). These pressures may be pronounced among college-enrolled men who are learning to respond to the rigorous demands of college life while also navigating

academic or social challenges. Moreover, young or “emerging” adulthood (Arnett, 2000) is a unique developmental timeframe in which men are working to explore, define, and describe their own ideas and beliefs about manhood and masculinities (Goodwill et al., 2019).

The rates of depression in young men are of concern. Ge and colleagues (2001) found the trajectories of depressive symptoms to be the highest around the ages of 17–18 years. Other research has shown the trajectories of depressive symptoms are highest in young adulthood (toward the age of 20 years) but then decline until older age (Sutin et al., 2013). In a study of emerging adults, McKinney et al. (2018) found maternal and paternal depressive and anxiety problems were associated with both irritability and defiance for male and female emerging adult children. Similarly, emerging adults have reported that when their parents had psychological problems, their parents were more likely to use harsh parenting behaviors (e.g., verbal aggression or yelling, physical aggression with hitting and spanking, and controlling with an authoritarian parenting style; Walker & McKinney, 2015).

Thus, this research study was designed to examine how toxic masculinity, social media use, and depression are related in a sample of young men. This is an important issue because gaining a better perspective of masculinity, social media influence, and associations with depression can provide comprehensive knowledge regarding interventions, resources, and treatment.

Literature Review

Gender Roles

Gender roles are often learned and engrained within the fabric of the family. A socialization perspective highlights parents' roles as instructors, reinforcers, and models of children's gender role attitudes (Lytton & Romney, 1991). Parents also reinforce sex-typed behaviors by encouraging their children's involvement in gender-stereotypical activities (Lytton & Romney, 1991). For men and boys, parents may explicitly or implicitly communicate a particular set of core features that a man must demonstrate. These include power/strength, rationality, heterosexuality, risk-taking, dominance, leadership, control, and repression of emotions (Mansfield, 2006). In the early days of the United States, men were expected to provide for their families, but they also took an active role in rearing their children (Lamb & Tamis-LeMonda, 2004). Fathers taught their children to read and write, found apprenticeship programs for their children so they could learn career skills, disciplined their offspring as needed, and led the family in prayers or other religious activities. The father was considered the primary parent and very involved in his children's development. Macro-societal and cultural shifts in gender norms pushed many fathers to become more directly involved in childcare (e.g., stay-at-home dads, changing diapers, physical play, social development, vital role in education) in the late 20th century. In other words, parental investment has shifted away from largely indirect forms like breadwinning and masculine role modeling and toward more direct, proximate, and engaged forms (Pleck, 2010).

When boys and men are taught to "tough it out," "keep a stiff upper lip," or otherwise control the experience and expression of softer emotions such as a depressed mood, they may respond to these emotions with a variant of classical depression that includes both internalizing

and externalizing symptoms (Magovcevic & Addis, 2008). Individual differences in adherence to distinct gender norms are connected with how people respond to expressions of negative affect and hence with the possibility of presenting as prototypically depressed, because emotion socialization is a deeply gendered process (Addis, 2008). Externalizing behaviors like substance abuse, violence, and excessive risk-taking are also gendered responses to negative affect that are more common in men who follow traditional masculine norms (Green & Addis, 2012).

Traditional masculine norms teach men to show dominance and authority, especially over others, and the related restrictive stereotypes demand that men be stoic, independent, powerful, and personal (Courtenay, 2000). According to some studies, though young, middle-class, heterosexual men in Western societies continue to exhibit some traditional masculinity norms, they appear to be embracing other aspects of contemporary masculinities, such as same-sex kissing (on the cheek and the lips) as non-sexual expressions of affection, an emerging homosocial and tactile experience of young American men (Anderson et al., 2019).

The stereotypical gender roles for men influence how they begin to represent themselves relevant to their gender. These stereotypes apply to the physical characteristics of a man's demeanor as well as his personal viewpoint. A part of masculinity is achieving the status of growing facial hair, which can be symbolic of masculinity and manhood. When adolescent males begin to grow facial hair, they often demonstrate and exhibit joy and satisfaction in their progress toward "manhood" (Rothfuß-Hanke, 2017). "Facial masculinity may be employed as a cue in female mate choice, as it represents the success of the male genotype in its developmental environment" (Kruger, 2006, p. 451).

According to McNaughton (2000), children spend a substantial amount of time attempting to behave like a "normal girl or a normal boy" to conform to their own culture's

views of masculinity and femininity. Many studies have demonstrated children as young as 5 years old conform to such gender-emotion stereotypes when it comes to judging other people's emotions or to expressing emotions themselves (McNaughton, 2000).

Early adolescence marks a time of gender intensification, pertaining to the increased gender stereotyping of attitudes and behaviors (J. P. Hill & Lynch, 1983). In order to learn what is appropriate for men and women, early adolescents actively seek out gender-related cues through, for instance, the media (Gerding & Signorielli, 2014). In research examining the gender norms represented on television, traditional feminine stereotypical cues (e.g., fancy apparel) and sexually subservient, hyper-feminine cues were presented considerably more frequently in female characters than in male characters (e.g., revealing clothing; Murnen et al., 2016). Male characters were much more likely to be depicted with typical masculine qualities like utilitarian attire and the body-in-motion, as well as hyper-masculine accessories like a weapon (Murnen et al., 2016).

Toxic Masculinity

A study in the *Journal of School of Psychology* provided the following definition of toxic masculinity: "The constellation of socially regressive masculine traits that serve to foster dominations, the devaluation of women, homophobia, and wanton violence" (Ingram et al., 2019, p. 139). In essence, toxic masculinity is simply socially regressive masculine qualities that serve to reinforce dominance, alluding to the idea that boys and men must be active, aggressive, and tough, and possess no feminine characteristic traits. Masculinity is defined as the traditional masculine ideology that captures the connection between an individual and the understanding of the cultural definition of the masculine identity (E. H. Thompson & Bennett, 2015). Broadly, this construct reflects an individual's belief about what men are like, how they should act, and how

important it is to embody societally-determined masculine norms. To clarify terms, Kupers (2005) referred to toxic masculinity as a form of traditional masculinity that becomes harmful to others in the ways described above.

Toxic masculinity has damaging effects to human society as the term itself implies levels of aggression, risky behavior, and stoicism yet excludes such traits as modesty, devotion, pride, and emotional sensitivity, thus reinforcing the stereotypes and attitudes society has regarding men. The term has been controversial within many communities due to the rise of aggression and ethnic violence in neighborhood communities over the past decade (Rotundi, 2020). Nonetheless, toxic masculinity has to be discussed as well as heavily examined to remove negative thinking and create positive role models or realistic ideas of how mature, balanced men should present themselves. The leading focal point of toxic masculinity is how men have been made to behave in such a manner that is widely acceptable to society and associated with traditional male stereotypes (Tavira, 2020). Society continues to tell men that they are not allowed to cry because showing that specific kind of emotion is a direct threat to their manhood and could bring them down from their position in society. Men are told by a patriarchal society that speaking up about sexual or physical abuse will ruin their “manly” image, hence they should not do so. When it comes to the effects of masculine gender socialization, men with more masculine gender socialization are more eager to conform to hegemonic masculine standards and are more stressed when those standards are broken (Green & Addis, 2012).

One place where toxic masculinity can be observed is on college campuses. Toxic masculinity is a widespread concern that is influential and is increasing within university campuses. Posadas (2017) noted “students could only go away from the unit without coming to consciousness of the truth that sexual violence in the West is fundamentally a problem of

masculinity”—a manifestation of the phenomenon that gender studies conceptualizes as “toxic masculinity” (p. 178). Despite the fact that research indicates cultural portrayals of male and female roles affect both genders, this perception has had an intergenerational impact. If no changes are made in our social structure, and most importantly in the family environment, this intergenerational cycle will continue.

Toxic masculinity, a type of hegemonic masculinity associated with rigid gender roles, dominance, and aggression, has increased in prevalence through social media and has been similarly associated with mental health problems (Vinopal, 2019). Depression is one mental health concern among young adults that is further discussed and explored later in this chapter.

Social Media

Social media is defined as forms of electronic communication (e.g., websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (e.g., videos; Merriam-Webster, n.d.). Social media has vast influences on generations of individuals. As the world merged into the 21st century, many changes in technology took place as telecommunication took on a new look as well. Computers took on a different and convenient shape as laptops, tablets, and cell phones became very popular.

Many computer companies were successful at providing inexpensive computer options, making it affordable for the average household family to own one or more devices used to connect to the internet. As of February 2019, 74% of Americans owned a desktop or laptop computer (Statista, 2021). In 2020, the number of unique mobile internet users stood at 4.28 billion worldwide, indicating over 90% of the global internet population uses a mobile device to go online (Statista, 2021). Having such access to a computer is significant for someone who is

not as technologically affluent in obtaining access to a new technical world, as research shows that in the United States, approximately 50% of people use a desktop computer and 46% of the market share goes to mobile devices (Seitz, 2024). The internet was created for great use but has been misused in many ways, which has affected many individuals' lives. Developed initially as a means for U.S. research scientists to speak with one another, the growing popularity of the internet continues to emerge (Statista, 2021).

Social networking is widely recognized in modern society as a medium for improving broad-scaled cooperation and connectivity. Furthermore, social media platforms have become an essential element of individuals' professional and personal lives. Social media platforms are internet-based applications created on the Web 2.0 technology and ideological foundation (Habes et al., 2018). Social media is a platform that allows individuals who are connected through a particular network to share information, thoughts, photos, videos, articles and even more. Social networking platforms promote new consumers with beneficial commercial capabilities (Dash & Piyushkant, 2020). Social media is becoming the norm as the technology grows every day and it is evident that many people use social media every day. It has been noted by researchers (Sharma & Kaswan, 2021) that young people also profit (e.g., YouTube, blogging) via the daily use of social media. Though we know that social media has many benefits, we cannot ignore social media demerits that can bring a great many difficulties for us unless we use them well. We need to be attentive to avoid the misinformation that is widely shared on social media, which may also cause productivity and creativity to decline (Sharma & Kaswan, 2021). There are times when an individual may seek out the media for clarity and truth via the information they search online; that information can be daunting and potentially misleading. The main advantage of internet relied networks is that one might take note of the latest developments in the world. Television

and print media are more often than not unilateral today and may transmit biased messages (Dolega et al., 2021). Thus, some people accept facts through some research with the aid of web-based social networking whereas others do not.

