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Behind The Screens: A Social And Emotional Learning Approach To Social Media

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BEHIND THE SCREENS: A SOCIAL AND EMOTIONAL LEARNING APPROACH
TO SOCIAL MEDIA

by

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A capstone project submitted in partial fulfillment of the requirements for the degree of
Masters of Arts in Literacy Education.

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DEDICATION

To my family for their continuous love and support through this educational journey. They are my biggest support system and have always been there for me through life's ups and downs.

To my students who never cease to surprise and inspire me every day. Their experiences as students in our modern and digital world is what inspired me to research this topic further.

To Madeleine Israelson, an Assistant Professor of Education at the College of Saint Benedict, who has served as my mentor and role model throughout the years. Her passion for children's literature sparked my own interest in the subject area.

To my lovely dogs Indy and Benny, for keeping me sane during this challenging year.

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CHAPTER ONE

Introduction

When people hear the words middle school, they often cannot help but cringe. Memories of mean girls, tasteless jokes, and adolescent awkwardness come crashing through the floodgates. It comes as no surprise that middle school is often branded as a time of chaos, insecurity, pain, and significant change. As a teacher in a middle-level setting, the question I field the most often is “Why teach middle school? That was the worst time of my life. I would *never* want to go back.” While I cannot help but shudder while recounting my own experiences at this age, I was drawn to this setting with the hope of reframing middle school in a more positive light. My mission in this profession has always been to create an environment where adolescent students feel valued, cared for, and cherished. I have also strived to create an environment where students feel self-efficacious and capable of successful learning. However, there is always one barrier that seems to interfere with students’ socioemotional and academic functioning, and that barrier is known as social media. This paper will further explore the question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?*

Context

Every morning before the bell rings for first period, students have the desirable luxury to stroll the halls and socialize with each other. While busses pull into the parking lot, students eagerly shuffle into the building and stuff their belongings into their lockers. With twenty minutes left to spare before class starts, most spend it seeking out their friends and chatting about the latest and greatest happenings of the day. This is one of my

favorite moments of the day because it is one of the rare and few glimpses I get of my students outside my classroom walls. It is fun and entertaining for me to simply watch my middle schoolers act like their goofy selves. Students bounce from classroom to classroom to greet their teachers. Some students approach me eager to share their take on the Vikings Game, while others joke about how fun hockey practice was the night before. I see students grouped in a circle doing silly dances and high-fiving others as they pass. Needless to say, there is always a buzz of excitement in the air before the bell rings for first period.

However, since I began my career, I have noticed that a new presence has crept its way into this buzzing hallway scene. A presence that has slowly stifled some of that early morning excitement. A presence that has latched onto my adolescent students' growing minds and sunk its claws in deep. A presence that has become more prominent in our increasingly digital world.

Now, when I see students stroll down the hallways in the moments before class, I cannot help but notice a glowing screen locked between their fingers. Some students walk to class with their eyes glued to their screens, never once looking up to see what is ahead of them. They appear quite zombie-like, as they nearly collide with others passing by. I hear murmurs regarding gossip and social media posts. "Did you see what she posted on Instagram last night? I cannot believe she did that!" I overhear a student scoff. "I only got 50 likes on my photo last night, ughhh how *embarrassing*," I hear a student whisper. "Why were they all hanging out last night? They kept posting together. I clearly did not get the invite," I hear a third say glumly.

Rationale

Researchers and educators alike have observed that an increasing amount of students in middle level settings are gaining access to technology that connects them to the internet. A survey conducted by Common Sense Media revealed that 81 % of teenagers (defined as ages 13-17) use social media apps. Amongst this population, 89 % report having access to a smartphone device and 38 % say they use social media multiple times within an hour (Rideout & Robb, 2018). This striking data exemplifies the high frequency of social media usage and access to technology.

Social media, while seemingly harmless in nature, has proven to be exceedingly detrimental to adolescent children (Dunckley, 2014; Horvath et al., 2020; Miller, n.d.; Robb, 2019; Abel, 2016). The students that fill our classrooms today are among the first to grow up in a society dominated by technology. For all of our current students' lives, being surrounded by screens has become a new normal, whether one is dining out at a restaurant, shopping at a mall, or sitting in math class. The significant amount of screen exposure combined with the addictive nature of social media has been proven to have lasting negative impacts (Dunckley, 2014; Horvath et al., 2020; Miller, n.d.; Robb, 2019; Abel, 2016).

In addition to strong online usage, the adolescents of today's generation are in the process of undergoing a variety of changes, specifically finding their peer group. This has grown increasingly complicated within the context of an internet-driven era. Maslow's Hierarchy of Needs demonstrates that the desire to belong to a peer group and feel accepted by others is a necessity (Mathes, 1981). Without it, one will not be able to fulfill their potential. While on the quest for identity and belongingness, adolescent students

will do whatever it takes to fit in—which nowadays translates to creating an online social media profile. As technology becomes more ubiquitous in our educational institutions, it is pivotal that those working in the field of education have an understanding of how deeply social media impacts students both socially, mentally, and cognitively. The question this capstone project will examine is: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?*

Background

From the start of my career in education, the middle school setting had always appealed to me. It was my most desired grade level to teach. One element of middle school that makes it so unique is that students are experiencing so many changes at once: physical changes, emotional changes, social changes, etc. For many students, middle school is the time where they take the first steps in making their own decisions. Rather than automatically behaving or acting in a way that their parents would deem acceptable, students are slowly beginning to venture out on their own. It is for this reason that peers become increasingly influential at this stage of development.

Adolescents are beginning to search for their identity, discover their values, and determine who they want to surround themselves with. The essential question of this age group is: *Who am I? Where do I fit in?* This may lead to some chaotic days in the classroom, but nevertheless, it is so rewarding to watch these students evolve over time. The thought of helping students navigate these ups and downs had always seemed exciting and meaningful to me. As soon as a middle school position was offered to me, I pounced on it. To this day, I always make the joke that I have yet to experience a boring

day at work. Simply put, middle school students keep me on my toes. I learn something new about myself as a teacher every day.

Personal Interest

For my first year of teaching, I accepted a position as a sixth grade Language Arts teacher. I entered the profession with a radiance and excitement to apply all of my findings from university to a classroom of my own. Upon the first few days of school, I was struck with the realization that teaching this group of sixth graders was going to be anything but easy. It was evident that my students were navigating a middle school setting that was completely different from anything I had ever known.

I quickly discovered that my students were consumed with all things related to social media, specifically Instagram and TikTok. At the time, my school had not yet implemented a cell phone policy. This resulted in students sneaking their cellphones in pencil pouches and expandables into my class. They were convinced they could get away with this and that no teacher would ever catch on. I would often see them hunched over in their chairs, heads angled towards the ground. They would use their bodies as a shield to prevent my eyes from seeing their phone in their grasp. Every now and then I would hear the *click click click* of letters being tapped on a keyboard. Much to their dismay, I was not that easily fooled.

My collection of cell phones locked away in my desk drawer always accumulated as the day progressed. Students' eyes would widen with surprise as soon as I reached my hand out for it. "But it's my phone. I *need* it," students whined.

I narrowed my eyes at them. "Well do you really *need* it during Language Arts class?" I deadpanned.

“Ughhh, no.” They would sigh with defeat and slowly place their phone in the palm of my hand. This happened in my classroom too many times to count. As soon as the end of the day rolled around, I quite literally had students sprint into my room, eager to pick up their device.

While cell phone use *in class* was frustrating, it did not compare to the challenges my team endured as a result of cell phone use *outside* of school hours. My team quickly discovered that the social media postings from the night before had a direct effect on our students’ emotions and behaviors in class the following day. One afternoon, my students were working on a group project. My room sounded of chatter and laughter as students worked together to complete their task. However, the room quickly turned to silence when one of my female students burst into tears. All of my students stopped dead in their tracks and began searching the room, their eyes scanning for the source.

“Nothing to see here, let’s keep working,” I chimed in. I quickly made my way over to the student. “What’s going on?” I asked, “Can you tell me what happened?”

“I’m sorry Ms. Koller, I am just really upset because my best friend’s boyfriend broke up with her. She found out because he posted a video on Instagram about it. He didn’t even text her! Now everyone on the team has seen it and I just feel like such a bad friend!” *Not again*, I remember thinking to myself. My entire class’s focus shifted from working on the project at hand to this latest social media tragedy. My time and effort for the remainder of class was directed towards consoling this student and contacting the counselor, rather than assisting students with their assignment.

Another time, my students created an online dating account on Instagram where they would post photos of a male and female student side-by-side and ask people to

comment below: would you ship (support) them? Or would you dip (disapprove) them? The creators of this public account would essentially steal photos from students' online profiles, and post them without consent. The comment threads became flooded with nasty remarks such as, "Get out my girl is too cute for him," "Lol he's gonna get rejected," and "Ewww she's so gross this would never happen."

This relationship Instagram account wedged its way into my team's classes and began to detract from the content we were teaching. Rather than discuss vocabulary and comprehension questions for the reading, students were consumed with the account's postings. They were more fixated on "who was shipped with who" than the actual core language arts content. While many students enjoyed partaking in the relationship fun, those smiles quickly turned to tears whenever a mean comment or unflattering photo pertained to them.

My first year of teaching became characterized by student meltdowns, angry outbursts, and many tears shed—all stemming from social media. I observed friendships being torn apart. I watched students take selfie after selfie, and they refused to post them until they were edited or filtered in some way. I heard students make comments about how they did not feel "good enough" because of something they saw online. My heart sank as I saw the severe damage this addictive online parasite was inflicting upon my students.

My team tried the best that we could to speak to our students about negative online habits and behaviors. However, no matter how often we repeated our message, nothing seemed to stick. Our administrative team felt equally bewildered by our growing

concerns. We fell into the rhythm of putting out fire after fire--a process that never seemed to end.

During a Multi-Tiered System of Supports (MTSS) meeting one afternoon, my grade-level counselor made the chilling remark, “Your students are *murdering* my soul. The drama and chaos never ends and I am not sure where to go from here.” To this day, those words have never left my memory. As a collective, my team felt exasperated, defeated, and at a complete loss of how to knock some sense into these kids. Our only finding that remained clear was that social media was a tremendous force to be reckoned with.

Summary

As I reflect on this difficult year, I wish I would have known more about how to navigate and address adolescent online habits with my students. The recurring drama, meltdowns, and emotional outbursts that I observed often led to heartbreak amongst my students. I felt helpless as I watched social media consume my students' spirits. Social media was not only a disruptive force for my students, but also a disruptive force for my classroom. My role as a teacher transformed into damage control, as my energy in the classroom shifted to managing and preventing conflict.

Middle school is such a pivotal point in terms of development. For those who are addicted to their digital life, what kind of path will they venture down? If I would have been provided with a curriculum targeting adolescent mental health as it relates to social media, would students continue to exhibit such toxic behavior? As younger generations of students enter our classrooms, it is vital that teachers are both educated and equipped

to navigate the cognitive, mental and social effects that increased social media use has on adolescents.

Conclusion

In summary, social media has become a norm for adolescent middle school students. For me personally, my goal as a middle school teacher has always been to make school a more enjoyable experience, as a majority of people tend not to look back on their time at this age fondly. I view social media as a significant roadblock that is preventing adolescents from developing any ounce of self-confidence and satisfaction with themselves. Not only has it become a deterrent for the feeling of happiness and joy, but it is negatively impacting learning in the classroom. My first year of teaching was eye-opening, as it became evident to me that social media is *damaging*. Rather than sit back and watch my students become addicted to this beast, it is my hope through this project that I not only learn more about social media's impact on cognition, mental health, and social interactions, but also how to educate my Instagram-crazed students about what these profiles are doing to them.

_____ Chapter two will examine literature as it relates to social media's impact on student academic and cognitive development, mental health, and communication ability. Additionally, it will explain how a social and emotional learning (SEL) curriculum can be implemented to improve online habits. The research referenced in this literature review will support my capstone project question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?* Chapter three will provide a more thorough

understanding of the research question. In conclusion, chapter four will serve as a reflection of the project's findings and application to modern classrooms today.

CHAPTER TWO

Literature Review

Introduction

Introducing a social and emotional learning (SEL) based curriculum in the classroom is essential for raising awareness and facilitating conversations surrounding social media concerns for the adolescent population. In Chapter One, I shed light on some of the negative impacts social media usage has on adolescent mental health and wellbeing. I recounted my own personal experiences and observations of my own students that demonstrated how disruptive and toxic social media can be to any learning environment. In Chapter Two, I will address the various ways in which social media negatively affects adolescent development. Additionally, I will explain how the implementation of a SEL curriculum reaps many benefits for adolescent students who are hooked to their digital devices. The research referenced in this literature review will support my capstone project question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?*

While conducting my research on this topic, I reviewed the literature in four relevant areas of study. The research embedded in Chapter 2 will be organized based on its relation to these four themes. The first theme will focus on social media's effect on adolescent cognition and academic performance. As technology becomes more integrated into schooling systems, it is vital that educators and parents alike possess an understanding of how detrimental online activity can be to a child's developing brain. These damages, consequently, have the potential to impact student learning. The second

theme will address social media's effect on adolescent mental health and wellbeing. During the adolescent phase, children are undergoing the maturation process to adulthood. In addition to many physical changes, children are also experiencing a breadth of emotions--some of which may be new and foreign. Social media unlocks a world where everything is live, filtered, and artificial, and students often fall victim to its deception. It is pivotal that teachers understand potential psychological risks so they can provide students with the necessary tools to navigate this rocky terrain. The third theme will examine social media's effect on adolescent social interactions. It is important that teachers are aware of how our current digital landscape is shaping peer communication and relationships. The fourth and final theme will investigate the many benefits of implementing a SEL curriculum. Additionally, it will explore how SEL can be used amongst educators to raise awareness surrounding social media risks and concerns with adolescent students.