Television is a form of media that has an influence on teenagers and has an impact on their academic abilities (Zimmerman & Christakis, 2005). Teenagers who watch 4 hours or more of television (on a daily basis) have poorer test scores. Children and adolescents with strong grades have been found to watch less television than their peers with poor grades (Sharif & Sargent, 2006). Another study showed different types of media have distinct effects on schooling (Vaezi et al., 2011). The media generates, collects, processes, and disseminates information, which causes cognitive, emotional, and behavioral changes in people. Because people are assumed to be able to mix diverse media, media reliance can be viewed as a complicated interplay of various media exposure and media dependence (Wojcieszak & Rojas, 2011). Users' cognition, mood, and conduct are assumed to be influenced by social media in combination with other media, according to this theory (Vaezi et al., 2011).

Young adults commonly use social media as a primary form of communication. It has been stated that social media is rapidly becoming the dominant form of communication, serving as a platform for the formation of attitudes and the cultivation of convictions (Ryan et al., 2017). Furthermore, social media has invaded people's lives in Western countries such as the United States and Australia in a way that previous types of media have not been able to do (Perloff, 2014). Social media and collaboration technologies are viewed as valuable tools for creating a new reality of collaborative learning, particularly in higher education, which indicates millennials are growing up with various technologies in their daily lives (Jang, 2014). Social media has been shown to influence ideas, perceptions, and stereotypes. Some commentators are

concerned that youth media, with its formulaic portrayal of gender roles and sexuality, is developing and sustaining stereotypical gender-role schemas, such as the ideas that, for women, looks and sexiness are all important, and for men, sexual obsession is normal and sexual prowess an asset (Ward, 2002).

Social media usage is one of the most popular online activities. In 2020, over 3.6 billion people were using social media worldwide, a number that has been projected to increase to almost 4.41 billion in 2025 (Statista, 2022). Social media is the form of technology that is more widely used to communicate with one another socially but has been used for professional purposes as well. Social media has a way of connecting individuals through a unique form of communication that can engage many people from different parts of the country or world via the internet. Social media is very popular among adolescents and young adults as being an entertaining form of communicating. This entertainment can be positive such as congratulating others and sending birthday wishes, or it can take on negative forms such as cyberbullying and unwanted sexting. Social media can and does have a positive effect on children and teens, whether by teaching social skills, strengthening relationships, or just being fun (Best et al., 2014).

Persistent use of social media platforms can also have a negative impact, particularly on the mental health and well-being of young users (Strickler, 2022). However, when looking at the advantages and disadvantages, social media and technology offer greater convenience and an increased ability to stay connected to family and friends worldwide via email, text, FaceTime, and other means; enable quick access to information and research, online learning, job skills, and involvement in civic engagement (fundraising, social awareness); and provide opportunities for remote employment.

Because of their limited capacity for self-regulation and susceptibility to peer pressure, children and adolescents are at some risk as they navigate and experiment with social media (King et al., 2018). Prior research indicated adolescents engage in frequent online expressions of offline behaviors, such as bullying, clique-forming, and sexual experimentation that have led to problems such as cyberbullying, privacy issues, and sexting (Lenhart, 2009). Other problems that merit awareness include internet addiction and concurrent sleep deprivation (Christakis & Moreno, 2009). Social media platforms like Twitter, Snapchat, and Facebook have had a rapid impact on crime, criminal justice, and policing. Formal punishment procedures, for example, are now periodically substituted by the actions of digital vigilantes who use social media to shame people who have committed crimes or violated cultural standards (Trottier, 2014). Social media “addiction” is a psychological state of dependency in which users become overly preoccupied with social media activities and are driven by an uncontrollable desire to use social media sites to the point that it interferes with normal functioning and causes behavioral addiction-like symptoms (Andreassen et al., 2014). According to studies, 15.2% of young adults are “at danger for social media addiction” (Turel et al., 2018, p. 85). Excessive use of social media and the internet may lead to poor relationships with friends and family, lack of interest in daily life, and neglect of domestic, academic, professional, and other responsibilities that gradually leads to a discount of the quality of life (Diomidous et al., 2016).

Although technology has been created for various uses, communication via social media has become a form of entertainment for young adults. Research has noted the benefits and the negative consequences of social media use. For instance, research indicates one mechanism is the use of social media for negative social comparison which, alongside rumination, can lead to later depression (Feinstein et al., 2013). In recent years, many parents, advocates, and

policymakers have expressed concern regarding the potential negative impact of social media use. Some studies have indicated social media use may be tied to negative mental health outcomes, including suicidality, loneliness, and decreased empathy (Berryman et al., 2018).

Whereas communication on social media may provide opportunities for connection, it also has many negative aspects. Suicide-related videos and images often have a high number of views and comments, and one high-quality study found comments on videos may perpetuate self-harm behavior among teens and young adults (Marchant et al., 2017). Social media was the platform for these tragedies; social media has created a new kind of audience of live behavior that can go viral quickly.

The Effect of Media on the Development of Gender Roles

Social media has a way of engaging individuals in positive or negative aspects, including shaping gender roles (Rose et al., 2012). These aspects can be influenced by traditional gender roles, gender-appropriate content, and positions regarding ambitions in life such as career. The desire to be muscular is linked to the media image of the “ideal” guy, according to theorists and experts (Gray & Ginsberg, 2007). Handling “action figures,” which are perhaps the classic media portrayal of a “ideal” yet unattainable male form, increases college men’s desire for muscularity, according to Barlett et al. (2005).

Communication has been altered by technology via social media/social networks in academic, personal, and professional settings, which can offer a number of advantages. In the United States, internet adopters use the internet for myriad purposes, including e-communication (emailing, text messaging, social networking), e-commerce (making purchases online, paying bills online, and others), e-education and e-entertainment (watching podcasts, videos, listening to music), accessing health information online (retrieving health insurance records, interacting with

physicians online), and more sophisticated forms of usage such as teleworking and interacting with household devices (Skaletsky et al., 2018).

There has been previous research on social media and its associations with toxic masculinity and mental illness in young adults. Vinopal (2019) found social media use was correlated with depression in general, but also that men who displayed toxic masculinity (and reported that they considered dominance, misogyny, and homophobia to be masculine norms) were more likely to seek out information they disagreed with, pursue negative interactions with others online, and ruminate over these experiences after they stepped away from the computer. Empirical research has been conducted into portrayals of traditional gender roles televised daily as individuals watch and examine the character and then emulate them in the form of play and then reality. Giaccardi et al. (2016) found viewing reality TV to be a significant predictor of adherence to traditional views of males in interpersonal relationships (as measured by the Adolescent Masculinity in Relationships Scale, with items pertaining to the suppression of emotions, the display of sexual drive, and the importance of appearing tough) as well as with respondents' own levels of conformity with masculine norms. Most depictions of gender roles in the media include portrayals of men as dominant, aggressive, and unemotional, and women as submissive and emotional (Baker & Raney, 2007). Given the sexualizing (i.e., appearance-focused) messages found in teen media content and early adolescents' proneness to engage in traditional gendered behaviors, Kirsch and Murnen (2015) examined whether teen media exposure related to early adolescents' engagement in sexualized appearance behaviors 1 year later. The results revealed girls/women are portrayed as objects who are valued solely for their physical appearance and sexual appeal (Kirsch & Murnen, 2015). This behavior is seen via

clothing, hairstyles, and within their communication and engagement with one another, which results in aggressive conduct.

Engaging in sexualizing (appearance) behaviors has been shown to negatively affect adolescent development (Zurbriggen & Roberts, 2013). Kirsch and Murnen (2015) examined seven famous Nickelodeon and Disney Channel television shows (e.g., *iCarly* and *Hannah Montana*) and found that boys objectified and valued girls only for their beauty 2.5 times per hour. According to Gerding and Signorielli (2014), girls are represented in teen programming as being more concerned with their looks and receiving more attention for their attractiveness than boys. Teen shows and television shows on Nickelodeon and the Disney Channel (Kirsch & Murnen, 2015) transmit the message that sexual attraction is the most defining component of masculinity, and consequently the value of males.

Toxic masculinity is believed to be responsible for aggressive and predatory heterosexual behavior resulting in sexual and domestic violence committed by men (Bhana, 2012). Toxic masculinity is further associated with the suppression of men's emotions, leading to emotional and mental health issues such as depression and anxiety (Addis & Cohane, 2005).

Depression

Once upon a time, we thought certain things were true and good for us (e.g., the Earth is flat, or Pluto is a planet as we learned “MVEMJSUNP” [My very educated mother just served us nine pizzas]). Moreover, many believed smoking was good for you and seatbelts were not a necessity and considered an annoyance and discomfoting (remember the crash dummies). Similarly, being exposed to a steady diet of negative imagery has helped spread problematic representations of mental illness (Riles, 2020). Many have watched caricatures of people with mental illness depicted as broken, dangerous, incurable, heavily medicated, scary, or

irresponsible. Media portrayals of those with mental illness often skew toward either stigmatization or trivialization (Pavelko, 2017). Consequently, all forms of media—including television, film, magazines, newspapers, and social media—have been criticized for disseminating negative stereotypes and inaccurate descriptions of those with mental illness. Nearly nine out of 10 people with mental health problems say stigma and discrimination have a negative effect on their lives (Hack et al., 2020). Stigma and discrimination can also make someone's mental health problems worse, and delay or stop them from getting help. Social isolation, poor housing, unemployment, and poverty are all linked to poor mental health. Thus, stigma and discrimination can trap people in a cycle of illness (Mental Health Foundation, 2021).