At the end of the chapter, I synthesize the implications of my research findings. I then illustrate how my research relates to my project question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?* The chapter will conclude with a summary of the key research findings as they pertain to the four themes, as well as a brief introduction to the following chapters.

Adolescent Cognition and Academic Performance

Research findings suggest that social media use damages student cognition and negatively impacts academic performance. These detrimental changes to the brain negatively impact critical thinking, concentration, and decision-making—all skills that are

critical for academic achievement. This section presents the scientific findings of how the addictive nature of screens erodes brain structure and functioning. First, the paper will more closely examine *how* frequent screen use impacts brain structures. Next, the paper will focus on how these cognitive damages correlate to academic achievement.

Understanding the cognitive effects of screen addiction is vital for those in the teaching profession because teachers may have to alter or modify instruction to meet screen-addicted students at their level.

The Development of the Adolescent Brain

Adolescence is defined as the transitional period between childhood and adulthood. This phase of life is characterized by the onset of puberty and the teenage years—which is accompanied by many physical and emotional changes. It comes as no surprise that this stage is known amongst researchers as one of the most dynamic phases of development, as the brain matures drastically (Arain et al., 2013). It is important to note that though the brain grows rapidly at this time, it does not fully mature until adulthood (American Academy of Pediatrics, 2007). In simple terms, the brain is more so being “rewired” during the adolescent phase (Arain et al., 2013).

It is essential to note that different regions of the brain develop at different times and at different rates. For example, the prefrontal cortex, the region of the brain responsible for executive functioning, typically does not fully mature until the mid-twenties (American Academy of Pediatrics, 2007). In comparison, the amygdala, the region of the brain that is responsible for emotional processing and regulation, develops at an earlier age (American Academy of Pediatrics, 2007). This gap in brain development

serves to explain why adolescent behavior is often more emotion and impulse driven. When smartphones are added to the mix, the path of brain development can be altered.

Screen Time & Thinning of the Cortex

As more students gain access to addictive smart devices, recent studies demonstrate that the increase in screen time is changing the course of adolescent neurodevelopment. A historic longitudinal study conducted by the National Institutes of Health (NIH) is currently underway to more thoroughly investigate adolescent development and neuroscience. This study, titled the Adolescent Brain Cognitive Development (ABCD) Project, is the largest longitudinal study of adolescent brain development to date. With a sample size of over 11,000 children between the ages of nine and ten, this study aims to track their course of development well into early adulthood. Results from a preliminary study demonstrated that children with extensive screen media activity (averaging over seven hours per day) exhibited significant structural differences in the brain. One notable pattern was a premature thinning of the cortex (Anderson, 2018). The cortex is an outer layer of the brain that oversees higher-level processes including sensory, motor, memory, language, and perception. The cortex is composed of different brain tissue, otherwise known as grey and white matter.

While it is considered a norm for the cortex to thin throughout maturation, researchers observed that this development begins to occur at an earlier stage than usual (Anderson, 2018). Given that this study is still in the works, it is too early to determine how this finding will impact children's cognition in the years to come. However, it is worth noting that results also revealed that children who engaged in over two hours of screen media activity per day received lower scores on thinking and language tests

(Anderson, 2018). In regards to her hopes for the study, Doctor Gaya Dowling, the director of the ABCD project, stated, “Some questions we will be able to answer in a few years. But some of the really interesting questions about these long-term outcomes, we’re going to have to wait awhile because they need to happen” (Anderson, 2018, para.18).

While the ABCD Project is still underway, other studies have confirmed the finding that increased screen time correlates with cortical thinning. In a study by Horvath et al. (2020), researchers studied brain images of 48 individuals between the ages of 18 and 30. The participants were divided into an experimental and control group. The experimental group contained participants who exhibited addictive smartphone behavior, while the control group was composed of participants who did not show signs of smartphone addiction. This was measured using a smartphone addiction proneness scale. After examining MRI scans from their participants, it was discovered that individuals from the experimental group had significantly lower grey matter volume in the cortex compared to their control group, denoting a causal relationship (Horvath et al., 2020). Grey matter is a vital component of the cortex, as it is an area composed of brain cells where processing occurs (LaMotte, 2019).

White matter, the other brain tissue in the cortex, has also been shown to have reduced thickness as a result of increased screen time (Hutton et al., 2020; LaMotte 2019). While the cortex is composed of both grey and white matter, they have different functions. Grey matter is made up of brain cells that relay information to the body, while white matter is composed of fibers that serve as the “cables” of the brain (LaMotte, 2019). The function of white matter tissue is to connect various regions of the brain so they can communicate with each other. It is for this reason that white matter tissue plays a

key role with literacy and language development. When white matter is altered, research suggests that the brain's processing speed is significantly reduced (LaMotte, 2019).

A study from Hutton et al. (2020) revealed that even in early childhood, children with high screen exposure showed signs of white matter reduction. The participants in this study ranged from 3 to 5 years old—none of them had attended kindergarten yet or possessed the ability to read independently. The children were asked to complete a cognitive assessment, which was followed by an MRI scan. To measure each participant's screen media activity, parents were surveyed regarding the child's access to screens, frequency of screen exposure, screen media content, and dialogic interactions—which refers to whether the child interacts with the screen independently or with an accompanying adult (Hutton et al., 2020). The results were consistent with the notion that increased screen time was associated with underdeveloped or shrinking white matter (Hutton et al., 2020).

While substantial research has been published surrounding the reduction of the cortex, additional data has emerged that shows a connection between cortex alteration and addiction. Hong et al. (2013) conducted a brain imaging study that sought to discover whether a causal relationship existed between reduced thickness of the cortex and addictive behavior. Brain scans of 15 adolescent males labeled as “internet addicts” (defined as those who experienced patterns of addiction: tolerance, withdrawal, obsession, numerous unsuccessful attempts to remove access, the exhibition of negative moods when attempting to remove access, and the disregard of friendships and activities as a result of it) showed thinning in a specific region of the cortex called the orbitofrontal cortex (Hong et al., 2013). This discovery was striking, as the thinning of the

orbitofrontal cortex has “consistently been implicated in the pathology of both drug and behavioral addictions” (Hong et al., 2013, para. 1). This suggests that damage to the orbitofrontal cortex is a pattern exhibited in individuals with various types of addictions.

Screen Time & the Insula

Another region within the cortex that experiences structural change from screen exposure is the insula. The insula is a neural structure that is small in size, but incredibly powerful. The insula is not a “one man show”—rather there is one found in *each* hemisphere of the brain (Blakeslee, 2007). Essentially, the purpose of the insula is to receive physiological sensations from the body and produce feelings that satisfy the body’s needs. For example, when the insula detects hunger, it generates feelings and behaviors that aim to satisfy hunger, such as eating. This information is then distributed to other regions of the brain that are responsible for decision-making (Blakeslee, 2007). It is this part of the brain that is commonly associated with addiction (Horvath et al., 2020). The insula reads the body like a textbook, and aims to satisfy needs and cravings. It is the driving force that pushes people to pull out that second cigarette from their pocket, or to reach for the half-empty bottle of wine on the counter.

In addition to producing feelings that satisfy the body’s needs, the insula is also responsible for translating human sensations into social emotions. Neuroscientist Craig at the Barrow Neurological Institute in Phoenix described this process using the examples of sense of taste and physical touch. When one consumes a food with a bad taste, the insula receives this sensory information and generates feelings of disgust. On the other hand, when one experiences physical touch from a loved one, the insula projects feelings of pleasure (Blakeslee, 2007).

The insula becomes activated when people experience cravings and feel pain. It becomes activated when people express empathy for others or sense pain is coming. It becomes activated when people feel excluded or vengeful towards others. It becomes activated when one is listening to music or hears a joke. It becomes activated when people see looks of anger or sadness on someone's face (Blakeslee, 2007). It is a complex brain structure that is known for evoking empathy and awareness. It is for these reasons that scientists have become increasingly curious as to how the insula is impacted when it comes to smartphone *addictions*.

Findings from Horvath et al. (2020) demonstrated that individuals with smartphone addiction showed diminished grey matter volume in the anterior region of the insula, a development that is consistent with people experiencing addiction. Considering that this part of the brain is involved with developing empathy, any impairment to the insula can lead one to develop apathy, or lack of concern or interest for others (Dunckley, 2014). This research has implications for adolescents because peer connection and socialization is of the utmost importance during this time. As children start to grow into their own, the ability to empathize with others and perceive others' emotions is an integral component of fostering connections. When a child lags in their ability to "read" people and express compassion for others, they may end up further isolating themselves.

Screen Time & Addiction

There are other factors at play besides altered brain structure. Social media itself is highly addictive. In fact, Lembke, the Medical Director of Addiction Medicine at Stanford University, defined social media as a drug (Rhodes & Orlowski, 2020). According to Common Sense Media (2020), 50% of adolescents report feeling addicted

to cell phones. They constantly have the urge to check their phone every thirty or so seconds to reply to text messages, scroll through feeds, and view how many likes their post has received (Rideout & Robb, 2018). Amongst this population, 38% report checking their smart device multiple times per hour, and 16% described themselves as using their phones “almost constantly” (Rideout & Robb, 2018 p. 3).

There is a method behind this madness. Shocking revelations from former employees in Silicon Valley reveal that one of the main priorities of big tech companies is to keep users engaged with their social media platforms. This tactic, now referred to as “brain-hijacking,” describes how social media platforms are wired to reinforce rewards when used (Harris, 2017, as cited in Anderson, 2017). Harris, a former Google product manager, shed light on how big tech companies are constructing their platforms to keep users craving more. In a 60 minute interview with Anderson Cooper, he stated:

This thing (smartphone) is a slot machine...Well every time I check my phone, I'm playing the slot machine to see 'What did I get?' This is one way to hijack people's mind and create a habit, to form a habit. What you do is you make it so when someone pulls a lever, sometimes they get a reward, an exciting reward. And it turns out this design technique can be embedded inside all of these products (Harris, 2017, as cited in Anderson, 2017).

These rewards that Harris refers to are the various elements that make smartphones so alluring. Examples include the “likes” that one receives when a selfie is posted on Instagram, the comments one gets when a new status is posted on Facebook, the update of a new follower on Twitter, the celebratory emojis that one obtains via text message, and the number of views one collects when a video is posted on TikTok (Anderson 2017).

Similar to a drug, people begin to experience *cravings* as a result of the instant gratification they are receiving from these “rewards.”

Smartphone addiction is deeply rooted in our innate need as humans to connect with other people. For centuries, human behavior has been motivated by the need to belong—whether that is through mating, procreating, living in a community, or other similar behaviors related to belonging (Rhodes & Orlowski, 2020). It is for those reasons that a platform centered on human connection can create such an enticing effect.

Biologically speaking, when one is rewarded, the brain releases a chemical known as dopamine. It comes as no surprise that dopamine is nicknamed “the happy hormone” because it is triggered by feelings of pleasure or satisfaction (“Dopamine and addiction”, n.d.). The feelings of gratification that are associated with dopamine is what drives certain behaviors to become addictive. Thus, when an adolescent logs onto Instagram and sees that she has 50 likes on photo, dopamine is released and reinforces feelings of delight. Like drug cravings, this tempts children to fall victim to the trap of checking their phones repeatedly.

The phrase “out of sight, out of mind” does not apply to kids without a phone in hand. Adolescents have become so hooked to their devices that new data suggests they experience feelings of anxiety with their phone’s absence (Anderson, 2017; Dunkley, 2014; Hou et al., 2012). Without their phone, adolescents are left wondering what kind of activity is happening online. Their brains begin to swirl with thoughts as to what they are missing out on such as, *How many likes is my photo getting? I wonder if anyone commented on my TikTok video yet? I haven’t checked my Instagram feed in awhile...what’s going on? Has my friend replied to my message yet?*

These increased feelings of anxiety lead to the production of a hormone called cortisol. When released, cortisol activates a fight-or-flight response to danger or threats. In this case, the feelings of anxiety are posing a threat to the body. To eliminate this threat, children are driven to reach for their device to check for updates (Anderson, 2017).

Scientists have observed that adolescents with high smartphone use display lower dopamine levels (Dunckley, 2014; Hou et al., 2012). The constant “high” that students are experiencing with online activity is rewiring the brain’s reward pathways to crave rewards instantly and with minimal effort. Overtime, the brain develops a tolerance to the short-term rewards, and in some cases, this can lead to a reduction in the chemical (“Low dopamine levels: symptoms & adverse reactions”, n.d.). The implications that this has for children are massive. For example, low dopamine levels are commonly associated with disorganized thinking, fatigue, lack of motivation, attention deficits, memory impairment, drowsiness, reduction in processing speed, cognitive impairment, lack of emotional expression, and increased levels of anxiety (“Low dopamine levels: symptoms & adverse reactions”, n.d.).