Culturally, society has created many bad ideas of what it means to be mentally ill. Those ideas, fears, misunderstandings, exaggerations, and stereotypes have resulted in many stigmas (Corrigan et al., 2014). The fear of these stigmas creates feelings of being categorized, judged, isolated, medicated, excluded, or facing discrimination. The worst consequence of these stigmas is the fear they create and how that fear limits people's willingness to get the help they need (Clement et al., 2015). In order to eliminate the stigma, one must explore the ideas of seeking assistance and acceptance. Through research, P. Robinson et al. (2018) found stigma and trivialization are highly prevalent on social media and stated that as an even-greater proportion of social interaction takes place online, developers of proactive campaigns should consider assessing and addressing both on social media platforms (p. 56).

Stigma toward people with mental illness is associated with a variety of negative individual and social outcomes, and often serves as a significant barrier to individuals seeking and continuing professional treatment (Wang et al., 2017). Because illness behavior is related in part to beliefs about the characteristic features and causes of illness (Leventhal & Crouch, 2013),

framing mental health concerns as strictly biological can limit the treatment options people will consider, making psychosocial interventions appear ineffective (Deacon & Baird, 2009).

Depression is a word or term that has been used in many different manners. The American Psychiatric Association (2024) defines “depression (major depressive disorder) [as] a common and serious mental disorder that negatively affects how you feel, think, act, and perceive the world . . . Fortunately, depression is very treatable” (para. 1–4). Depression causes feelings of sadness or a loss of interest in activities an individual once enjoyed. “It can lead to a variety of emotional and physical problems and can decrease your ability to function at work and at home” (Texas Health Resources, 2022, What is Work Depression? section, para. 1). This illness can be inclusive of biological, psychological, and social/emotional stress from many factors. Given the high prevalence and substantial burden of depression, considerable research has focused on the underlying factors. As one of the fundamental environmental factors affecting many aspects of individuals’ development (Bradley & Corwyn, 2002), there is behavioral evidence to show family socioeconomic status (SES) has a powerful influence on physical and mental health, such as depression (Piko et al., 2013; Zhou et al., 2018).

Researchers have used specific subscales to test the links between masculinity and depression and found masculine norms like “restrictive emotionality” were linked to higher rates of depressive symptoms, whereas “self-reliance” was linked to lower rates of depressive symptoms—though there were differences among men of different ages (Hammond, 2012). Many researchers have been examining the link between toxic masculinity and depression (Hammond, 2012). Men’s experiences of depression may be exacerbated by adherence to this set of male norms, which may increase the frequency or intensity of maladaptive or antagonistic actions. Scores on the CMNI-46 Winning subscale, which examines the need to succeed and

dominate, have been linked to a range of unfavorable outcomes in prior studies, including depression (Wong et al., 2017).

Society plays a major role in this illness as many individuals suffer psychologically and physically, leading to stress and social anxiety. Some people who may consider themselves introverts live within their personal space and only allow certain people in via their comfort level. Spradlin et al. (2019) reported individuals with low moderate levels of extraversion (i.e., introverts) had a positive association between Facebook use and face-to-face communication, meaning greater use of Facebook was found to be associated with increased face-to-face communication. The association between Facebook use and face-to-face contact was not regulated by any other personality factors or attachment patterns. Introverts may benefit from Facebook (and perhaps other social networking sites) because it allows them to create trust and rapport in a less intimidating social context, making them more comfortable engaging in face-to-face dialogue (Spradlin et al., 2019). However, social media also presents a variety of difficulties for introverts. Introverts, for example, sometimes find social contacts challenging and taxing, and they prefer to work alone and without self-promotion. Furthermore, introverts may not have a large network of real-life contacts to help them get started online, and the frequent self-expression and self-disclosure of social media may feel far from spontaneous because people typically wait to be asked for their opinion (Samuel, 2019). However, social media is just as crucial for introverts as it is for extroverts, if not more so, because it allows people who avoid face-to-face networking to create a professional network and reputation. Indeed, new research (Samuel, 2019) revealed introverts profit the most from social media use. However, their source of entertainment can become addictive and damaging to their ability to effectively communicate

and engage in healthy relationships due to the content and vast number of mixed messages deemed appropriate for society.

Limits on the use of social media have resulted in mental health benefits for young adults and adults. A small, randomized controlled trial with college-aged youth showed limiting social media use to 30 minutes daily over 3 weeks led to significant improvements in depression severity (Hunt et al., 2018). Depression in young adult males can be decreased by providing them with appropriate online behavior training, encouraging them to participate in healthy online activities, and setting limits on how much time they spend on social media/social networks.

Toxic Masculinity, Social Media Use, and Depression

Many young adult males look up to a variety of role models who exemplify and represent who or what they want to be. Men have traditionally been taught life lessons both directly and indirectly that have left a lasting imprint and influenced their thinking. Young adult males' cultural beliefs influence future generations' behavioral patterns. The aim of this study was to explore the relationships between social media use, toxic masculinity, and depression among young adult males.

This research came about due to the researcher's interest in the effects of toxic masculinity that is communicated to males via social media networks. The endorsement of traditional masculine norms and depression was found to be positively correlated by Nadeau et al. (2016). This toxic style of masculinity, which focuses on homophobia, aggression, revealing emotional instability, violence, and chauvinism, can be damaging to maturing young males. Toxic masculinity is characterized by a drive to dominate and by the endorsement of misogynistic and homophobic views (Parent & Moradi, 2011). Though the correlation between

toxic masculinity and depression is well established, the current study was designed to examine whether social media use moderates the relationship between toxic masculinity and depression.

Hypotheses

Overall Hypothesis: Social media use will moderate the relationship between toxic masculinity and depression in young adult men.

Hypothesis 1: Social media/social network usage will be associated positively with toxic masculinity.

Hypothesis 2: Toxic masculinity will be positively correlated with depression.

Hypothesis 3: Time spent on social media/social networks will be positively correlated with depression.

Methods

Participants

The participants in this study were young adult males ranging in age from 18–25 years. The exclusions were individuals under the age of 18 years and over the age of 25 years, and those who could not read English sufficiently to respond to the questions; all other self-identified males were eligible to participate in this study. The proposed number of participants was 125 based on a power analysis with an expected medium effect size ($r = .25$), $\alpha = .05$, and power of .80. Participants were recruited via postings on social media (e.g., Facebook, Twitter, TikTok). Due to recruitment challenges and incomplete data, the final sample size was 37 participants. Details are discussed in the results section.

Measures

Data were collected through four instruments: a demographic questionnaire, the Bergen Social Media Addiction Scale (BSMAS) to measure the use of social media networks, the Patient Health Questionnaire-9 (PHQ-9) to measure depression, and the Man Box Scale to measure toxic masculinity.

Demographic Questionnaire

For the study, the researcher created a demographic questionnaire to gather some general and basic demographic data: cultural ethnicity, age, gender, income, marital status, education, sexual orientation, religious affiliation/background, and SES. The response options were a forced choice style to encourage respondents to consider a definitive option. These particular items were asked to ensure the participants met the inclusion criteria (i.e., self-identified male between the ages of 18 and 25 years) and to provide background information on the participants to allow for

exploratory examination of the study data. A copy of the demographic questionnaire is included in Appendix A.

Bergen Social Media Addiction Scale (BSMAS)

The BSMAS (Andreassen et al., 2012; see Appendix B) is a social media addiction scale, but social media has been defined as the use of Facebook, Twitter, Instagram, and other platforms. Therefore, the BSMAS can be considered a social networking addiction scale despite being called a social media addiction scale. The BSMAS is an adaptation of the Bergen Facebook Addiction Scale (BFAS; Andreassen et al., 2012). In the BSMAS, the term “Facebook” was replaced with “Social media” on all items of the scale. Within this scale, there are six components of behavioral addiction (Andreassen et al., 2012): salience, mood modification, tolerance, withdrawal, conflict, and relapse. The BSMAS is a simple and quick way to assess social media addiction. The six items are rated on a 5-point Likert scale from 1 (*very rarely*) to 5 (*very often*). A total score is then calculated by adding the scores of each item. The BSMAS total score ranges from 6 to 30 with higher scores indicating greater social media addiction. Based on the gold standards of clinical diagnosis, the BSMAS score of 24 is considered to be the optimal cut-off value for diagnosing a social media disorder. The BSMAS has also been validated in different cultural samples, such as in Norway, Italy, Persia, and Hungary (Andreassen et al., 2012; Bányai et al., 2017; Lin et al., 2017; Monacis et al., 2017).

The BFAS initially included a pool of 18 items, three reflecting each of the six core elements of addiction. This measure was constructed and administered to 423 students together with several other standardized self-report scales (e.g., Addictive Tendencies Scale, Online Sociability, Facebook Attitude Scale, NEO-FFI, BIS/BAS scales, and sleep questions). The item within each of the six addiction elements with the highest corrected item-total correlation was

retained in the final scale. The factor structure of the scale is good (RMSEA = .046, CFI = .99) and coefficient alpha is .83. The 3-week test–retest reliability coefficient is .82. The scores converge with the scores for the other scales of Facebook activity. Also, they are positively related to neuroticism and extraversion and negatively related to conscientiousness. High scores on the new scale are associated with delayed bedtimes and rising times (Andreassen et al., 2012).