Screen Time & Lack of Sleep

This “cell phone craze” makes it difficult for students to power down their phone each and every night. An increasing amount of teens are staying up later at night to keep up with all the happenings on social media. A study conducted by Common Sense Media (2019) reported that 39% of children keep their device within reaching distance of their bed. Amongst this population, 29% reported that they sleep *with* their mobile device in

bed (Robb, 2019). Having a phone in such close proximity has been proven to be a major distractor.

Phones are famously known for their ability to light up when one receives a notification. Thus, when one sees their phone begin to glow in the darkness of the night, it becomes difficult to ignore. Instead of focusing on a good night's sleep, kids' attention is diverted to, *Is someone trying to reach me? Did I gain a follower? Or maybe someone commented on my photo?* According to an adolescent focused survey focusing on smartphone habits, 1 in 3 teens, equating to 36%, reported that their sleep is being disrupted by notifications or the *desire* to check their phone for notifications at least one time per night (Robb, 2019).

Since adolescents are at a pivotal stage in terms of both mental and physical development, they require more sleep compared to adults. Experts recommend that adolescents need a minimum of roughly nine hours of sleep per night in order to feel energized the following day (Sleep and teens, n.d.). In reality, not all adolescents are receiving this amount. A United States study discovered that 40 % of adolescents were sleeping less than 7 hours each night (Abi-Jaoude et al., 2020). Through these findings, it is evident that smart devices are serving as a barrier to quality sleep.

Receiving quality sleep each night is of the utmost importance because it relates to all aspects of one's health. When one gets the proper amount and quality of sleep, it improves physical, mental, intellectual, and social health. Simply stated, sleep helps to better one's quality of life ("Sleep deprivation and deficiency", n.d.).

Overnight, the brain works to prepare both the mind and body. Mentally speaking, when one is asleep, the body engages in various processes to ensure "healthy brain

function” (“Sleep deprivation and deficiency”, n.d.; Curcio et al., 2006). The brain generates new neural pathways overnight that allows one to retain and learn information. For example, sleep helps one remember how to drive a car when behind the wheel. Sleep helps one remember how to play the violin when the bow is in hand. Sleep helps one remember how to divide two digits when sitting in math class (“Sleep deprivation and deficiency”, n.d.). A good night’s rest also fortifies the brain’s ability to learn new information. Research shows that improved quality of sleep leads to improved attention span, stronger decision-making skills, and increased creativity (“Sleep deprivation and deficiency”, n.d.).

When adolescents fail to receive the sleep they need, it does not come without consequences. Lack of sleep has been shown to impair activity in high-functioning sectors of the brain (McNeely & Blanchard, 2009). For instance, a sleep-deprived student often struggles with paying attention in class. Since his brain was not able to recharge overnight, it attempts to compensate for sleep the next day. It is for these reasons that kids may have a difficult time keeping their eyes open in class or feel physically fatigued. The brain has a more difficult time absorbing and processing new information due its lack of preparation.

Additionally, sleep deprivation weakens one’s ability to make decisions, problem-solve, regulate emotions and behavior, feel intrinsically motivated, and adjust to change (“Sleep deprivation and deficiency”, n.d.; Curcio et al., 2006). Parents and teachers alike may notice that their child grows more irritable, on-edge, or emotionally checked out when sleep deprived. These changes in behavior are likely to occur when one is not feeling alert and energized. It is not uncommon for adolescents to become

more moody or impulsive, especially considering that their bodies are already undergoing many hormonal changes. Sleep deprivation may also intensify negative feelings, including sadness and anger. It is for these reasons that adolescents lacking quality sleep become more susceptible to mental health conditions such as depression, anxiety, and potentially suicide (“Sleep deprivation and deficiency”, n.d; Curcio et al., 2006.).

In regards to physical health, sleep is critical for adolescents because it is a time where significant growth and development occurs (“Sleep deprivation and deficiency”, n.d.). The adolescent phase of life is infamously known as the time of puberty—where a child’s body enters the maturation process. During sleep, the body is actively at work. Hormones are released that not only stimulate growth, but also enhance muscle mass, and repair body tissue and cells (“Sleep deprivation and deficiency”, n.d; Curcio et al., 2006).

Screen Time & Academic Performance

Students struggle with putting their phones away at any time of day—whether it is in the late hours of the night or during school hours. Researchers are noticing that homework is taking longer for students to complete due to constant interruptions (Miller, n.d.). With all the incoming text messages and notifications, students get sidetracked and end up multitasking. According to Hamlet, a clinical psychologist, multitasking is not reinforcing any learning. She stated, “Basically, multitasking isn’t possible. What you end up doing is really just switching back and forth between two tasks rather quickly. There is a cost to the brain,” (Miller, n.d., para. 25).

It is worth noting that the presence of cell phones *inside* the classroom is detrimental to assessment scores. A study found in the journal *Education Psychology* (Glass & Kang, 2018) compared two college classrooms: one that allowed students to use

technology (laptops and cellphones) and one that prohibited technology. In the room that permitted technology, students received a score that was half a letter grade lower than those who did not have access. Shockingly, students in this classroom who chose not to use a cellphone or laptop during class also performed lower than their peers in the opposite room. Glass, professor of psychology at Rutgers University and lead author of the study, attributed this to a divided attention span. Even though the students in the classroom were not on cellphones personally, they were still distracted by them in other people's hands. To further explain the importance of these findings, Glass stated:

Many dedicated students think they can divide their attention in the classroom without harming their academic success—but we found an insidious effect on exam performance and finale grades. To help manage the use of devices in the classroom, teachers should explain to students the damaging effect of distractions on retention—not only on themselves, but for the whole class, (Lardieri, 2019, para. 9).

This is the first study in the field that depicts a causal relationship between technology distractions and assessment performance. Though this study targeted university students, Glass asserted that the findings can be applicable to middle and high school settings (Glass & Kang, 2018; Lardieri, 2018).

In summary, smartphone devices have proven to impact adolescence brain development, as well as academic performance. In a world bound by technology, it is fair to say that adolescent smartphone use will likely not decline anytime soon. To ensure healthy and natural development, health professionals suggest parents create a family use media plan (American Academy of Pediatrics, 2016). These plans allow families to find a

healthy balance between technology time and a technology-free time. Other recommendations include prohibiting children from having access to digital devices at bedtime, promoting physical activity, finding “media-free” time to spend together as a family, and discouraging children from interacting with any screens while completing coursework—unless it is being used as a learning tool (American Academy of Pediatrics, 2016). While many discoveries have yet to be made, the current research stresses the tremendous influence that screens can have on students’ neurological development and academics.

Adolescent Mental Health & Wellbeing

Adolescence is a critical transitional period because children are not only undergoing physical changes, but they are experiencing emotional development as well. As children begin to navigate through uncharted and foreign waters, their fluctuating emotions act as a coping mechanism. It is for this reason that adolescence is commonly associated with the expression of feelings that are often intense and fluid (“Adolescent Emotional Development,” n.d.). These changes in emotions and behavior leave children more vulnerable to mental health conditions such as anxiety and depression (World Health Organization, 2020). In fact, those with mental disorders often report that they first experienced symptoms prior to the age of 18 (Odgers & Robb, 2020).

Social media adds a whole new layer to the emotional complexities kids are experiencing during this time of instability and curiosity. With 81% of adolescents engaging in social media platforms, it is essential that adults holding positions of influence or authority are educated as to how these seemingly harmless sites can pose a dangerous threat to one’s sense of self (Rideout & Robb, 2018).

Dangers to Mental Health

Whenever one scrolls through Instagram, one's eye is immediately bewitched by dazzling images depicting lives of luxury and perfection. One may see a picture of a suntanned girl on the beach, laughing as if she had no cares in the world. One may see a shot of a group of girls huddled together and beaming at the camera, as if they have known each other for years. One may see a selfie of a woman with thin cheekbones and piercing blue eyes, smirking at the camera as if she's never felt an ounce of insecurity in her life. Vibrant photographs of sunshine, palm trees, laughing faces, and shopping sprees glow on the screen—and adolescents absorb these images like a sponge.

For decades, many have lambasted media industries for promoting beauty and lifestyle standards that are difficult to attain. The billboards and magazines featuring bikini clad models with tiny size 0 frames have long since been called to a reckoning over their deceptions (Yu et al., 2011). While beauty manipulation in media content has long been acknowledged, it is far less recognizable on social media platforms. On these apps, the line between realism and idealism becomes much more blurred.

Rather than pouring over images of photoshopped models and elites, adolescents' social media feeds are bombarded with photos of ordinary people leading what appears to be *extraordinary* lives. It is no longer *only* the models or celebrities who are upholding impossibly high standards, but it is also one's neighbor, friend, cousin, or classmate (Yu et al., 2011; Kerpen, 2017). Those who seem to "have it all" may be living right next door or sitting across the way in the cafeteria.

The curation of photos that show only the best and brightest of moments in one's life is what makes social media a weapon of self-destruction. Time and time again, users

fall victim to the dangerous trap of self-comparison. Furtick likened social media platforms to a highlight reel. He stated, “The reason we struggle with insecurity is because we compare our behind-the-scenes with everyone else’s highlight reel,” (as cited in Kerpen, 2017).

What adolescents struggle to realize is that the posts they are viewing online are a distortion of reality. Photos are often altered by users to erase any flaws or imperfections. Filters are used to make moments more vibrant and colorful. Social media’s deception of perfection casts the feeling that everyone is living their best life...except for you (Kerpen, 2017).

Correlation to Depression

Researchers have noted a positive correlation between social media usage and high levels of anxiety and depression (Abi-Jaoude et al., 2020; Odgers & Robb, 2020; Miller, n.d.; Twenge et al., 2017). The contributing factors, such as negative body image, cyber-bullying, and perceived social isolation, will be discussed at length in the remainder of this section. To begin, it is essential that one understands the extent to which social media is threatening mental wellbeing.

Prior to the Coronavirus pandemic, mental health professionals observed a prominent spike in suicide rates amongst every age group within the United States. The population that was the most at risk were adolescent females between the ages of 10 and 14 (Odgers & Robb, 2020). For researchers, this trend was nothing short of unexpected.

Since 2010, numerous studies have indicated a steep rise in depressive symptoms, self-harm, and suicidal thoughts amongst adolescent females (Abi-Jaoude et al., 2020; Twenge et al., 2017, Twenge, 2020). Researchers suspect that the adoption of

technological devices over the course of the decade likely played a role in this surge. A longitudinal study found that between 2007 and 2015, the rise in mental health conditions amongst adolescents correlated with the growing acquisition of smartphone devices (Twenge et al., 2017). It is important to note that smartphone devices were first introduced to consumers in 2007. Thus, researchers attribute this spark to the introduction of smart devices. (Miller, n.d.; Twenge et al., 2017).

A second longitudinal study of students in eighth to twelfth grades examined the relationship between psychological wellbeing and screen media activity. The variable of psychological wellbeing was measured through annual surveys that asked participants to reflect on their level of self-esteem, life satisfaction, and happiness (Twenge et al., 2017). The data found that adolescents with increased screen media activity self-reported behaviors that aligned with lower psychological well-being, thus demonstrating a negative correlational relationship (Twenge et al., 2017). In the years where adolescents had lower screen media usage, they experienced higher psychological well-being (Twenge et al., 2017).

While many studies have proven that social media usage correlates with mental health conditions, few have demonstrated a direct effect. Hunt et al. (2018) of the University of Pennsylvania published the first study that depicts a causal relationship between these two factors. Hunt recruited over 140 college-aged students to participate in the study. In order to be accepted, participants were required to own a smartphone device and have accounts on the following three social media platforms: Facebook, Instagram, and Snapchat.

To determine whether a causal relationship existed, Hunt et al. (2018) designed an intervention that required participants to reduce their usage on each app to 10 minutes per day, equating to 30 minutes total. To gauge mental status, the participants completed questionnaires before and after the intervention occurred on a daily basis. They were asked to self-assess their social supports, fear of missing out, loneliness, anxiety, depression, anatomy and self acceptance (Hunt et al., 2018). To compare, participants in the control group were asked to use their social media accounts on Facebook, Instagram, and Snapchat as they normally would. Throughout the course of the study, researchers collected data from their devices to track their activity and measure the time spent on different platforms.

The results showed that the individuals who cut back their social media usage to 30 minutes per day exhibited a more positive mental state. For example, they reported lower levels of loneliness and depression when compared to the control group (Hunt et al., 2018). While this study was the first of its kind, it did imply to an extent that a direct link exists between social media and mental status. Depressive symptoms stemming from social media can be attributed to a variety of factors, including negative body image, low self-worth, perceived social isolation, and cyberbullying.

Effect on Body Image

After a long day at school, a high school teen returns home and throws herself on her bed. She grabs her phone from her backpack and begins to scroll through the content she missed. An image of the school elected homecoming queen flashes on the screen. She is wearing a tight bodycon dress while smiling at the camera—not a hair out of place.

*The girl stares at the photo with envy. She thinks to herself, Why can't I look like that?
Why do I have to be so ugly?*

Body image can be defined as one's perceptions, feelings, and behaviors directed towards one's body (Cash, 2004). It is the feeling one has about herself as soon as she steps foot in front of a mirror. Many make the assumption that self-esteem is synonymous to body image. Rather, body image is an *element* of one's self-esteem (Gallivan, 2014). A positive body image is defined as having a "clear, true perception of your shape; seeing the various parts of your body as they really are" (National Eating Disorders Association, n.d., para. 2). Those with body satisfaction feel confident with their physical attributes and possess an understanding that physical appearances are not definitive of character (National Eating Disorders Association, n.d.).