Patient Health Questionnaire-9 (PHQ-9)

The PHQ-9 (Spitzer et al., 1999; see Appendix C) is the 9-question depression scale of the PHQ, a self-administered version of the PRIME-MD, a screening tool used to assess 12 mental and emotional health disorders. It has modules on mood, anxiety, alcohol, eating, and somatoform disorders (Kroenke et al., 2001). The PHQ-9 takes less than 3 minutes to complete and the total of all nine responses from the PHQ-9 can be used to predict the presence and severity of depression and make a depression diagnosis according to *DSM* criteria. Primary care providers frequently use the PHQ-9 to screen for depression in patients. The PHQ-9 questions are based on the diagnostic criteria for depression from the *DSM* and ask about the patient's experience in the past 2 weeks related to level of interest in doing things, feeling down or depressed, difficulty with sleeping, energy levels, eating habits, self-perception, ability to concentrate, speed of functioning, and thoughts of suicide. Responses range from 0 (*not at all*) to 3 (*nearly every day*); higher scores suggest greater presence of depressive symptoms. Factor analysis supports that the items of the scale reflect two factors: a somatic and a cognitive/affective factor.

The test–retest reliability was assessed by the correlation between PHQ-9 scores obtained from in-person and phone interviews with the same patient. The correlation value obtained was 0.84. In an assessment of construct validity, the correlation coefficient between the PHQ-9 and

the SF-20 Mental Health scale was .073 (Kroenke et al., 2001). To assess the criterion validity, a mental health professional validated the depression diagnoses from PHQ-9 scores from 580 participants, resulting in 88% sensitivity and 88% specificity. The use of sum scores (i.e., summing the scores of each item) is supported by psychometric studies, but techniques based on factor analysis are deemed more precise (Kroenke et al., 2001).

The Man Box Scale

The Man Box Scale (A. L. Hill et al., 2020; see Appendix D) was developed to measure men's personal beliefs and assess cultural ideas about male identity regarding attitudes, behaviors, and understandings of manhood. This includes being self-sufficient, acting tough, looking physically attractive, sticking to rigid gender roles, being heterosexual, having sexual prowess, and using aggression to resolve conflicts. This is a 15-item scale that provides a measure of toxic masculinity. Participants mark their agreement with each item on a 4-point Likert-type scale with options of 1 (*strongly disagree, the most gender-equitable*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree, the least gender-equitable*). Higher scores suggest more rigid ideas of masculinity or the endorsement of less gender equalities.

Through an iterative and collaborative process, Promundo-US piloted and field-tested over 100 items in more than 30 countries; the final 17 items were selected by key stakeholders, including content experts in gender and masculinities research, in-country partners, and the funder. Using previously collected data (in 2016) from men age 18–30 years across the United States, the United Kingdom, and Mexico, exploratory factor analyses (EFA) and confirmatory factor analyses (CFA) were conducted, internal consistency reliability was evaluated, and convergent validity was assessed by examining associations of the standardized mean Man Box Scale score with violence perpetration, depression, and suicidal ideation. Item response theory

(IRT) was used to derive a 15-item short form, and the researchers conducted CFA and additional assessments for reliability and convergent validity. The CFA resulted in good model fit. The researchers (A. L. Hill et al., 2020) found good construct validity via significant associations of standardized mean Man Box Scale score with violence perpetration (OR range = 1.57–2.59), depression (OR range = 1.19–1.73), and suicidal ideation (OR range = 1.56–2.59). IRT resulted in a 15-item short form with good fit thorough CFA and convergent validity, as well as good internal consistency. The Man Box Scale is a valid and reliable measurement tool to enhance research on gender equality (A. L. Hill et al., 2020).

Procedures

Participants were recruited through social media network sites, including Facebook, Instagram, Twitter, TikTok, and posting flyers (see Appendix E). Additional recruitment consisted of snowball sampling as research participants assisted with recruiting subjects and used social networking to refer additional people to the study (see Appendix F). The researcher contacted all of his personal and professional contacts and asked for their support in recruiting participants by forwarding the survey invitation to all of their contacts.

Recruitment took place via email invitation, snowball sampling techniques, and social media postings. The researcher posted the invitation to participate on the social media networking sites Facebook, Instagram, TikTok, and Twitter. Recruitment efforts were inclusive of friends, peers, and fellow classmates who shared the study invitation through their personal social media pages. The invitation included a link connecting the survey participants to the study.

When participants clicked on the research link in the email invitation or on the social media posting, they were directed immediately to the informed consent page (see Appendix G).

Participants were instructed to read and consent to the study by clicking on “I consent.” Survey participants were instructed to save a copy of the consent form for their future reference.

After consenting, participants were directed to the survey questions. The online survey took 7–10 minutes to complete, inclusive of the demographic questionnaire, BSMAS, PHQ-9, and the Man Box Scale. All measures were completed online. The survey contained a validity check item about one-third of the way through the questions (e.g., “Please check strongly agree/disagree”). Forty-six participants failed the validity check items and thus their data were removed from the dataset before analysis and not included in any reporting within the present study. Participants did not receive any compensation for their participation. Participants were surveyed through Qualtrics (web-based data collection). After completing all survey items, participants were directed to a short debriefing form explaining the study and thanking them for their participation (see Appendix H).

Ethical Considerations

This study adhered to the ethical guidelines for conducting research involving human subjects. Prior to commencing the research, the researcher completed the Collaborative Institutional Training Initiative (CITI) program for human research protections. The CITI training provided comprehensive education on the ethical principles and regulations governing research with human subjects, including informed consent, confidentiality, and the protection of vulnerable populations. The completion of the training program ensured the researcher was equipped to address potential ethical issues that may arise during the study. The certificate for the CITI training is included in Appendix I.

Results

Data Preparation

The data preparation for this study was critical to the effectiveness of the quantitative statistical analysis. First, the researcher ensured the respondents met the research inclusion criteria, and then ensured each individual answered all of the required questions. The accuracy of the data was increased by using a validity check of items on the survey. One question was added to the survey, which instructed respondents to choose “sometimes.”

Although 130 respondents started the survey, the final useable sample was 37. Of the original responders, seven did not consent and were removed from the data sample, 28 did not complete enough of the survey to provide useable data, 10 were excluded because they reported as cisgender females, and 12 were excluded because they did not meet the age requirement. Finally, an additional 36 respondents were excluded because, although they met the inclusion criteria and completed all the questions, they failed the validity check. Thus, with an abundance of caution, their data were removed from the final analysis. The original plan was to recruit a sample of 125 participants, which would have given the study a power of .80. The final usable sample ($N = 37$, $r = .25$, $\alpha = .05$) provided a power estimate of .29, indicating the study was significantly underpowered and the researcher was unlikely to find an effect if one existed.

As noted above, 28 participants who met the inclusion criteria started but did not complete the survey. It is unclear why these participants did not finish the survey. One possible explanation is that the survey took longer than the anticipated 7–10 minutes to complete. The completion time (i.e., how long a person had the survey open) ranged from 1 minute to more than 5 days. However, more than 88% of the completed responses were finished in less than 15 minutes and more than 80% were completed in under 10 minutes. This indicates the survey

length was not likely an issue. Instead, the biggest concern with the sample was the large number of respondents who failed the validity check. Though it was not possible to know the reason, a reasonable guess is that participants engaged in random responding.

Sample Descriptive Statistics

The researcher conducted basic data checks, checked for outliers, and cleaned the raw data, including reverse-scoring survey items that should be reverse-scored. To prepare the inferential analysis, the researcher coded the data by grouping and assigning the values of the survey replies. This technique of analysis showed the association between the variables (i.e., social media, toxic masculinity, and depression) to generalize the findings and conduct analyses of correlations, regression, and the interaction analysis to test for moderation. Participants completed three scales: the PHQ-9 (depression), the BSMAS (social media), and the Man Box Scale (toxic masculinity) providing descriptive information and symptomology, along with a demographic questionnaire to provide demographic data.

Demographics for participants in this study appear in Table 1. All participants were cisgender males between the ages of 18 and 25 years, as required to participate in the study. Forty percent of the participants were between the ages of 18 and 20 years, 19% were 21–23 years old, and 40% were 24–25 years old. Sixty-two percent of the participants were Black or African American, 13% were White, and 24% reported another race or ethnicity. Sixty-five percent of the participants were single with all of the other participants (35%) being in a stable relationship (i.e., married, stable partnership, or cohabiting). This is reasonable given that all participants were younger than 25 years old. Seventy-three percent of the participants were employed either full or part time, with the remaining 27% being self-employed, students, or disabled. Thirty-seven percent of the participants had a high school education or less, 30%

completed some college or an associate's degree, and 32% completed a bachelor's degree or more.

For the sample, the mean for the BSMAS was 14.27, which was below the cut-off for social media addiction (24). The mean for the Man Box Scale was 42.54, on a scale that has a range of 15–60. Finally, the mean for the PHQ-9 was 7.67, which fell in the mild depression range. An examination of differences between the valid and the invalid responders did not yield significant differences on the primary scales of interest. For the BSMAS, the mean for the invalid responders was 15.08 compared to 14.27 for valid responders ($t = 0.605, p = 0.547$). For the Man Box Scale, the mean for the invalid responders was 46.05 compared to 42.54 for valid responders ($t = 1.324, p = 0.189$). For the PHQ-9, the mean for the invalid responders was 7.54 compared to 7.67 for valid responders ($t = -0.075, p = 0.939$).

When examining differences in the demographic variables for the valid and invalid responders, the following differences were found. The valid responders were older than the invalid responders ($t = -5.458, p = 0.00000158$) and had completed more education than the invalid responders ($t = -3.607, p = 0.000617$). The difference in the racial/ethnic make-up of the two groups were not significant, $\chi^2(3, N = 37) = 1.949, p > .05$. The difference in the marital status make-up of the two groups was not significant, $\chi^2(2, N = 37) = 3.383, p > .05$. Finally, the difference in the employment status of the two groups was approaching statistical significance at the $p = .05$ level, $\chi^2(4, N = 37) = 9.177, p > .06$. The invalid group had more unemployed respondents compared to the valid group. Thus, overall, the valid responders tended to be older, more educated, and less likely to be unemployed than the invalid responders.

Table 1*Sociodemographic Characteristic of Participants*

Variable	<i>n</i>	%
Age		
18–20	15	40
21–23	7	19
24–25	15	40
Race/Ethnicity		
White	5	13.5
Black/African American	23	62
American Indian/Alaska Native	2	5
Asian/Asian American	1	2.5
Hispanic/Latino	5	13.5
Other	1	2.5
Marital status		
Single	24	65
Married	3	8
Stable partner	7	19
Cohabiting	3	8
Employment		
Employed full time	17	46
Employed part time	10	27
Self-employed	1	2.5
Unemployed	2	5

Variable	<i>n</i>	%
Disabled	3	8
Student	4	11
Education		
Less than high school	5	13.5
High school diploma or GED	9	24
Some college	5	13.5
Associate's degree	6	16
Bachelor's degree	7	19
Master's or professional degree	1	2.5
Doctorate	4	11

Scale Descriptive Analyses

Participants completed three scales: the PHQ-9 (depression), the BSMAS (social media), and the Man Box Scale (toxic masculinity). Table 2 presents both the Cronbach alphas for the three scales and the correlations among the scales. A Cronbach alpha is considered acceptable for demonstrating a scale measures a single dimension with high reliability if it meets or exceeds .70. The three scales resulted in Cronbach alphas ranging from .80 to .94. Neither of the correlations involving the PHQ-9 reached significance at $p = .05$ or better, but the Man Box Scale correlated significantly with the BSMAS ($r = .412, p = .01$). The positive correlation between these two scales indicates higher levels of toxic masculinity were associated with greater dependence on social media.

Table 2*Descriptive Statistics and Correlations for Study Variables*

Variable	alpha	<i>M</i>	<i>SD</i>	1	2
1. Depression (PHQ)	.91	7.82	1.08	—	
2. Social media (BSMAS)	.80	14.68	0.83	.27	—
3. Toxic masculinity (Man Box Scale)	.94	42.89	2.05	.15	0.41*

* $p < .01$.

Analyses of Hypotheses

A number of stepwise regression analyses were conducted to determine whether one of the independent variables explained an outcome or value of the dependent variables. Predictors included all demographic variables, time spent on social media/social networking, and toxic masculinity to see what predicted depression. In another regression, the predictors were used to determine relationships with toxic masculinity. Additionally, analyses were conducted in an attempt to triangulate the findings to determine what differences existed between different subgroups, and specifically what aspects of social media use might relate to different symptoms of depression and responses on the Man Box Scale. As noted above, this study did not have sufficient power. Thus, even if a true correlation existed, it may not have been represented with the study data.

Hypothesis 1

Hypothesis 1 predicted that social media/social network usage would be associated positively with toxic masculinity. The results of this study were statistically significant ($r = .412$, $p = .01$), indicating social media/social network use was positively correlated with toxic masculinity.

Hypothesis 2

Hypothesis 2 predicted that toxic masculinity would be positively correlated with depression. However, there was no correlation with toxic masculinity and depression as the data did not produce significance at $p = .05$ or better ($r = .152, p > .05$). There was low power and attrition, which posed a threat to the internal validity within the data, a stepwise regression analyses was used, predicting a regression to the mean of a loss of survey participants.

Hypothesis 3

Hypothesis 3 postulated that time spent on social media/social networks would be positively correlated with depression. However, there was no correlation with social media/social networks use and depression as the data did not produce significance at $p = .05$ or better ($r = .270, p > .05$). There was low power and attrition, which posed a threat to the internal validity within the data, a stepwise regression analyses was used, predicting a regression to the mean of a loss of survey participants.

Primary Hypothesis

The primary hypothesis stated social media use would moderate the relationship between toxic masculinity and depression in young adult men. To test this hypothesis, the two predictor variables were normalized by subtracting the mean score from each individual score and multiplying the two mean-normalized scores together to create an interaction effect. The results of the interaction analysis showed social media dependence had a significant direct effect on depression ($p = .028$) and toxic masculinity approached a significant direct effect on depression ($p = .083$). However, the interaction did not reach significance ($p = .081$). These results are included in Table 3.

Table 3*Linear Regression Model Output*

Variable	Coefficient	Standard error	<i>p</i>
Intercept	7.33	1.15	<.01
Social media	0.59	0.26	0.03
Toxic masculinity	-0.17	0.09	0.08
SM*TM	0.004	0.02	0.81

Exploratory Analyses

Investigating why something happens in situations where there are limited data available is known as exploratory research. This approach can lead to deeper comprehension of a subject, determine how or why a specific phenomenon is happening, and predict future occurrences. Observations and questions that can direct more analysis or study can be produced by an exploratory analysis. The analysis's objectives are to ascertain whether the dataset contains any issues, identify any evident flaws, comprehend relationships, identify significant components, locate patterns in the data, and offer fresh perspectives (Velleman & Hoaglin, 2012).

Though the primary a priori hypotheses did not yield the anticipated results, the researcher wished to examine possible relationships between the demographic variables and the primary study variables. Exploratory analyses were conducted with the demographic data using age, ethnicity, marital status, education, and employment to predict endorsement of each of the three study variables. Upon conducting these ANOVAs, the data revealed significant results with age and education; no other significant results were found. Tables 4–6 display the exploratory analyses that had significant findings.

Table 4*One-Way Analysis of Variance in Social Media Addiction by Age*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between groups	2	129.39	64.70	3.43	0.04
Within groups	34	642.08	18.88		
Total	36	771.47			

The ANOVA of social media addiction scores by age showed significant differences in social media addiction based on age group. Specifically, the youngest age group (18–20-year-olds) had a significantly higher score than the middle (21–23 years) or oldest (24–25 years) age groups.

Table 5*One-Way Analysis of Variance in Social Media Addiction by Level of Education*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between groups	2	154.98	77.50	4.27	0.02
Within groups	34	616.48	18.13		
Total	36	771.47			

The ANOVA of social media addiction scores by level of education showed significant differences in social media addiction based on level of education. For this analysis, participants were put in three groups of high school degree or less, some college and associate's degree, and bachelor's degree or higher. Participants with a bachelor's degree or higher had significantly lower scores on social media addiction relative to the other two groups.

Table 6*One-Way Analysis of Variance in Toxic Masculinity by Level of Education*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between groups	2	981.83	490.92	3.53	0.04
Within groups	34	4727.36	139.04		
Total	36	5709.19			

The ANOVA of toxic masculinity scores by level of education showed significant differences in toxic masculinity based on level of education. For this analysis, participants were put in three groups of high school degree or less, some college and associate's degree, and bachelor's degree or higher. Participants with a high school degree or less had significantly higher scores on toxic masculinity relative to the other two groups.

Discussion

Discussion of Findings

The purpose of this study was to understand and explore the correlations between social media, toxic masculinity, and associations with depression in young adult males ages 18–25 years old. This study was designed to examine the relationship between toxic masculinity and depression in young adult males, aged 18 to 25 years, as moderated by the use of social media and social networks.

The existing literature contains explorations of the relationship between adult depression and toxic masculinity. However, there is a gap due to the insufficient integration of these factors, which the current study was designed to address by examining how they interact and influence each other. In particular, a prior study closed the knowledge gap on men's psychology and masculinity by looking at the connection between male depression, social media/social network usage, and both positive and negative interactions, as well as toxic masculinity (Parent et al., 2019). Consistent with the literature (Burn & Ward, 2005; Coughlin & Wade, 2012; Jakupcak et al., 2002; Rochlen et al., 2008), the current study showed a positive association between toxic masculinity and social media usage. This is unsurprising as the literature shows strong support for such an association (Parent et al., 2019). Unfortunately, there were no correlations involving depression that reached significance at $p = .05$. However, the data did provide support for Hypothesis 1, which predicted that social media/social network usage would be directly associated positively with toxic masculinity. The finding show young men who adhere to toxic masculinity may spend more time on social media/social networks. Toxic masculinity may be associated with an increased propensity to seek out and read content with which one disagrees, ruminate about disagreements or arguments on social media/social network sites, or make hostile

responses to such disagreements (Kupers, 2005; Parent & Moradi, 2011). Adopting positions of antifeminism and homophobia, combined with a hyperfocus on a need to dominate or win interactions, can lead individuals to engage more frequently with social media/social network content which with they disagree, leading to negative social media/social network interactions (Herring et al., 2002; Shaw, 2014).

However, analyses for the other three hypotheses did not show significant results. The data did not support the notion that toxic masculinity and depression are correlated, nor did the data show a positive correlation between depression and social media use. The data revealed the overall hypothesis of social media use moderating the relationship between toxic masculinity and depression in young adult males did not reach significance, indicating no association.

The data revealed a significant correlation among one of the variables, which is consistent with prior research with adults indicating social media/social network use is associated with toxic masculinity. Men who more strongly endorsed the dominance-heterosexism-misogyny triad of aspects of conformity to masculine norms on the Man Box Scale were more likely to report unhealthy social media use. This finding is consistent with past research and theoretical work on toxic masculinity that showed adherence to traditional masculinity is associated with maladaptive communication and interaction styles (Burn & Ward, 2005; Coughlin & Wade, 2012; Jakupcak et al., 2002; Rochlen et al., 2008). The relationship between toxic masculinity and affect-based attention is one of the most notable aspects. In essence, this finding indicates men who adhere to toxic masculinity may engage in reliably more negative social media/social network behaviors. Toxic masculinity is characterized by a need to dominate, antifemininity, and homophobia (Kupers, 2005; Lorde, 1984; Parent & Moradi, 2011).

Prior research with adults indicated time spent on social media/social networks was associated positively with positive and negative online behaviors (Tandoc et al., 2015). More frequent social media/social network use was associated directly with depression in the current study. In prior research, toxic masculinity was found to be directly associated with negative online behaviors, supporting the idea that men who more strongly endorsed the dominance-heterosexism-misogyny triad of aspects of conformity to masculine norms were more likely to report negative online interactions (Connor et al., 2021). Again, this finding is consistent with past research and theoretical work on toxic masculinity that showed adherence to traditional masculinity is associated with maladaptive communication and interaction styles (Burn & Ward, 2005; Coughlin & Wade, 2012; Jakupcak et al., 2002; Rochlen et al., 2008).