In contrast, those experiencing negative body image view themselves through a distorted lens. It causes people to feel insecure, ashamed, and anxious over their "flawed" physical appearance (National Eating Disorders Association, n.d.). A person with a negative body image will look at her reflection and furrow her brows with disgust. *I wish I could be as skinny as the girls on the dance team. Why do I have to be so fat?* One may think to herself.

Body image is an attitude that is *learned* overtime. It is heavily influenced by family, community, culture, peer group, and society. As children develop and evolve, their feelings regarding their physical attributes are formulated based on a few different factors such as: self-comparison, the imitation of role models and their physical appearances, and the acceptance of societal beauty standards as a norm (Pai et al., 2015).

Research shows that body image is learned fairly early on. Starting from a young age, children develop an awareness of their body and begin to cast judgments about how it compares to others (Pai et al., 2015). A 2010 study demonstrated that kids as young as 5 and 6 years old had already harbored feelings as to what one's body *should* look like (Hayes & Tantleff-Dunn, 2010). Roughly one-third of the children surveyed preferred a body size that was perceived as being more thin than their own (Hayes & Tantleff-Dunn, 2010). A second study confirmed the finding that the onset of body image concerns happens around 6 years of age (Smolak, 2011). After surveying an elementary school population, Smolak discovered that 40-60% of girls between 6 and 12 were already expressing concern over their weight and had a fear of becoming "too fat" (Smolak, 2011).

As adolescent bodies begin to change and mature, feelings of insecurity over shapes and sizes is known to intensify. Considering that most social media platforms are appearance-centered, increased usage is leading to heightened self-doubt (Gallivan, n.d.). Several studies consistently demonstrate a correlation between social media usage and negative body image. The reasoning behind this can best be explained through social comparison theory.

Social comparison theory focuses on how one's self-worth is determined by how an individual feels she can measure up to others. Durvasula, a clinical psychologist and psychology professor, explains, "Social media is basically social comparison on steroids," (Lavine, 2014). If an individual perceives a person is "worse off" than her—she thinks more highly about herself. Perhaps someone sees an unflattering photo of a peer on Facebook and thinks, *Wow, definitely not her best photo. At least I don't smile like*

that. This is known as a downward comparison. In turn, if an individual perceives a person is “better off” than her—she engages in self-objectification. This is exemplified when a person scrolls through Instagram and encounters photos of others who are thought to be more physically attractive. One may think, *She always looks gorgeous in her photos. I never look like that. Why can't I be more like her?* This is known as an upward comparison (Wang et al., 2016). For young girls struggling with self-confidence, viewing photos online of others reinforces negative self-worth. They fall into the continuous cycle of compare and despair over and over again.

A study conducted in 2015 sought to examine social media’s relationship with feelings of body image disturbance (Fardouly et al., 2015). Female participants were divided into two groups. The experimental group required participants to sift through their Facebook feed for 10 minutes, while the control group had participants browse an “appearance-neutral” site. The findings demonstrated that the participants in the experimental group involving Facebook exposure were in a more negative mood afterwards compared to the women in the control group. Additionally, the women with greater “appearance comparison tendencies” in the experimental group expressed increased feelings of wanting to change their looks compared to those in the control group. They reported dissatisfaction with their hair, skin, and face after viewing various images online (Fardouly et al., 2015).

Fardouly followed up on this finding in a later study in 2017. Her study examined a population of women between the ages of 18 to 25. She found a consistent positive correlation between Instagram use and negative body image and increased self-objectification (Fardouly et al., 2018). Fardouly and her research team attributed

these feelings to “the internalization of the societal beauty ideal and appearance comparisons to celebrities,” (Fardouly et al., 2018, p. 1391).

Similarly, a study conducted in 2013 surveyed over 100 females in both middle and high school settings to determine the effect that “appearance exposure” on Facebook had on their self-image (Meir & Gray, 2014). The participants were required to complete a questionnaire that measured the following: amount of time spent on Facebook, Facebook feature use, weight dissatisfaction, drive for thinness, thin ideal idealization, appearance comparison, and self-objectification (Meir & Gray, 2014). The study presented the findings that it was not the *total* amount of time spent on Facebook that positively correlated with negative body image (weight dissatisfaction, drive for thinness, thin ideal idealization, appearance comparison, self-objectification), but the amount of time *devoted* to photo sharing features. The authors emphasized that the results from their study mirrored the findings of other studies that measured body image and its relationship to traditional media exposures, such as television and advertisements. However, they assert that social media is distinct from studies centered on traditional media because Facebook users are more heavily influenced by the content that their peers are posting, compared to celebrities. Additionally, the authors asserted that while their study did not prove a causal relationship between Facebook image viewing and negative body image, it appears likely that a “bidirectional relationship” exists. Adolescent females with body dissatisfaction are more motivated to seek out and engage with images on social media platforms, thus reinforcing a negative sense of their physicality (Meier & Gray, 2014).

While many studies regarding this topic are centered on adolescent female body image, it is essential that one understands the physical pressures that social media has

created for adolescent males. Society has perpetuated the ideal that in order for a man to be physically attractive, he must be lean, strong, and muscular. Experts suggest that Social Cognitive Theory may serve as an explanation for the role social media has on body satisfaction (Gultzow et al, 2020). This theory indicates that human behavior is learned by observing behavioral norms and then in turn imitating that behavior. On social media platforms, it has become a norm for men to post fitness inspired images or images reflecting a strong physique. Thus, boys begin to associate fitness and muscles as a normative behavior (Gultzow et al., 2020).

A 2020 quantitative analysis study examined over 1,000 Instagram posts created by male users (Gultzow et al., 2020). The purpose behind this study was to determine male body representation on Instagram, as well as how Instagram users reacted to images of different male bodies. The results from the sample showed that most of the images posted shared common themes of “high levels of masculinity and leanness” (Gultzow et al., 2020). Interestingly enough, these images elicited far more responses compared to those that did not (Gultzow et al., 2020). This is the first study that demonstrated a strong “association” between physical appearance and the number of responses generated (Gultzow et al., 2020).

It is important to note that negative body image is detrimental to adolescents because it makes them more vulnerable to mental health conditions, such as anxiety and depression (National Eating Disorder Association, n.d.). Additionally, those with body dissatisfaction are more likely to develop an eating disorder (National Eating Disorder Association, n.d.).

Low Self-Worth

A high school aged boy eagerly pulls out his phone during lunch. Earlier in the day, he had posted a selfie of himself lifting in the workout room. He felt good after that workout—healthy, strong, energetic. He checks his profile only to find that 5 people liked his photo, one of whom is his grandmother. He feels his heart sink into his chest. Within seconds, the photo disappears from his account. Sitting on the other side of the cafeteria, a girl sits on her phone and adds a beauty filter to one of her photos. She becomes mesmerized by the newly created sparkle in her eye and the slimness of her nose. I cannot wait to post this, she thinks to herself.

Self-worth is defined as, “a deep knowing that I am valuable, that I am loveable, necessary to this life, and of incomprehensible worth,” (Hibbert, 2013, para. 2). Essentially, self-worth relates to the value one feels about his or herself. There are several factors that influence one’s self-worth including one’s genetic makeup, personality, life experiences, self-comparison, thoughts, amongst many others (Ackerman, 2020). However, the reign of technology has created a world where social media factors into one’s self-worth. (Rideout & Robb, 2018).

For students at this age, experiencing pressure is nothing new. Throughout adolescence, students are on a quest for identity and belonging. A core question that students ask themselves during this time is, *Who am I? What kind of person do I want to be? What kind of people do I want to surround myself with?* (McNeely & Blanchard, 2009). This exploration process drives adolescents to grow more independent and autonomous. They begin to seek out friendships that align with their newfound identity, as they are craving social acceptance. It is for this reason that most parents observe the

infamous shift of their child becoming more peer focused than family focused (McNelly & Blanchard, 2009).

This deep rooted desire for belongingness and peer acceptance is rarely a seamless process. Students have always faced pressures to fit in and be deemed popular, but now this pressure extends beyond school walls. With social media, there is an added pressure to convey perfection.

A 2018 survey implemented by Common Sense Media investigated the effect that “likes” can have on one’s mood. The survey asked students a variety of questions pertaining to their mental health so they could gauge which respondents exhibited low social-emotional wellbeing, and which respondents exhibited high social-emotional wellbeing. One question on the survey asked whether or not teens feel bad about themselves if no one comments or likes their posts? The data showed that 43% of those with low social-emotional wellbeing reported feeling bad about themselves, as well as 11% of teens with high social-emotional wellbeing (Rideout & Robb, 2018). Additionally, 43% of teens with low social-emotional wellbeing reported that they have deleted social media posts because they got too few “likes.” In comparison, 13% of teens with high social-emotional wellbeing reported taking similar action (Rideout & Robb, 2018).

The aspiration to be popular adds a new element of pressure when it comes to online profiles. Through social media, kids are intrinsically motivated to display the best version of themselves. Bubrick, a clinical psychologist, elaborated on the reasoning behind the pressure to be perfect, “Kids spend so much time on social media trying to post what they think the world will think is a perfect life. ‘Look how happy I am! Look at

how beautiful I am!’ Without that they’re worried that their friends won’t accept them. They’re afraid of being rejected,” (Miller, n.d. para. 20). It is this direction for perfection that drives kids to devote hours of time to creating, curating, and editing content. Kids snap multiple selfies of themselves—trying to capture themselves at the best angle. They agonize over what filter to select—trying to find the perfect lighting. They draft out captions over and over again—trying to determine the right thing to say.

Kids will go to great lengths to ensure their postings are well-received. In his photo series titled “Selfie Harm”, British photographer Rankin (Rankin, 2019, as cited in Del Castillo, 2019) sought to explore the extent to which teens will manipulate their pictures prior to posting them online. Rankin photographed 15 teenagers ranging between the ages of 13 to 19. Each individual posed naturally, giving viewers a sense of each model’s appearance without any makeup. After the shoot, Rankin allowed the teens to edit their photo via photoshop software until they deemed it “social media ready” (Rankin, 2019, as cited in Del Castillo, 2019). The results were astounding. After comparing the before-and-after shots, Rankin discovered that a majority of the models manipulated the size and shape of their facial features. The most common edits amongst both males and females included the enlarging the eyes, and the narrowing of the nose and neck. For females specifically, most added makeup, erased freckles, enlarged their lips, and slimmed the size of their face. On a more subtle level, many smoothed out their skin and brightened their eyes (Del Castillo, 2019; Hosie, 2019). When asked about the photo manipulation, Rankin stated, “I found it disturbing how big even the small changes are. It’s so simple, almost like creating a cartoon character of yourself,” (Hosie, 2019, para 10).

This photo series captured a modern-day phenomenon: adolescents feel that their natural self does *not* measure up to social media expectations. Rather than showcase authenticity, adolescents use filters and photo editing apps to mask their true identity.

The fallout that adolescents experience when they feel their lives do not measure up to those featured online grows more threatening to their self-worth once they transition into college. At universities, students are often confronted with new challenges: new peers, new friends, new surroundings, newfound independence, and greater academic intensity (Fagan, 2015; Jacobson, n.d.). The stakes are higher, the academic workload is greater, and the social pressures substantiate as teens begin to navigate an environment that is liberated from parental authority. The pressure to be perfect grows stronger than ever as teens long to impress their new peers on campus, as well as others back home. Thus, teens begin to use social media as a vehicle to capture and document the “perfect” college experience.

Researchers at Stanford University began to notice an increase in suicide rates among college-aged students who had social media profiles that seemed to depict an ideal, happy and successful life (Jacobson, n.d.). One of these students was named Madison Holleran, an all-star athlete attending the University of Pennsylvania. Holleran had what seemed to be the perfect life. Anyone who scrolled through her Instagram profile was instantly captivated by her beauty, athletic talent, and exciting social life. It was clear Madison was a girl who was loved by many— as her Instagram dazzled with shots of friends and family laughing and smiling together. To the average onlooker, Madison’s Instagram conveyed a life of perfection. Her pictures embodied a perfect, ideal college experience. Except for there was one problem, Madison was not happy.

In January 2014, Madison committed suicide. It was a tragedy that no one saw coming. Minutes before her death, Madison posted her final photo on her Instagram. It was a picture of the city landscape of Rittenhouse Square in Pennsylvania. The picture showed an evening sky with trees filled with string lights. Once again, a beautiful photo was masking so much pain (Fagan, 2015).

The term “duck syndrome” was created by the Stanford Researchers to explain the discrepancy between one’s social media profile and one’s inner despair. It refers to the way social media acts as a concealer to pain, similar to the way in which, “a duck appears to glide effortlessly across a pond while below the surface its feet work frantically, invisibly struggling to stay afloat,” (Jacobson, n.d., para.7). It is important that adolescents learn to view social media through a more realistic lens. Social media is a curtain that masks and shields people’s struggles and demons.