Though the analyses yielded significant results only for one hypothesis, an exploratory analysis showed regressions that predicted toxic masculinity based upon factors such as age, education, and employment. An exploratory analysis was conducted as an approach to identify patterns within the data inclusive of outliers and features of the data that might not be expected. A series of ANOVAs was performed, revealing regressions with social media addiction by age and education and toxic masculinity by level of education. Results of a one-way ANOVA revealed a significant effect of social media addiction based on age group, indicating the 18–20-year-old group scored significantly higher on the BSMAS compared to the middle age group (21–23 years) and older age group (24–25 years). Given the potential effects of social media and social network exposure on certain outcomes, it appears younger age groups may be more vulnerable to social media addiction.

The ANOVA of social media addiction showed a significant effect by level of education within three groups (high school diploma or less, some college and associate's degree, bachelor's

degree or higher). Participants with higher education levels, particularly those with graduate degrees, had significantly lower scores on social media addiction compared to individuals with lower education levels. This indicates higher education may be associated with more moderate social media usage habits.

Last, the ANOVA regarding toxic masculinity revealed a significant effect of toxic masculinity based upon level of education. Study participants were placed in three groups (high school diploma or less, some college and associate's degree, bachelor's degree or higher). The data revealed participants with a high school diploma or less had significantly higher scores on toxic masculinity relative to the other two groups. This indicates higher education may contribute to more critical perspectives on traditional gender norms and the behaviors associated with toxic masculinity.

Possible Explanations for the Findings

The failure to find support for three of the four hypotheses was surprising; however, there are several possible explanations for these results. First, it is possible that the hypotheses were correct, but due to the small sample size and thus low power in the study, the researcher could not detect a significant effect. Due to insufficient power, the data factored out differently, revealing only one correlation within the three hypotheses. Because of a lack of power within the analysis, the current study did not yield significant results; it is possible that with more participants, the results may support the hypotheses.

Second, the results may be explained by the lack of variability within the sample. The majority of the participants in this study endorsed one cultural ethnicity although the study was open to all cultural and ethnic backgrounds. It is possible that the similarities among the

participants led to a restricted range in the data and, thus, a failure to find significant correlations. If the study was repeated with a more diverse sample, perhaps the outcome would be different.

A third possibility relates to measurement error or problems with the operationalization of the variables. The measures used in this study showed strong reliability data, but they may not be valid measures of the variables in question. Out of the three measures, two—the Man Box Scale and the BSMAS—were chosen because they were shorter and it was expected that having fewer test items would reduce attrition. For instance, the BSMAS is a 6-item measurement designed to expose the difficulties an individual faces due to social media's excessive usage and assess the severity accordingly (Andreassen et. al., 2012). The Man Box Scale, a 17-item measure, evaluates harmful masculinities such as hypersexuality, aggressiveness and control, inflexible masculine gender roles, heterosexuality, and homophobia (A. L. Hill et al., 2020). Comparatively speaking, the Man Box Scale is shorter than many other masculinity scales, particularly the Conformity to Masculine Norms Inventory-46. However, by focusing on the measure length rather than the construct validity as the primary reason for selecting the measures, it is possible that the measures were not the best assessment of the constructs. Despite the fact that both scales are minimal in terms of number of questions—particularly the BSMAS—many participants failed the validity question, which was an extra question added to the scale. This indicates respondents were not attending to the questions and may have responded randomly, thus compromising the validity of the data.

Finally, a fourth explanation is that the data are accurate—that there is no association between the variables being studied. This implies the absence of any correlations between the variables is a true reflection, which is another interpretation of the data that may be made. Varied measurement approaches, including direct observation, semi-structured and unstructured

interviews, daily diaries or journals, experience sampling techniques, and behavioral logs or records could have been used within this quantitative measurement to yield different results.

All of the participants within this study belonged to a generation called “Generation Zoomers” or simply Gen Z, meaning their lives were affected much differently than prior generations. Members of this generation were born in the mid-to-late 1990s and early 2010s. This generation of individuals has grown up in an emerging technological world whereas, to no fault of their own, they learned and relied on technology as a way of life. They read books less often than their predecessors and spend more time in front of a screen (Sliwa, 2018). They tend to become familiar with the internet and portable digital devices at a young age (Twenge et al., 2018). Individuals within this age group are not prone to going to the library or know what an encyclopedia is because of technology and their experience with the digital era.

Gen Z is used to searching for information online (Francis & Hoefel, 2018); hence, digital media and social network platforms are regarded as channels of social influence in the digital era that affect individuals’ attitude formation. Previous studies have shown information sources have different meanings for information receivers, which results in them forming different attitudes toward a subject (Chang & Chuang, 2019; Russo & Simeone, 2017). Thus, one possible way of understanding the findings from this study is that these social media natives, perhaps because social media use is a regular part of their daily lives, are less affected than are other generations. Perhaps conducting this same study with an older population might result in the correlations the researcher anticipated to find that were not present in this study.

In a prior study, the empirical findings supported the hypothesis that digital media influence has a greater effect on determining the attitudes of Gen Z than on the previous generation (Jordan, 2021; Tyson et al., 2021). The result aligns with the impression of Gen Z that

their addiction to digital devices causes them to more easily be influenced by digital media (Jordan, 2021; Tyson et al., 2021). The vast number of social media outlets has made information more accessible for more individuals but is very concerning due to miscommunication of the information creating a different narrative. Many people now obtain their news through social media, which is well known to be troubled with misinformation and misrepresentation (Di Domenico et al., 2021).

The struggle for gender equality, negotiation of masculinities, and the role of intersectionality in these debates further compound the complexity of these wars (Gill & Donaghue, 2013). Digital and social media have amplified these conflicts, providing platforms for a multitude of voices and perspectives, sometimes leading to polarization (Kolehmainen, 2012). Social media portrayals of masculine norms reveal how masculinity has evolved through changes in characteristics and personality traits.

These actions reflect not only a desire for dominance but also an insecurity and entitlement characteristic of toxic masculine norms. This is emblematic of the behavior observed in certain incel or misogynistic subcultures, where unreciprocated affection leads to aggressive and entitled attitudes toward women (Lindner, 2023). A previous study on masculinity and media indicated “it has been demonstrated that nefarious applications of synthetic media have notable cultural antecedents, including toxic masculinity” (Kalpokas et al., 2024, p. 17).

Clinical Implications

Overall, this study adds to the literature and helps pave the way for more in-depth investigation into the attitudes and actions that shape online interactions and lead to the harmful use of social media and other networks. The purpose of this study was to look into the relationships between toxic masculinity, social media, and depression in young adult males.

Future research would greatly benefit from examining the impact of social media on a more diverse audience that includes both genders and by using a larger sample size. There are references to potential future study areas throughout the limitations section.

This study provides additional support to the theory that there is a relationship between depression and social media/social networks, indicating depression rises with an individual's dependency on social media. Additional information was obtained by a univariate analysis that supported age and education level as being associated with social media addiction, and education level also being associated with toxic masculinity. These initial findings support the need for additional research to better understand the correlations.

An individual's emotional state can be affected by their associations with social media/social networks and unfavorable images and portrayals of masculinity, as covered in the literature review (M. S. Robinson & Alloy, 2003). Social media and connections through social networks influence the others' well-being and emotional stability, including aspects such as depression, both directly and indirectly (Matthes et al., 2020), despite the fact that numerous individuals believe they have control regarding their interactions on these platforms. Therefore, though one might make an effort to steer clear of unfavorable online representations and images of individuals, modern technology employs algorithms based on what a user observes, flooding their social media and networks with content that some find entertaining but ultimately shames people.

Positive male mentoring programs and groups can be implemented through numerous community centers, vocational programs, colleges, and universities to aid young adult males in becoming more insightful and aware of the indirect effects of social media and websites, such as Facebook, on their emotional stability. Furthermore, the development of protocols and scheduled

time dedicated to social media and connection with others might lessen the detrimental effects of online behaviors that cause depression in this age group.

In an effort to remain proactive toward minimizing the impact of mental illness with this population, leaders of vocational and collegiate programs should work in a progressive manner to offer and implement social support groups and mentoring clubs along with updated information in the campus counseling and student support centers that is tailored to a multicultural and diverse student body. Such programs can address topics related to healthy social media use, combating social media addiction, recognizing the symptoms of depression and knowing when to seek help, and understanding toxic masculinity. Young adult males between the ages of 18 and 25 years may experience improvements in their behavior and emotional health as a result of the implementation of such support programs.

There are online public health resources available to combat the growing popularity of social media activity through positive and beneficial interactions. Public health interventions aim to raise the level of online discourse and discourage negative rumination over material viewed online, using models of successful online public health or awareness interventions (Guo & Saxton, 2014; Obar et al., 2012). By means of informational and instructional campaigns, school programs, parental involvement, and seminars and training, harmful habits can be addressed and constructive digital citizenship can be promoted. Programs for media literacy can be used to educate people on how to analyze messages that uphold stereotypical masculinity. Digital literacy skills empower users to successfully and ethically explore social media, recognize hazardous content, and respond accordingly. Developing communication and collaboration skills with Generation Z is crucial as they represent potential clients and the next generation of workers. By using such approaches, developers of public awareness campaigns can help foster

an online community that is more accepting and respectful, that allows people to express themselves without reinforcing the negative stereotypes associated with toxic masculinity.

Limitations

The results of this study must be interpreted in the light of the study's limitations. First, the data were cross-sectional and thus causality could not be inferred. There were likely reciprocal relationships present among the variables. For instance, externalizing depression may be linked to a greater propensity to seek out and respond to aggravating material on social media/social network sites. Experimental research could be conducted to further explore causality among the variables in the study.

Second, data were collected online from Qualtrics, and sampling from Qualtrics does have limitations. Although extant research on Qualtrics suggests that with protocols such as those used within the study (e.g., restricting participation to people from other countries, including more validity check items) data integrity can be improved (Rouse, 2015), there is still a risk that participants are paying minimal attention to items as they complete a study or are engaged in other behaviors (e.g., watching TV) while completing a study. With the high rate of respondents failing the validity check, the online administration seems to have been a limitation in this study. The present study would have been augmented by, and speaks to the need for, modern measures of social interaction that address internet and social media/social network behaviors.

Third, the researcher relied upon subscales of the Man Box Scale to assess toxic masculinity; the present study supports the need to develop a dedicated measure of toxic masculinity. Last, the assessment of depression in social media/social networks use also supports the need for a dedicated measure that more clearly delineates the use of social media/social

networks. Reacting angrily to something found on the internet, for instance, could have different causes and effects than considering a response in detail for several hours. An extension of the current research to such methodologies could be informative. For example, researchers can assess whether individuals who endorse toxic masculinity also attend visually to stimuli that is perceived as a threat (e.g., to a fake social media/social network post with which they disagree, compared with one with which they agree).

Due to low statistical power, the decreased sample population reduced the reliability of the study, hindering the ability to detect meaningful effects and draw accurate conclusions even if a true difference existed in the sample population. This may have led to Type II errors where the researcher erroneously concluded that there was no association between the variables, when in reality there may have been a meaningful relationship that was not detected. Low statistical power can significantly affect the validity and generalizability of the study findings. Controlling for potential confounding variables, such as socio-demographic factors, can help reduce error variance and increase statistical power sensitivity.

An additional limitation was the significant attrition rate, which led to a smaller survey sample size; this percentage is not always indicative of a negative outcome. Attrition can be divided into two categories: dropout attrition, which occurs when participants begin a survey but do not finish it, and nonresponse attrition, which occurs when individuals initially choose to participate but later decide not to. Based on the available data, it is probable that dropout attrition occurred within the sample. The survey may have been too lengthy, taking longer than 5 minutes, as indicated by the early departure of these respondents.

Given that only 37 survey respondents finished the entire survey, there may have been a difference in the results if the number of respondents had increased. Data showed a large number

of participants withdrew from the survey early, perhaps as an indication of its length, types of questions, its emotional content, personal nature, or other factors. Attrition could have led to biases in the sample because individuals who withdrew from the survey may have had particular attributes that were pertinent to this research; hence, the remaining sample may have been less representative of the population. Though there was validity and significance in the data, this resulted in a decrease in the study's power, compromising the external and internal validity of the regression. Providing incentives along with offering recognition and rewards can assist with retaining survey participants and reducing attrition.

Future Directions

There is a lack of research on men's online interactions and the links between those habits and mental and physical health. Further research could look into differences across social media/social network sites, such as the relationship between toxic masculinity and interactions on anonymous versus non-anonymous internet sites, or the relationship between toxic masculinity and different types of unfavorable interactions (Parent et al., 2019). Taking preventive efforts to address the above concerns, such as identifying or establishing more measures to address time spent online and anonymous/non-anonymous measurements, can help alleviate the lack of control over online activities. The findings supported the argument put forth by Sanders et al. (2000) that

an evaluation of the amount of time on social media/social networks may indicate the need for a specialized metric that more clearly defines social media/social network usage. Reactive and aggressive responses to online material, for example, may have distinct causes and outcomes. (p. 241)

Researchers play a critical role in gaining a better understanding of the full impact of social media on mental health and well-being and informing best practices and effective interventions. Taking initiative with rigorous evaluations of social media's impact on mental health, developing and establishing standardized definitions and measures, and evaluating the best practices for healthy social media use in collaboration with healthcare providers is a great start (Office of the Surgeon General, 2021).

The current study supports the need for future studies on men's online interactions and their impact on their physical and mental well-being. Future research should explore variations in social media platforms and the connection between toxic masculinity and unfavorable encounters, as attitudes and behaviors can influence others. For instance, are people more prone to react negatively to, rather than ignore, those who deliberately try to agitate other people (trolls)? Are people more inclined to participate in contentious and fierce exchanges when they disagree with someone online? Further research is required to understand and prevent such behavior, which is a concern that has been widely observed in academic, professional, and, notably, social settings (Cruz et al., 2018). With so many people falling victim to this practice, it has raised even more concerns. In many ways, trolling is similar to cyberbullying and cyberstalking in that technology is used to cause harm and distress (Howard et al., 2019). Trolls tend to be deceptive, taking on false identities while targeting their victims (Hardaker, 2015). Further research on men's online behaviors can be useful for research, clinical work, and advocacy with men because social media and social networks are ubiquitous in everyday interactions and because their anonymity fosters the display of toxic masculinity.

Conclusion

The main objective of this study was to investigate the associations between social media/network use, toxic masculinity, and depression in a sample of young adult males, age 18 to 25 years. Data analyses supported the hypothesis that time spent on social media/social networks would be positively associated with depression. Scientific evidence supports the idea that harmful content exposure as well as excessive and problematic social media use are primary areas for concern (Office of the Surgeon General, 2021).

Hypothesis 1 predicted that social media/social network usage would be associated positively with toxic masculinity; this hypothesis was supported. However, Hypothesis 2, which predicted that toxic masculinity would be positively correlated with depression, and Hypothesis 3, which predicted that time spent on social media/social networks would be positively correlated with depression, were not supported. There were no correlations with toxic masculinity and depression as well as no associations with social media network use and depression as the data did not produce significant results. Additionally, using the survey respondents' demographic information, an exploratory analysis was conducted, and results showed age and level of education were predictors of social media addiction and level of education was a predictor of toxic masculinity. According to the survey's findings, younger respondents had greater endorsements for social media addiction than did older respondents. Furthermore, a univariate analysis using the demographic data showed a regression in which the predictor of toxic masculinity was level of education. According to the findings, those with lower levels of education were more inclined than those with higher levels of education to support toxic masculinity beliefs and actions.

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Appendix A: Demographic Questionnaire

Gender

- Male
- Female
- Transgender Male
- Transgender Female
- Non-conforming Gender

Age

- Under 18
- 18-20
- 21-23
- 24-25
- Over 25

Ethnic Identity

- African American
- Asian/Pacific Islander
- AMENA (African, Middle Eastern, and North African)
- Caucasian/White
- Hispanic or Latino
- Native American or American Indian
- Other

Marital Status

- Single
- Married
- Stable partner but not living together
- Cohabiting/living together
- Separated/Divorced/Widowed
- No Answer

Employment

- Part-time employed
- Full-time employed
- Self-employed
- Unemployed
- Student
- Other

Education

- Higher Education Diploma and University Degree
- Bachelor's Degree
- Associate's Degree
- High School Diploma
- GED
- No Answer

Appendix B: Bergen Social Media Addiction Scale

Here are six statements to consider. For each, answer: (1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.

1. You spend a lot of time thinking about social media or planning how to use it.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.
2. You feel an urge to use social media more and more.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.
3. You use social media in order to forget about personal problems.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.
4. You should answer sometimes for this question.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.
5. You have tried to cut down on the use of social media without success.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.
6. You become restless or troubled if you are prohibited from using social media.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.
7. You use social media so much that it has had a negative impact on your job/studies.
(1) very rarely, (2) rarely, (3) sometimes, (4) often, or (5) very often.

Appendix C: Patient Health Questionnaire-9 (PHQ-9)

➤ <https://www.apa.org/depression-guideline/patient-health-questionnaire.pdf>

**Over the last two weeks, how often have you been bothered by any of the following problems?
(Use “X” to indicate your answer)**

1. Little interest or pleasure in doing things.

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all</i>	<i>Several days</i>	<i>More than half the days</i>	<i>Nearly every day</i>

2. Feeling down, depressed, or hopeless.

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all</i>	<i>Several days</i>	<i>More than half the days</i>	<i>Nearly every day</i>

3. Trouble falling or staying asleep or sleeping too much.

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all</i>	<i>Several days</i>	<i>More than half the days</i>	<i>Nearly every day</i>

4. Feeling tired or having little energy.

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all</i>	<i>Several days</i>	<i>More than half the days</i>	<i>Nearly every day</i>

5. Poor appetite or overeating.

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>Not at all</i>	<i>Several days</i>	<i>More than half the days</i>	<i>Nearly every day</i>

6. **Feeling bad about yourself---or that you are a failure or have let yourself or your own family down.**

0 *1* *2* *3*

Not at all *Several days* *More than half* *Nearly every day*
the days

7. **Trouble concentrating on things, such as reading the newspaper or watching television.**

0 *1* *2* *3*

Not at all *Several days* *More than half* *Nearly every day*
the days

8. **Moving or speaking so slowly that other people could have noticed? Or the opposite---being so fidgety or restless that you have been moving around a lot more than usual.**

0 *1* *2* *3*

Not at all *Several days* *More than half* *Nearly every day*
the days

9. **Thoughts that you would be better off dead or of hurting yourself in some way.**

0 *1* *2* *3*

Not at all *Several days* *More than half* *Nearly every day*
the days

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult Very Difficult Extremely Difficult

Appendix D: Man Box Scale

Participants mark your agreement with each item (4-point Likert-type scale: 1-strongly agree, the most gender-equitable; 2-agree; 3-disagree; 4-strongly disagree, the least gender-equitable)

- 1. In my opinion, a man who talks a lot about his worries, fears, and problems shouldn't really get respect.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

- 2. In my opinion, it is good for a boy to be taught how to cook, sew, clean the house and take care of younger children.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

- 3. In my opinion, a gay guy is not a "real man".**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

- 4. In my opinion, a real man should have as many sexual partners as he can.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

- 5. In my opinion, a guy who doesn't fight back when others push him around is weak.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

- 6. In my opinion, a man shouldn't have to do household chores.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

7. In my opinion, guys should act strong even if they feel scared or nervous inside.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

8. In my opinion, it is very hard for a man to be successful if he doesn't look good.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

9. In my opinion, a real man would never say no sex.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

10. In my opinion, men should really be the ones to bring money home to provide for their families, not women.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

11. In my opinion, men should use violence to get respect if necessary.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

12. In my opinion, straight guys being friends with gay guys is totally fine and normal.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

13. In my opinion, women don't go for guys who fuss too much about their clothes, hair, and skin.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

14. In my opinion, men should figure out their personal problems on their own without asking others for help.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

15. In my opinion, a man should always have the final say about decisions in his relationship or marriage.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

16. In my opinion, a guy who spends a lot of time on his looks isn't very manly.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

17. In my opinion, if a guy has a girlfriend or a wife, he deserves to know where she is all the time.

1 *2* *3* *4*

Strongly Agree *Agree* *Disagree* *Strongly Disagree*

Appendix E: Recruitment Flyer

CALL FOR RESEARCH PARTICIPANTS

Healthy Research Saves Lives

A brief online survey looking at social media use, masculinity and depression in young men.