Perceived Social Isolation

It is Saturday night. A middle school aged girl is at home, watching a movie with her parents. She glances at the clock, the time is only 7:30. She sighs glumly to herself. She should be at her friend’s house for their weekly Saturday night sleepover, but she never got the invite. Out of sheer boredom, she picks up her iPhone and begins to scroll through Instagram. Her eyes gravitate to the first photo that appears on her screen: her friend is smiling with a group of girls from school all huddled together under blankets, smiles plastered on their faces. The caption reads, “Saturday sleepover with my besties!” Her eyes begin to well with tears.

Before social media existed, kids were not privy to the daily happenings of their peers’ lives. However, the introduction of social media platforms have provided teens

with a vast and distorted window into what their classmates are doing *in live time*. Instead of hearing about the latest party or get together, students nowadays can actually see the play-by-play of what is happening via social media. Social media has created a “look at what I am doing” culture where adolescents are able to see who is doing what and with who *all the time*. This opens the door to a world of hurt as those who are not included often feel excluded and left out.

The fear of missing out, famously known as “FOMO”, is the unsettling and all-consuming feeling that you are missing out on something your peers are doing or that you are not “in the know” about something (Abel et al., 2016). Considering that adolescence is a pivotal time where children are seeking out peer groups, the ramifications of FOMO can be damaging for adolescents. For example, FOMO can manifest as feelings of inadequacy, envy, anxiety, loneliness, and self-doubt on its victims. Kids who are struggling to establish peer relationships may start to feel isolated from others (Vitelli, 2016). Reed, a writer for the New York Times, summarizes the effect that FOMO can have:

We tend to talk a lot about having FOMO when we scroll through our social media feeds, but *fearing* you’re missing out and *knowing* you’ve been left out are different. We can let our imaginations fill in the gaps about other people’s lives, but sometimes it doesn’t take much imagination at all to see that people are doing awesome things without you. That’s the cost of living with social media. (Reed, 2019, para. 5)

Numerous studies confirm associations between social media usage and FOMO. A 2018 Common Sense Media survey reported that 47% of overall teens between the ages of 13

to 17 indicated that they sometimes feel left out and excluded while using social media apps. In regards to gender, females were more likely to experience FOMO compared to males. This amounted to 54% (females) versus 39% (males). While examining the data collected from teens exhibiting low social-emotional well-being specifically, they found that 70 % identified as experiencing feelings of FOMO. In comparison, 29 % of teens with high social-emotional well-being expressed similar feelings (Rideout & Robb, 2018).

A 2016 cross-sectional study conducted by the American Journal of Preventive Medicine demonstrated that teens with increased social media use felt more socially isolated when compared to those who did not use social media as much (Primack et al., 2016). The specific variable that this study measured was perceived social isolation. The authors defined social isolation as “a state in which an individual lacks a sense of social belonging, true engagement with others, and fulfilling relationships,” (Primack et al., 2016, p. 1). While the data showed a linear relationship between social media and perceived social isolation, the authors acknowledged that the cross-sectional nature of the study made it difficult to prove causation (Primack et al., 2016). There is far more research that needs to be done as social platforms evolve and grow in popularity.

Cyberbullying

A high school girl is in a fight with her best friend after she began to spread some false rumors about her. These rumors ended up circulating through the depths of Instagram, causing her social media page to become flooded with insulting comments. Her screen glowed with the words, slut, white trash, ugly loser, nobody. Kids from school whom she had never interacted with before were leaving her private messages, “You

should transfer schools cuz no one here likes you.” She felt her chest begin to tighten. The words echoed through her head, branding themselves on her soul.

There is great variation when it comes to the definition of cyberbullying. The five most common characteristics found in most definitions include: electronic forms of contact, aggressive acts, intent, repetition, and harm to the target (Hutson, 2016). One of the most damaging aspects of social media is that teens are able to villainize or harass others with the swift click of a few buttons. These platforms provide bullies with a public platform where they can attack their victims in ways that extend beyond just words alone. Photos, memes, comments, videos, messages, and stories can quickly turn from fun features to weapons of attack (Rideout & Robb, 2018). Of all the social networking sites, Instagram is deemed by a majority of adolescents to be the epicenter for bullying (Rideout & Robb, 2018). It is important to note that this app is known for both photo and video sharing (Ditch the Label, 2017). Sitting behind a screen evokes a feeling of cyber courage—meaning that individuals feel more empowered to share their thoughts, whether they be good or ugly. It is far more convenient and easier for people to state their feelings or thoughts when face-to-face communication is eliminated.

A survey conducted by the Pew Research Center sought to determine the %age of teens aged 13 to 17 in the United States who had been targeted through cyberbullying. In order to measure this, researchers defined cyberbullying as six online behaviors: offensive name-calling, spreading false rumors, receiving explicit images they did not ask for, constant asking of where they are, what they are doing, or who they are with by someone other than a parent, physical threats, and having explicit images of them shared without their consent (Anderson, 2018). Overall, the results showed that 59 % of teens

surveyed reported experiencing at least one of the six abusive behaviors above. Amongst this population, students most often reported experiencing offensive name-calling (42%) and the spreading of false rumors (32%) (Anderson, 2018).

While examining the demographics behind the study, experts observed that both males and females were equally subjected to online harassment, with females amounting to 60% and males amounting to 59% (Anderson, 2018). It is important to note that while both genders were equally likely to be bullied online, researchers found that some abusive behaviors were more common for one gender over the other. For example, more females reported that they were victims of rumor-spreading when compared to males. Additionally, more girls reported that they had received unsolicited messages compared to their male counterparts (Anderson, 2018). Researchers also found that increased social media usage correlated with the experience of online bullying. Simply stated, the more often one goes on social media, the greater the likelihood that they will experience cyberbullying (Anderson, 2018).

The bystander effect refers to the failure of onlookers to discourage or intervene during a situation of bullying, assault, or threat (Padgett & Notar, 2013). With online bullying, the bystander effect is also observable. Bullying that occurs on social platforms is distinct in the fact that it is often highly visible and widespread. The dispersing of negative photos, memes, comments, and videos are all forms of digital content that can be viewed by the masses. Yet despite the fact that adolescents *see* cyberbullying in action, many fail to *take* action. A 2018 study found that 60% of individuals under the age of 25 witnessed online harassment, but most failed to intervene (The Children's Society, 2018).

The weaponization of social media platforms to target others poses an imminent threat to vulnerable teens. Adolescent victims of cyberbullying are more at risk of committing self-harm or engaging in suicide-related behavior (John et al., 2018). Due to its prominence, it is essential that schools work to incorporate a cyberbullying prevention program into the curriculum. In order for real change to occur, adolescents need to become educated on the crippling impact their online actions may have on others.

Research strongly supports the fact that social media takes a toll on adolescent's mental health. With 81 % of adolescents on social media platforms, it is of vital importance that kids equip themselves with the proper tools of mindfulness and self-awareness when logging onto social media sites (Abi-Jaoude et al., 2020; Odgers & Robb, 2020; Rideout & Robb, 2018; Kerpen, 2017; Twenge et al., 2017). Mental health professionals recommend that parents set a time limit for their children so that they can use these apps in moderation. When controlled, children are forced out of their digital world and able to spend quality time face-to-face with others, engage in physical activity, and be fully present in the moment. It gives adolescents a break from the constant self-comparing and the strive for perfectionism.

Parents are also highly encouraged to have honest discussions with their children about the harsh realities of social media, including deception and cyber-bullying. Data shows that only 11% of adolescents feel comfortable discussing incidents of online bullying with their parents (National Crime Prevention Council, n.d.). By initiating open conversation, children may grow more comfortable to share their pains, anxieties, and concerns over online activities with adults.

Adolescent Social Interactions

Walk into any restaurant nowadays and one will immediately notice the following: tables packed with friends and family, enjoying a meal together. Yet despite the great company, the guests at some tables appear distracted, their eyes glued to a glowing box in their hand. Rather than taking the time to connect with others right in front of them, some prefer to roam the depths of the smartphone-sphere. Social media poses perhaps the most complex paradox, as noted by Forbes contributor Tardanico (2012). She stated, “With all the powerful social technologies at our fingertips, we are more connected—and potentially more *disconnected*—than ever before,” (Tardanico, 2012, para. 7). Does social media truly enhance a feeling of connectedness? Or is it causing us to feel more disconnected from our peers? Is online messaging interfering with our ability to truly communicate with each other?

This section will provide an overview of how the ubiquitous presence of screens and social media are changing the way adolescents socialize with each other. There will be numerous findings presented that demonstrate how communication is altered when behind a screen. In a society where technology is glamorized, it is vital that people understand how social behavior and interaction can change.

The Importance of Social Acceptance

Adolescence is characterized as a time of pivotal social development. It is marked by a paramount shift in which kids transition from being family-oriented to more peer-oriented. Social acceptance is immensely important to this age group because it opens students to new learning experiences and provides them with tools to help them relate to each other. For example, healthy friendships allow adolescents to learn about

empathy, problem-solving, compassion, coping with peer competition, and resolving conflict (Children's Health, n.d.; McNeely & Blanchard, 2009). To seek out an identity outside of the family, children are driven to search for a peer group (McNeely & Blanchard, 2009). This motivation to belong is partially stimulated by the brain, as healthy social interactions trigger positive feelings. Thus, one feels rewarded or joyful when socially accepted (McNeely & Blanchard, 2009). Simply stated, belonging to a peer group makes adolescents feel good about themselves.

Peers play a critical role in helping adolescents establish their identity. They impact one's attitude, values, beliefs, and behavior. This trickles down to affect even the most simple of things, such as fashion sense, musical interests, and involvement in extracurricular activities (McNeely & Blanchard, 2009). This demonstrates the important link that peer acceptance and sense of self have to each other. It is important to note that not all adolescents are influenced by their peers to the same extent. Generally speaking, those with a stronger desire to belong are more prone to be influenced by their peers (McNeely & Blanchard, 2009).

The absence or lack of peer connection may lead adolescents to experience feelings of rejection, withdrawal, inferiority, and isolation. Studies have shown that children lacking feelings of social connectedness are more vulnerable to experiencing depressive symptoms. Researchers have discovered a correlation between low levels of peer acceptance and the experience of mental health conditions such as depression and social anxiety (Foster et al., 2017). Additionally, children who are struggling with maintaining relationships miss out on learning critical social skills such as cooperating

with others, establishing empathy, listening to others, amongst many others (MacEvoy, 2011).

Socialization: Understanding Nonverbal Cues

The introduction of social media has transformed the way in which adolescents interact with each other, and these changes are not necessarily healthy. Rather than socializing with peers face-to-face, which is of the utmost importance for developing critical social skills, teens are spending an increasing amount of time communicating with others through a screen. A Common Sense Media survey demonstrated that only 32% of teens between the ages of 13 and 17 listed in-person interaction as their preferred method of communication. This percentage has decreased dramatically since 2012, where almost half of participants designated in-person interactions as their top choice. In comparison, 35% preferred texting, 16% preferred social media, and 10% preferred video chatting (Rideout & Robb, 2018).

In the times that children *do* spend together, teens reported that it is difficult to direct their attention away from their devices. One-third of the adolescents surveyed described that they never or rarely ever put their phones away when having a meal with another or when visiting with a family member. An even greater percentage, amounting to 55%, indicated that their phones are almost always present when spending quality time with friends (Rideout & Robb, 2018). This data paints an alarming picture: the presence of smart devices is changing the frequency and duration of face-to-face interactions.

The decline of in-person interactions amongst adolescents is concerning for a variety of reasons. To begin with, face-to-face interactions are essential to human development. Kids learn how to relay information both verbally and nonverbally.

Nonverbal cues such as eye contact, facial expressions, personal space, body language, and tone of voice allows students to show their own emotions and makes it more simple for kids to decode what other people are feeling. If a child is angry, he may have a flushed face or a loud voice. If a child is anxious, he may appear fidgety, hunched over, or have a shaky voice (Fuller, n.d.). Over time, kids learn to associate these different expressions, tones, or behaviors with emotions. When communicating by screen, kids are unable to see these nonverbal signs.

Picking up on nonverbal cues is critical to human socialization. In today's world, most of our face-to-face interactions rely solely on nonverbal communication. In fact, data suggests that 93 % of social interactions are based on nonverbal cues (Margalit, 2014; Tardanico, 2012). Nonverbal cues are important because children are able to sense one's emotions and respond appropriately. Margalit (2014), a social psychologist, emphasized the importance of picking up on nonverbal cues, stating:

When we interact with others, we continuously process wordless signals like facial expressions, tone of voice, gestures, body language, eye contact, and even the physical distance between us. These nonverbal signs are the heart and soul of the interaction. We cannot understand the true meaning of an interaction if we do not have the ability to interpret these nonverbal signals. They enable us to infer the other person's intentions, as well as how involved they are with the interaction, whether they are stressed or relaxed, if they are attracted to us, and so on. (Margalit, 2014, para. 8)

In different social situations, one must be able to "read the room" and adjust our behavior accordingly. Comforting a friend who is in tears or introducing oneself to a

classmate on the first day of school are two very different situations that require different responses and behavior. Kids who truly understand how to interpret these cues tend to foster positive peer relationships and have exceptional social skills (Fuller, n.d.).

In contrast, those who communicate behind a screen miss out on detecting nonverbal cues. This hinders children's ability to develop basic social skills that are vital for strong and healthy peer connections (Fuller, n.d.; Margalit, 2014).