Qualifications:

- Living in the United States of America
- At least 18 years old and no older than 25 years of age
- Self-identified male
- Ability to read English sufficiently to respond to the questions
- Access to the internet to complete an online survey

What: Complete a brief (7-10 minute) online survey to support research

Appendix F: Email Invitation for Snowball Sampling

Invitation to Participate: Research Study on Social Media, Toxic Masculinity, and Depression
Qualtrics.com

Hello,

My name is Anthony Warren and I am a student in the Doctor of Psychology program at The Illinois School of Professional Psychology at National Louis University in Chicago, Illinois. I am currently in the process of conducting research for my doctoral dissertation and am recruiting research participants. My research will focus on influential correlations between social media, toxic masculinity, and depression. Unfortunately, if you personally know me, you are not eligible to participate. Please feel free to share this post on your timeline or with anyone who may be interested.

I am seeking participants who are:

- living in the USA
- between the ages of 18 -25 years of age
- self-identified males
- able to read English sufficiently to respond to the questions

Participation in this study will involve completing 4 very brief online surveys about your experiences related to social media, toxic masculinity, and depression. The online surveys will take between 7 and 11 minutes. There is no compensation for your participation and no penalty if you choose not to participate. Interested participants may fill out a brief screening questionnaire online ([Qualtrics.com](https://www.qualtrics.com)).

If you have any questions about this study, please contact me at awarren5@my.nl.edu.

Thank you for your time and consideration.

[Qualtrics Link to Demographic Screening Questionnaire](#)

Appendix G: Consent Form

Informed Consent

This study is being conducted by **Anthony Warren** who is a student at the Illinois School of Professional Psychology at National Louis University working on a Clinical Research Project (CRP). This study is a requirement to fulfill the researcher's degree and will not be used for decision-making by any organization.

I am asking you to participate in this study, "**Social Media, Toxic Masculinity, and Depression in young adult males** occurring from **7/15/2022 to 11/15/2022**. The purpose of this study is to understand and explore the correlations between social media, toxic masculinity, and associations with depression in young adult males ages 18-25 years old. This form outlines the purpose of the study and provides a description of your involvement and rights as a participant.

By clicking "I consent" below, I am providing consent to participate in a research project conducted by **Anthony Warren**, doctoral student, at National Louis University, Chicago.

STUDY PURPOSE

- The purpose of this study is to investigate correlations between social media, toxic masculinity, and depression in young adult males ages 18-25 years of age.

PARTICIPATION IN STUDY

- I understand that my participation in the study will include the following:
 - I will be recruited through social media networking and will be surveyed through four online instruments i.e.
 - Demographics Questionnaire
 - A depression scale
 - A masculinity scale
 - A social media usage scale
- This study will take approximately 7-10 minutes complete.

STUDY RISKS AND BENEFITS

- The risks associated with this study are minimal, no more than would be expected during normal day-to-day events and interactions
- I have been provided a list of support referrals at the end of this document which can provide me with or connect me with resources to help me address symptoms of depression or other mental health issues, if I wish to do so.

- There are no direct benefits to my participation in this study; however, my participation may help increase understanding about social media use, masculinity and depression.

CONFIDENTIALITY AND PRIVACY

- The information I provide will be anonymous and all data will be treated confidentially. This means that nobody will know my identity, and only Anthony Warren (the student researcher) and his research supervisor Dr. Leah Horvath, will have access to the data that I provide.
- Paper and electronic records used in this study will be stored securely:
 - No personally identifying information will be collected.
 - Research data will only be stored in a single password-protected Excel file.
- The records of this study will be kept private. All data that may be shared will be shared in aggregate form.
- The results of this study may be published or otherwise reported at conferences, and employed to inform understanding of depression, but data will be reported in aggregate form and bear no identifiers that could connect data to individual participant responses).
- Data from this study will be destroyed three years following the completion of the study; all computer files containing data will be deleted from all storage media .

CONTACT INFORMATION

- I have the right to get a summary of the results of this study if I would like to have them. I can get the summary by emailing Student at [REDACTED].
- In the event that I have questions or require additional information, I can contact the researcher, Student at: [REDACTED].
- I understand that this research study has been reviewed and approved by the Institutional Research Review Board at National Louis University. I understand if I have any concerns or questions before or during participation that have not been addressed by the researcher, I may contact Dr. Horvath, CRP Chair at: lhorvath1@nl.edu, 18 South Michigan Ave., Chicago, IL, (312) 261-3115, or the co-chairs of NLU's Institutional Research Review Board: Dr. Shaunti Knauth, Shaunti.Knauth@nl.edu, (312) 261-3526, or Dr. Christopher Rector, crector@nl.edu, (312) 261-3112. Co-chairs are located at National Louis University, 122 South Michigan Avenue, Chicago, IL.

VOLUNTARY PARTICIPATION

- I understand that my participation is voluntary. If I do not participate, it will not harm my relationship with Anthony Warren or National Louis University. If I decide to participate, I can refuse to answer any of the questions that may make me uncomfortable. I can quit at any time without my relations with Anthony Warren or National Louis University being affected.

- I have read and understand the explanation provided to me. I voluntarily agree to participate in this study. I am encouraged to download a copy of this consent form for future reference.

CONSENT

- I understand that by continuing with the survey, I am agreeing to participate in the study of social media, toxic masculinity, and depression in young adult males. My participation will consist of the activities below, and described in more detail above,:
 - Initial completion of online demographic questionnaire
 - Completion of a depression scale
 - Completion of a masculinity scale
 - Completion of a social media scale
- I understand that my total time commitment will be approximately 7 -10 minutes

Please choose your response:

“I consent”

“I do not consent”

Information to identify and contact investigator:

Anthony Warren

████████████████████
██████████████████
██████
██████████████████

Support Referrals are listed on the following page.

Support Referrals

In an Emergency

If you or a loved one is in immediate danger **calling 911 and talking with police may be necessary**. It is important to notify the operator that it is a psychiatric emergency and ask for an officer trained in crisis intervention or trained to assist people experiencing a psychiatric emergency.

National Suicide Prevention Lifeline

1-800-273-8255 [24 hours, 7 days a week]

The Lifeline provides 24/7, free, and confidential support for people in distress, prevention and crisis resources for you

National Alliance on Mental Illness (NAMI)

<https://www.nami.org/>
info@nami.org

NAMI Crisis Text Line

Text NAMI to 741741 [24 hours, 7 days a week]

Connect with a trained crisis counselor to receive free, 24/7 crisis support via text message.

NAMI HelpLine

1-800-950-NAMI (6264) [M-F 10am – 6pm ET]

The NAMI HelpLine can be reached **Monday through Friday, 10 am–6 pm, ET**. The NAMI HelpLine is a free service that provides information, referrals and support to people living with a mental health condition, family members and caregivers, mental health providers, and the public.

Appendix H: Debriefing Form

Illinois School of Professional Psychology
at
National Louis University

Debriefing Form

Thank you for participating in our study. This study was investigating the relationship between social media use, toxic masculinity and depression in young adult men. Through this work, we hope to benefit from an increased understanding of the correlations between social media, toxic masculinity, and depression in young adult males ages 18 to 25 years of age.

If you are experiencing discomfort from the participation in this study, please make use of the following resources for support:

- If you are a student, your University counseling center
- The National Alliance on Mental Illness at 1-800-950-NAMI (6264)
 - Mental Health America at 1-800-273-TALK (8255)
- SAMHSA (Substance Abuse and Mental Health Services Administration) at 1-800-662-HELP(4357) 24/7, 365 days-a-year
 - 911 or immediate emergency services.

If you have questions about this study, please contact Anthony Warren at awarren5@my.nl.edu. If you have other questions or concerns about the research in which you just participated, contact the Illinois School of Professional Psychology, Psychology Department Chair Dr. Horvath at lhovath1@nlu.

Appendix I: CITI Training Certificate

This is to certify that:

Anthony Warren

Has completed the following CITI Program course:

Human Research

(Curriculum Group)

Group 1: Students

(Course Learner Group)

1 - Basic Course

(Stage)

Under requirements set by:

National Louis University

Completion Date Expiration Date Record ID

12-Apr-2021 12-Apr-2023 42072200



This is to certify that:

Anthony Warren

Has completed the following CITI Program course:

Human Research

(Curriculum Group)

Group 1: Students

(Course Learner Group)

2 - Refresher Course

(Stage)

Under requirements set by:

National Louis University

Completion Date 24-Oct-2023 Expiration Date 24-Oct-2025



Record ID

53585971

Verify at www.citiprogram.org/verify/?w63e94483-09e2-40c3-bf94-bbb9a04a5a31-53585971