Online Messaging and Emotional Disconnect

Discerning emotions in online interactions can be quite challenging. When one sends a text, there is an uncertainty surrounding the mood or tone of the message. Suppose an individual receives a text from a friend that reads, "I'm fine", the recipient has no way of knowing whether the sender truly is fine, or whether they are just saying that to hide their true emotion. The recipient is provided with no cues or signals as to how the sender is feeling (Tardanico, 2012). Online messaging eliminates any and all sense of context that are needed to enhance conversation. Tardanico touched on this further by explaining, "With 93 % of our communication context stripped away, we are now attempting to forge relationships and make decisions based on phrases. Abbreviations. Snippets. Emoticons. Which may or may not be accurate representations of the truth" (Tardanico, 2012, para. 8).

When messaging others online, there is an element of disingenuity (Tardanico, 2012). When one is feeling sad or depressed, all it takes is the press of a smiling emoticon to signal feelings of happiness. When the sender receives the smiley emoticon, he assumes that the sender must be in a happy mood, despite the many tears behind the screen. Online messaging creates a false narrative as to how one is truly feeling. The lack

of authenticity makes it easier for adolescents to mask any negative emotions they may be experiencing. For example, Tardanico (2012) describes the experience of Sharon Seline. In October 2011, Sharon Seline was texting back and forth with her daughter, who was away at college. Seline was curious to know how her daughter was adjusting to this new environment, so she asked her questions about how everything was going. Her daughter's responses conveyed a sense of positivity. She responded with positive comments, smiley faces, and heart emoticons—all indicators that she *must* be thriving and filled with joy.

This was far from the truth. In fact, Seline's daughter was anything *but* happy. Seline experienced a shock to her system later that night after she was notified that her daughter had attempted suicide. Further investigation revealed that her daughter showed many depressive symptoms—such as isolating herself in her dorm and crying. All of this fell completely under the radar. Her text conversations with her mother failed to capture the immense pain and suffering she was feeling (Tardanico, 2012). As adolescents mature and progress through school, it is essential that they are able to engage in real, authentic, conversation. It is through these conversations that one is able to gauge other people's emotions and feelings.

Conversations: A Change in Pace

In-person interactions are known to be a “synchronized” method of communication because the speaker and listener are both actively involved in the conversation (Margalit, 2014). While one is speaking, the other is quiet. While one is explaining using facial expressions and different tones of voice, the other is actively listening, nodding her head in agreement or gasping in surprise (Margalit, 2014). With

reciprocal communication, the responses are coordinated and immediate. The direction of the conversation is based entirely on the signals each person is projecting and receiving throughout the duration of the conversation.

In contrast, digital communications are defined as an “unsynchronized” communication style (Margalit, 2014). While messaging over text, the responses are neither coordinated, nor immediate. One may text a friend, “Hey! What are your plans for the weekend?” and not hear back for hours. It becomes unclear as to whether the recipient read the message or whether the recipient read the text, but chose not to respond. This may cause adolescents’ imaginations to fill in the gaps, and come to their own conclusion as to why their message garnered no response. *I bet she’s mad at me, that’s why she didn’t text me back*, one may think. *He probably doesn’t want to hangout with me. He’d rather be with his cooler friends, so he’s just going to ignore me*, thinks another. The inability to detect the recipient's signals combined with the lack of immediate response makes for an interaction that is majorly uncoordinated (Margalit, 2014). With online messaging, some conversations may be dragged out over a series of hours, days, and perhaps even weeks.

Online interactions become “less demanding” for the individual because less attention and energy is required (Margalit, 2014). Recipients of messages have no way to read or detect the sender’s signals, leading one to question, *Is the tone of this text upset? Is this person sad? Anxious?* Additionally, the responses do not always elicit a rapid response. Because online interactions require far less effort, they allow people to multitask while the conversation is still taking place (Margalit, 2014). For example, one may be messaging a parent about soccer practice while completing a homework assignment, or responding to a friend about her messy breakup while shopping online.

With online messaging, people's attention tends to become divided. This fractured focus that results from the mere presence of a smartphone can negatively impact social relationships.

As demonstrated, peer groups and social acceptance is of integral importance during adolescence. While many adolescents may turn to social media and online messaging as a way to feel connected, it is important that they understand the superficiality that coincides with it (Jacobson, n.d.). Communicating digitally may create a space where interacting with others feels more casual, comfortable, and care-free, but the relationships that are established may not always be *real*. People's online personas are not always reflective of one's authentic self. Additionally, online relationships cause children to miss out on important social skills, such as the ability to read and react to nonverbal cues. From the research reviewed, it is evident that the most authentic method of communication occurs when face-to-face with another.

Social & Emotional Learning (SEL) as a Tool

The research referenced in this literature review have made it abundantly clear that social media affects adolescents in ways that can be detrimental to their cognition and academics, mental health, and socialization. Since social media is becoming the new normal, it is imperative that educators take measures to educate students on the potential risks associated with social media usage and offer tools to overcome the challenges that social media presents. This can be achieved through the implementation of a social and emotional learning (SEL) curriculum. The Collaborative for Academic, Social, and Emotional Learning (CASEL) defined SEL as,

The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. (Collaborative for Academic, Social, and Emotional Learning , n.d., para. 1)

At its core, SEL seeks to develop emotional and social competencies amongst youth in schools. The foundation is composed of five core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision making (Collaborative for Academic, Social, and Emotional Learning, n.d.). These skills provide students with a foundation of skills that are necessary to maximize their potential in life, such as establishing relationships and academic achievement. For students, the utilization of SEL teaching leads to improved academic performance, healthy peer and adult relationships, and reduced misconduct and risky behaviors (Greenberg et al., 2003).

The focus on these five skills is significant and purposeful because when taught explicitly, adolescent brain functioning is primed to elicit behavior that is empathetic and healthy (Owen, 2015). Through the teaching of these abilities, students are led down a path that is bound for success. It is the central goal of this framework to equip students with the necessary tools to succeed in school, work, and life (Committee for Children, 2019).

This section describes in detail the benefits of implementing a SEL based curriculum. The findings presented will emphasize the positive and long lasting effects that SEL curriculum has on students. Additionally, this section outlines how this

curriculum can be used to educate adolescent students on the potential risks of social media and how to use it in a way that does not harm one's self and others.

Social and Emotional Learning in the Classroom

In classrooms that utilize the SEL framework, there are two components that are essential to implement for success. The first is the establishment of a positive school learning environment. At its core, positive school learning environments center around the formation of strong, compassionate teacher-student relationships (Collaborative for Academic, Social, and Emotional Learning, n.d.). Creating a classroom environment where students feel safe, free to be themselves, and valued is foundational to SEL. In positive classroom atmospheres, teachers approach classroom management and instruction through a humanistic lens. They implement strategies and practices that support students' social-emotional needs (Collaborative for Academic, Social, and Emotional Learning, n.d; Elias, 2004). Teachers work to create a classroom community where there is a sense of mutual trust, respect, and belonging. This learning approach prompts students to feel more bonded to their school.

There is extensive research that demonstrates the powerful effect positive learning environments have on students (Collaborative for Academic, Social, and Emotional Learning, n.d; Cook et al., 2018, Elias, 2004). A University of Minnesota study (Cook et al., 2018) investigated whether the act of teachers positively greeting students at the door improved classroom behavior. The results demonstrated that this small and simple gesture yielded strong effects. For example, student academic engagement improved by 20%, and disruptive behavior was reduced by 9% (Cook et al., 2018). In classrooms where relationships are at the forefront, students are more likely to feel a greater sense of

connection to their peers, teacher, and school (Collaborative for Academic, Social, and Emotional Learning, n.d). This deeper sense of connectedness drives students to acquire “prosocial” and “proacademic” norms and mindsets that are modeled and encouraged by individuals in this environment (Collaborative for Academic, Social, and Emotional Learning, n.d, p. 4). Quite naturally, students in these positive settings become more intrinsically motivated because they feel both “psychologically and physically safe,” (Collaborative for Academic, Social, and Emotional Learning, n.d, p. 4). It is for this reason that students with exposure to SEL teachings see a reduction in substance abuse, criminality, aggression, emotional distress, and sexual activity (Collaborative for Academic, Social, and Emotional Learning, n.d; DePaoli et al., 2018; Elias et al., 1997).

The second element that is integral for success is providing social and emotional competency instruction (Collaborative for Academic, Social, and Emotional Learning, n.d.). Because SEL classrooms are so relationship-centered, it is essential that adolescent participants possess basic social and emotional skills. How can teachers require their students to participate in a pro-social setting if they lack the fundamental tools?

In order to thrive in SEL classrooms, students must be able to conduct themselves in a manner that is positive and appropriate. The purpose of social-emotional competency instruction is to introduce, build, and fortify necessary social skills. Teachers often integrate these skills within their content areas to increase engagement. Students with healthy social-emotional habits are more likely to value their education and seek out learning opportunities (Collaborative for Academic, Social, and Emotional Learning, n.d.; DePaoli et al., 2018).

The Power of Social and Emotional Learning

Some research found evidence that SEL is of equal importance, or in some cases *more* important, to the traditional content areas, such as math and reading (Brotto, 2018). Social and emotional competencies directly relate to how well one copes to change, how one transitions to new environments, and most importantly, how successful one will be. In essence, SEL seeks to improve student mental health and wellbeing by providing them with coping skills and mindfulness strategies to ensure a positive mindset. The core abilities of self-awareness, self-management, social awareness, relationship skills, and responsible problem-solving are thought to be of greater significance in the future when applying for jobs compared to academic skills (Brotto, 2018).

Studies show that SEL teachings lead to positive, long-lasting outcomes for students (Elias, 2004; DePaoli et al., 2018; Tierney, 2020; Yoder; 2014). A 2018 report conducted by The Collaborative for Academic, Social, and Emotional Learning (CASEL) sought to determine how SEL affects students in the long-term. They executed a nationally representative survey of adolescents between the ages of 14 to 22 that included some in-depth interviews. In order to gauge their exposure to the SEL curriculum, the surveyors had participants use a SEL capability scale to assess their school. Participants were asked how well their high school worked to develop the following seven SEL skills: working with others, including those who are different from oneself, self-confidence, awareness and understanding of other people's feelings and views, finding solutions to disagreements in a positive manner, emotional awareness of self, managing conflict, and coping with stress (DaPaoli et al., 2018). Schools with a strong SEL capability meant that students felt they effectively taught six or seven of the skills mentioned. Schools with a

medium SEL capability translated to effectively teaching two to five of the skills. Weak SEL capability schools amounted to those that effectively taught zero or one of the skills (DePaoli et al., 2018).

The results from this report were astounding. First, it was discovered that both current students and young adults who attended strong SEL capability schools reported a “more positive social climate and learning environment,” (DePaoli et al., 2018, p. 3). Those surveyed also felt that they had greater academic achievement and preparedness for life after high school compared to participants who attended schools that did not emphasize SEL as strongly. This amounted to a substantial 83% (DePaoli et al., 2018).

The specific data provided in the study further proved the power that SEL teachings uphold. For example, 92% of participants attending strong SEL schools and 90% of former students from strong SEL schools rated them with a letter grade of A or B in terms of their ability to create a positive and supportive learning environment. In contrast, only 55% of those attending weak SEL schools and 42% of former students from weak SEL schools rated them with an A or B letter grade (DePaoli et al., 2018). This stark contrast highlights the powerful impact SEL can have, not only in regards to academics, but preparing students for life beyond high school.

Even more astonishing were the disparities regarding feelings of inclusion and empathy in strong SEL schools versus weak SEL schools. When asked about peer cooperation, 89% of students from strong SEL schools indicated that students get along with each other. This compared to 46% of students attending weak SEL schools. Additionally, 80% of students originating from strong SEL schools reported that they respect and value the opinions of their classmates, while only 25% of students from weak

SEL schools expressed the same feelings (DePaoli et al., 2018). Another noteworthy finding from the data included that strong SEL schools elicited stronger feelings of safety and security while at school compared to weak SEL Schools (DePaoli, 2018).

When asked about the effectiveness of attending a SEL focused school, a high school student replied,

“I wouldn’t have talked to kids who are different from me at my old school. Now I will. If I don’t understand anything I can ask a teacher. I went from D’s to A’s. I was ready to stop going at my old school,” (as cited in DePaoli et al., 2018, p. 4)

This data proves that the teaching of SEL fosters a learning environment where peers are able to practice and establish fundamental life skills, such as respecting differences and valuing others.

One final powerful finding from the study revealed that students attending SEL focused schools were more likely to participate in volunteer service activities or service-oriented employment. Of those surveyed, 57% of students from strong SEL schools indicated that they volunteer in the community on a regular basis. This %age compared to 28% of high schoolers from weak SEL schools. Additionally, a high percentage of strong SEL students reported that they were interested in service-based professions for future employment (DePaoli et al., 2018). When reflecting on the biggest takeaways from SEL, one high school student commented,

It’s going to help us in the long run, learning how to communicate with people and be open to others’ opinions. It helps me get along better with other kids my age. We all have the same skill set...If you believe that you can do something, you

will most likely succeed, like getting good grades in all your classes. (DePaoli et al., 2018, p. 4)

The results from this survey highlight the lasting impacts that a SEL curriculum can have on students. Those who experienced a SEL curriculum reported greater academic achievement, a greater willingness to work with others, and a greater call to help others in the community. Numerous other studies have confirmed the positive impact that SEL teachings can have (Elias, 2004).

A 2008 meta-analysis of over 200 studies discovered consistent findings about the benefits of SEL curriculums. For example, across studies, experts noted a 9% decrease in behavioral and conduct issues, as well as a 10% decrease in mental health conditions including depression and anxiety (Elias, 2004). Additionally, there was a 9% increase in positive attitude about one's self, peers, and school, a 23% increase in positive social-emotional skills, and an 11% increase in academic assessment scores.

The vitality of SEL came to fruition during the COVID-19 pandemic, as children were suddenly torn away from their teachers, friends, teammates, and daily routines. As schools locked their doors, students were not only thrust into the uncharted world of distance learning, but also into the uncharted world of a pandemic—a time marked by fear and uncertainty. Life as they knew it changed drastically.

Gone were the days of eating lunch with friends in the cafeteria. Gone were the evenings filled with dance class and soccer practice. Gone were the times when a student could sit side by side with their teacher, solving a math problem. Gone were Saturday nights spent with friends. All ties to the outside world were severed, leaving kids

confined to the walls of their home. The changes were unprecedented. A writer for the New York Times described the challenges students had to endure,

The shuttering of the American education system severed students from more than just classrooms, friends, and extracurricular activities. It has also cut off an estimated 55 million children and teenagers from school staff members whose open doors and compassionate advice helped them build self-esteem, navigate the pressures of adolescence, and cope with trauma. (Levin, 2020, para. 7)

As school shifted to screen, SEL became a lifeline for educators to gauge their students' emotional wellness during this tumultuous time. Teachers turned to teaching lessons centered on coping to change, emotional awareness, and growth mindset in an attempt to ease their pains. Rather than prioritizing math assessments and reading, teachers directed their attention to mental health. The most important question of the day became "How are you doing today?" (Tierney, 2020). The incorporation of SEL provided teachers with a sense of clarity surrounding their students' wellbeing, during a time when the world was engulfed with fear (Tierney, 2020).

It is evident that the teaching of core developmental skills, such as empathy and conflict management, are transformative. In summary, SEL provides students with the tools they need in order to evolve into empathetic, inclusive, and successful individuals. In the forthcoming section, the five core competencies of SEL will be defined at great depth. Each core competency plays a vital role in countering the negative effects stemming from social media use.

Core Competency #1: Self-Awareness

The core competency of self-awareness refers to one's ability to develop a strong sense of self. It encompasses the skills of being in touch with one's own emotions, being aware of one's strengths, and demonstrating self-efficacy (Washoe County School District, n.d.). Individuals who master this skill have a deep understanding of who they are and ultimately, they believe in their ability to succeed.

As noted in the previous findings of this chapter, social media takes a toll on students' mental health. Numerous studies noted a positive correlation between social media use and depressive symptoms (Abi-Jaoude et al., 2020; Odgers & Robb, 2020; Rideout & Robb, 2018; Kerpen, 2017; Twenge et al., 2017). When students scroll through social media feeds, they are prone to compare themselves to others, experience feelings of FOMO, and feel negatively about their physical appearance. All of these feelings lead one to believe that her life does not measure up to social media standards. The teaching of self-awareness skills provides students with the tools to self-monitor their behavior (Washoe County School District, n.d.). If students are able to recognize feelings of anxiety or depression, they may be more likely to seek help.

Core Competency #2: Self Management

The core competency of self management centers on emotional regulation and stress management. Those who possess strong self-management skills are able to manage their emotions in various contexts, set attainable goals for themselves, and demonstrate integrity (Washoe County School District, n.d.).

Self management is of the utmost importance during adolescence because students experience fluctuating emotions and mood swings. Social media postings may

trigger a variety of feelings. One moment, a girl may post a selfie of herself and feel on top of the world. Seconds later, she may stumble upon a selfie of another whom she feels is far more attractive than her. The short-lived positivity quickly drains from her body, leaving behind a deeply ridden pain. Social media is like an emotional rollercoaster—forcing teens to shift gears between joy and despair, making self-management increasingly challenging. Teaching self management, as well as management of impulse control, is important for teens with a substantial online presence because it provides them with the tools to manage stress and emotions. With the teenage brain still in the midst of developing, many teens do not consider the effect that their online actions can have on others, as well as themselves. A SEL curriculum is beneficial with aiding students to make healthy decisions online.

Core Competency #3: Social Awareness

The core competency of social awareness focuses on teaching the skills of empathy and respect for others, as well as valuing diversity. When one develops proficiency of this skill, there are a few key indicators. The first is the ability to understand other people's emotions and perspectives. This is done by establishing empathy. The second indicator is the ability to respect and value other peoples' differences. This is taught through lessons centering on respect and acceptance. The third is possessing an understanding of how to provide help and support to those in need (Washoe County School District, n.d.).

Teaching social awareness is integral to promote positive online behaviors. As the research noted earlier in the chapter, increased screen media activity is known to lead to a thinning of the insula, the part of the brain responsible for eliciting empathic responses

(Blakeslee, 2007; Dunckley, 2014; Horvath et al., 2020). For example, when kids scroll through Instagram, they feel a need to broadcast every aspect of their life. They may document what they are eating for breakfast, cappuccino art, friends they are with, activities they are doing, amongst others. Adolescents often share these “harmless” posts with little regard for how others who view them may feel. Posts of friends clinking glasses around a dinner table may trigger feelings of rejection, isolation, and exclusion amongst those who were not invited. Videos of high schoolers at a party sparks feelings of FOMO when outsiders see them online. Girls who leave derogatory and insulting comments on classmates’ photos fail to recognize the weight their actions carry. Through the explicit teaching of empathy, adolescents can learn how to be more mindful and considerate of others online.

A second core teaching is respecting and valuing others. On social media, students feel more empowered to use words that are insulting, unkind, and demeaning. It is far easier to post mean statements, than say them to one’s face directly. Through SEL, teachers are able to speak directly to cyberbullying prevention (Tierney, 2020). It is essential for adolescents, who are already experiencing many emotional shifts, to develop healthy and effective strategies to navigate online harassment. Whether a student falls into the role of victim, perpetrator, bystander, or all of the above, students must possess an awareness of appropriate conduct from all angles.

Core Competency #4: Relationship Skills

The core competency of relationship skills focuses on relationship building and communication. Adolescent students are seeking out friendships to establish identity. For this reason, it is pivotal that adolescents are able to build *and* sustain relationships with

their peers. Additionally, it is important that students possess the ability to communicate assertively in order to manage or resolve conflicts. Students who demonstrate mastery of this skill are able to forge positive relationships with individuals originating from different backgrounds, cultures, and lifestyles. They are able to advocate for themselves and others in various social settings (Washoe County School District, n.d.). Behind the screen, adolescent communication skills become stunted. Building relationships that are genuine and real becomes increasingly difficult when most interactions occur online (Margalit, 2014; Jacobson, n.d.). SEL bridges this gap by incorporating interpersonal activities and practicing social skills. Additionally,

Core Competency #5: Responsible Decision Making

The core competency of responsible decision making prioritizes problem-solving and maintaining responsible behaviors in both social and academic contexts. (Washoe County School District, n.d.). One who develops proficiency in responsible decision making is able to apply the following principles: use an ethical approach when making decisions, demonstrate personal accountability for one's actions, use problem-solving skills appropriately during social affairs, and to make positive contributions to one's community (Washoe County School District, n.d.).

When students log online, one's perceptions of right versus wrong can quickly become skewed. Adolescents can be easily influenced by the actions of celebrities and their peers. If a teen comes across photos of their peers engaging in risky behaviors such as alcohol consumption or drug use, that individual may begin to feel that the behavior is normative. In a time where children are striving to fit in, some will do whatever it takes to be perceived as cool or popular (Washoe County School District, n.d.). However, many

teenagers fail to realize that their online activity leaves behind a digital footprint, or a trail of data generated by one's internet activity (Ericksen, 2018). Harrington, a media and branding consultant, described a digital footprint as, "anything that is about you or put out by you on social media," (Ericksen, 2018, para. 6). This trail of digital breadcrumbs is permanent, following people for years to come. When adolescents post content that shows them engaging in risky behavior, that content is likely not to disappear, despite being deleted. It may come back to haunt them during job interviews, or university acceptance. Through SEL, adolescents learn the importance of weighing the consequences of their actions. They learn how to problem solve effectively in different situations. This is transferable to online behaviors because it teaches teens to be more mindful of their online behavior.

How Social and Emotional Learning Can Help With Social Media

The introduction of social media platforms has created a new digital dimension, where participation demands the posting of heavily edited content and the portrayal of a perfect life. Adolescents create post after post—projecting snapshots of their life into the cybersphere. With the swift click of a button, students have access to the world at their disposal. For secondary students today, social media and reality have become closely intertwined, blurred together with no clear line as to where one ends and the next begins. It is essential that our tech-savvy teens are equipped with the necessary tools to be mindful and responsible social media users. By incorporating SEL into the classroom, students can learn about positive online behaviors for social media use, as well as develop an awareness of potential risk factors and how to avoid them.

Conclusion

In conclusion, this chapter focused on the various aspects of adolescents' development and lives in which social media takes a toll. While seemingly harmless in nature, research has found ample evidence that social media is detrimental to adolescent cognition and academic performance, mental health and wellbeing, and social interaction. The implementation of a social and emotional learning curriculum can effectively educate adolescents about the potential risks associated with social media usage and provide an opportunity to develop the skills to navigate and engage with social media in a way that is healthy. Since social media usage is likely to only increase in the future, it is integral that students with developing minds and bodies are prepared to navigate its rocky terrain.

The next chapter of this capstone project will address a curricular approach in response to the research question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity that stems from adolescent social media usage?* I will thoroughly describe a series of lessons targeting middle school students that specifically focuses on cultivating healthy online habits and behaviors.

CHAPTER THREE

Project Description

Introduction

This project sought to answer the research question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity that stems from adolescent social media usage?* This inquiry is framed by the abundance of research demonstrating a need for a curriculum to address toxic online behavior. The previous chapter focused on the various aspects of adolescents that are affected by social media: brain development and academic performance, mental health, and socialization. A SEL curricular approach was introduced as a framework that when implemented, offers many benefits for adolescents navigating online platforms.

To address the research question at hand, this capstone project will take the form of a series of advisory lessons targeted for middle level students in the sixth grade level called Digital Life Studies. This project will introduce lessons grounded in SEL methods to teach positive online behaviors. These lessons will be taught on a weekly basis to allow teachers to have the flexibility to address other important advisory topics such as team building, school announcements, and service learning. The purpose behind these lessons is to promote awareness of the potential risk factors associated with high social media usage, as well as to explicitly teach strategies and practices to help students engage in healthy online habits and not cause pain to self or others. This chapter will describe the rationale behind the project, the intended audience and setting for implementation, the

project description, the learning framework involved, assessment, and the timeline of implementation.

Project Rationale

Research suggests that increased screen media activity is negatively impacting various aspects of adolescent development including cognition, mental health, and socialization. The Common Sense 2018 survey conducted by Rideout and Robb demonstrated the dramatic increase in social media and smartphone usage since 2012. Nowadays, a majority of teens are owners of their own devices, which unlocks the door to social media profiles. This survey also highlighted the fact that most teens prefer online communication, rather than in-person interactions (Rideout & Robb, 2018). This data speaks to the strong grasp social media has on its users. For this reason, it is vital for 21st century teens, as well as adults in influential positions, become educated about how their online activities may be of harm to self and others. When kids login to Instagram or TikTok, it is essential that they possess an understanding of how different postings may affect their self-esteem or hurt others. Using the tools provided by SEL, kids are able to monitor and regulate their emotions, become mindful of others, and be prepared to take action when witnessing acts of online bullying. With social media accounts more likely to increase in popularity and use rather than decrease, there must be a curriculum in place to teach the research on social media impacts.

This can occur through the implementation of a social and emotional learning curriculum. Advocates for SEL argue that it is beneficial because it teaches students important “life” skills (CASEL, n.d.; Elias et al., 1997). SEL teachings are just as

important as core content areas because they equip students with the tools they need to find success in life beyond the classroom.

In order to combat these developmental changes, it is critical that adolescent students, the heaviest users of social media and smart devices, possess an awareness of the potential risk factors that coincide with high online activity and develop strategies to navigate these challenges in ways that protect the well-being and mental health of themselves and others.

Project Description

To address the growing need for a curriculum pertaining to social media etiquette and behavior, I have designed a series of advisory-based lessons that are grounded in SEL methods. The lessons, titled Digital Life Studies, are designed to be implemented as a schoolwide initiative for sixth grade students specifically, meaning that all students in that grade level will be exposed to this curriculum. These lessons will address eight common themes of social media usage: online identity, maintaining balance between online and offline activity, cyberbullying, the highlight reel, the fear of missing out (FOMO), body image and the perfect image, digital footprint, and digital dangers. The execution of the Digital Life Studies lessons target the potential risks that coincide with high screen media activity and allow students to engage in open discourse surrounding these topics.

The Digital Life Studies curriculum will be embedded in the advisory curriculum throughout the school year so sixth grade students can continue to engage with this issue. At the school of implementation, the advisory period is a forty-five minute class period where students meet with their homeroom teacher. This time serves a variety of purposes,

including team building activities, independent reading time, media center book checkout, teacher check-in and homework time, goal-setting activities, team meetings, service learning, amongst several other activities. The Digital Life Studies lessons are also meant to be introduced on a weekly basis, giving teachers the opportunity to be flexible with how they utilize their advisory time.

The structure of these lessons will vary from topic to topic. However, all lessons will share the common pedagogical structure of introducing the topic with warm up discussion questions, then utilizing direct instruction to explain the topic, followed by a student-directed cooperative activity, and ending with a reflection task as closure. Since all students can relate to this topic in some way, it is essential that they are given the opportunity to ask questions, express their thoughts, and share their opinions. All of the lessons incorporate different discussion methods to prompt students to engage in open conversations. Some examples of the different methods utilized include fishbowl discussions, carousel discussions, partner discussions using think-pair-share, small group discussions, gallery walk, philosophical chairs, and concentric circles. The variety of discussion modes is purposeful in the sense that they are meant to play to the strengths of each individual learner. For example, some students prefer smaller and more intimate settings in order to feel comfortable expressing their opinions, while other students thrive in a larger group. The range of discussion models provides opportunities for students of various comfort levels to participate and share their opinions.

Intended Participants & Setting

The lessons at hand were designed to be implemented in a middle-level setting, specifically targeting students in the sixth grade. At the middle school being discussed,

there are approximately 1,316 total students. Amongst this population, 464 students are sixth graders (U.S News, n.d.). The middle-level population was chosen purposefully because of their increased vulnerability as they undergo puberty and experience numerous significant developmental changes. Children at this age are beginning to seek out their core identity for the first time. The addition of a smartphone during this period of growth can make development more challenging and complex.

The intended setting for this project is a middle school with students in grades 6 through 8. The school in mind is located in a suburban Midwestern city that has a population of over 76,000 residents. The student population of this middle school is predominantly white, as 57.1% of the students identify as White. More specifically, 23.3% identify as Asian, 9.1% identify as Black, 5.8% identify as two or more races, 4.4% identify as Hispanic, 0.2% identify as Pacific Islander, and 0.1% identify as American Indian. Amongst the student body, 11.4% qualify for free and reduced lunch.

Learning Framework

At the school of implementation, there is already a SEL curriculum in place known as Top 20. Similar to the structure of my Digital Life Studies curriculum, these lessons are also executed once per week. The Top 20 philosophy focuses on establishing a positive growth mindset amongst students. In Top 20 classrooms, students learn to become more aware of their thinking, learning, and communicating—coined as the acronym TLC by the developers (Bernabei et al., 2019). Once students determine successful ways to think, learn, and communicate, they are able to unlock their full potential. A simple way to envision this idea is the line, an essential component of this framework. When an individual is *above the line*, their TLC is effective. This means that

one's thinking is working in his or her best interest and serving one well. In contrast, when an individual is *below the line*, their TLC is ineffective. In other words, one's thinking is *not* working on his or her best interest (Bernabei et al., 2019). As humans, we fluctuate from above the line to below the line throughout the day, throughout the week, and throughout the year. It is a process that is fluid and ever changing. Through this curriculum, students are given the tools to recognize their own TLC and monitor where they fall on the line. The ultimate goal of the Top 20 program is to teach students strategies and practices to stay "above the line", otherwise known as maintaining a growth mindset, as much as possible (Bernabei et al., 2019).

The Digital Life Studies curriculum I have created will serve as a supplemental unit of study to the Top 20 lessons. On the day when students are not participating in Top 20 lessons or completing additional tasks, they will engage with a social media centered lesson. Similar to Top 20, my curriculum focuses on fostering healthy habits for productive, positive mindsets in an *online* setting. After viewing post after post online, it becomes second nature for adolescents to compare, share, and potentially feel despair after being bombarded with unrealistic norms. When students approach social networking sites, it is vital that they view their activity through an educated, humanistic lens. The Digital Life Studies curriculum bridges important life skills such as mindfulness, empathy, and responsibility with appropriate online etiquette. It teaches students how to live "above the line" even in the digital world.

When implementing a SEL-based series of lessons, there are methods and strategies that must be utilized in order to be successful. The Center on Great Teachers and Leaders for the American Institutes for Research emphasized the importance of

teaching the whole child in order to support students in mastering the SEL core competencies (Yoder, 2014). They have identified 10 instructional methods that when implemented, promote positive learning, support social and emotional competencies, and drive academic engagement. These methods were determined through a comprehensive literature review that focused on SEL research and current programs (Yoder, 2014).

Method 1: Student-Centered Discipline

Student-centered discipline is an approach to classroom management that is meant to motivate students to *want* to behave more appropriately. Using this technique, teachers rely on positive reinforcement, rather than punishment, to redirect behavior. Any consequences that are given to students are reasonable and in some way related to the undesired behavior. Additionally, teachers utilizing student-centered discipline techniques also provide their students with ample opportunity to have some *choice* or say regarding their learning activities. Allowing students to be self-directed, active learners is effective with curbing inappropriate behaviors (Collaborative for Academic, Social, and Emotional Learning, n.d.; Yoder, 2014).

Method 2: Teacher Language

Many are familiar with the saying, it's not what you say, but how you say it. In SEL classrooms, the manner in which teachers speak and communicate with students can be incredibly impactful (Adams, 2017; Yoder, 2014). In fact, research reveals that the tone of voice an educator uses amongst students may have a more powerful effect than is realized. After conducting an experiment of her own amongst her kindergarten students, Wash discovered that students were more engaged in class when projecting a tone that was more upbeat (Adams, 2017). During the adolescent phase, teachers serve the

important role of acting as a role model for students. As students experience fluctuating mood swings and intense emotions, it is vital that teachers maintain a positive and supportive attitude.

Additionally, teacher language encompasses more than tone of voice. Teacher language can also refer to providing feedback that is encouraging and specific (Yoder, 2014). For example, when completing a task in the classroom, teachers should do more than simply praise a student's accomplishments. Telling a student, "Good job!" lacks specific direction and encouragement. In SEL classrooms, a common practice used amongst educators is to praise the student for his or her effort, summarize what the student accomplished, and describe what steps can be taken to improve and grow (Yoder, 2014). For example, a teacher may remark, "I can tell you put a lot of effort into this essay. When you slow down and take your time, the quality of your writing improves greatly. To help your writing grow even more, I am going to challenge you to elaborate and explain your thinking in greater detail." Here, the teacher is providing feedback and guidance in a way that is positive and constructive.

Another component of teacher language in SEL classrooms is facilitating conversations with students where they are prompted to monitor and reflect on their behavior (Yoder, 2014). In SEL classrooms, teachers do not tell students how to act. A simple comment such as, "It was not appropriate to yell during class today," prevents the student from reflecting on his behavior. Rather, SEL teachers engage their students in a dialogue where they can guide them to problem-solve and regulate their behavior. An example of effective teacher language being used may sound like this, "I noticed you were upset in class today. What strategies have we learned you could use when you find

yourself in a situation where you are starting to feel angry?” Through these conversations, students are forced to slow down and think more deeply about their behavior and actions.

Method 3: Responsibility and Choice

Providing students with the freedom of choice is vital for maintaining motivation and holding students accountable. Teachers in strong SEL classrooms design lessons with the incorporation of democratic principles. This means that students are given a say, to a certain extent, in deciding which learning activities and lessons they would like to participate in. One of the instructor’s roles is to provide students with choices that are both “controlled and meaningful” (Yoder, 2014). Giving students a voice in how they spend their class time enables students to take a greater responsibility over their learning. The power of choice is known to demonstrate increased effort and level of understanding when students are able to select their text or task (Schiefele, 1991, as cited in Turner & Paris, 1995; Turner & Paris, 1995). Turner & Paris identified an increase with students’ engagement and motivation in the classroom when presented with the following factors known as the “6 C’s”: choice, challenge, control, collaboration, constructive comprehension, and consequences (Turner & Parris, 1995). When students’ voices are prioritized, a drive in motivation follows.

Method 4: Warmth and Support

In order for SEL classrooms to operate effectively, students need to feel supported by their teacher and their peers socially, emotionally, and academically. It is the ultimate responsibility of the teacher to create a classroom atmosphere where there is mutual respect and compassion for one another. Instructors can accomplish this by expressing an

interest in their students' lives outside of the classroom, asking students questions (some about school, some not about school), facilitating conversations about topics students can relate to, and checking in with students when a concern or problem arises. By taking these steps, teachers can build strong and productive relationships with their students. By taking a personal interest, teachers are able to show students that they genuinely care about them (Collaborative for Academic, Social, and Emotional Learning, n.d.).

In addition to making students feel *supported*, teachers also need to ensure that their students feel *included*. In order to ensure that students feel like valued members of the class, teachers can embed learning activities where students have the opportunity to share about themselves, their life experiences, or their takeaways from the lesson.

Method 5: Cooperative Learning

The Cooperative Learning Institute defines cooperative learning as, “the instructional use of small groups so that students work together to maximize their own and each other’s learning,” (Johnson & Johnson, n.d., para. 5). Essentially, cooperative learning focuses on having students work together to attain a common goal. One of the benefits to this learning style is that it reinforces interpersonal and problem-solving skills—which are critical skills to develop during adolescence (Collaborative for Academic, Social, and Emotional Learning, n.d.). While working in a small group setting, students learn to collaborate in a way that is efficient, positive, and productive. Students may be forced to work with individuals they do not know, or with those who have differing opinions and ideas. Learning how to navigate and behave in small group settings with different dynamics and personalities is critical for adolescent socialization.

Method 6: Classroom Discussion

Classroom discussions are an integral component to any SEL classroom. One unique aspect of this method is that the roles reverse— the teacher takes on a more passive role, while students are held responsible for taking charge and leading the class. In this scenario, the role of the teacher is to merely act as a facilitator, while the students are responsible for driving the conversation. This activity forces students to become more active in the learning process. For some students, this can be incredibly motivating. For others, this may present as a challenge.

One of the many benefits of having classroom dialogues is that it allows students to express their ideas and share their thinking in a way that is more open-ended and conversational (Collaborative for Academic, Social, and Emotional Learning, n.d.). Students are able to respond, elaborate, and build off each other’s insights. However, in order for this to be done successfully, it is important that students possess the ability to not only *listen* to each other, but to respond in a way that is appropriate and thoughtful (Collaborative for Academic, Social, and Emotional Learning, n.d.).

Method 7: Self-Reflection and Self-Assessment

Self-reflection and self-assessment is an important practice in SEL classrooms because it forces students to “actively think about their own work,” (Collaborative for Academic, Social, and Emotional Learning, n.d., p.15). Allocating time for students to review and reflect upon the work they have completed prompts students to think more deeply and concretely about what steps they can take to improve and grow as learners. They are able to identify their strengths, and target specific areas of improvement. When

students think about how to develop and enhance their work, they are engaging in the process of goal-setting.

Outside of academics, the skill of self-reflection is invaluable for adolescents because it teaches them how to identify moments where change or help was needed. At the middle level, students are in the midst of piecing together parts of their identity. Their mood may change as rapidly as their peer group for the day. The need to belong and the pressure to fit in can cause adolescents to behave in ways that are not always consistent, respectful, or appropriate. With the skill of self-reflection, students learn to identify mistakes and then make changes moving forward.

Method 8: Balanced Instruction

The Collaborative for Academic, Social, and Emotional Learning describes balanced instruction as, “using an appropriate balance between active instruction and direct instruction, as well as the appropriate balance between individual and collaborative learning,” (Collaborative for Academic, Social, and Emotional Learning, n.d., p. 16). Balanced instruction ensures that students are able to engage with the content in a variety of ways to meet each learner’s needs. It is important to note that though the word balanced is used, there is not always an even break between the types of instruction used during a lesson. In fact, a majority of SEL curriculums actually encourage educators to approach lessons using a more active lens to promote student engagement (Collaborative for Academic, Social, and Emotional Learning, n.d).

Method 9: Academic Press & Expectations

When students enter the classroom, it is important that they feel appropriately challenged and supported by their teacher. The term “academic press” describes the

instructor's ability to challenge students in a way that is meaningful, motivating, and appropriate (Yoder, 2014). One of a teacher's most important responsibilities is to meet students at their level—which ranges from student to student. A teacher with an effective academic press knows just how hard to push her students without invoking feelings of stress, frustration, or anxiety (Collaborative for Academic, Social, and Emotional Learning, n.d). When challenged, students should sense that their teacher believes in them, despite any mistakes or errors that occur along the way. The Collaborative uses the word “expectations” to refer to the teacher's belief that all students *can* and *will* succeed (Collaborative for Academic, Social, and Emotional Learning, n.d). In SEL settings, the instructor recognizes her students' potential regardless of their academic abilities or shortcomings. When pressing students, students will feel challenged, but will also know that their teacher is encouraging them along the way.

Method 10: Competence Building

The act of competence building refers to the development of social-emotional competencies throughout an instructional lesson. To describe it further, the Collaborative stated,

“Competence building occurs when teachers help develop social-emotional competencies systematically through the typical instruction cycle: goals/objectives of the lesson, introduction to new material/modeling, group and individual practice, and conclusion/reflection. Each part of the instructional cycle helps reinforce particular social-emotional competencies, as long as the teacher integrates them into the lesson,” (Collaborative for Academic, Social, and Emotional Learning, n.d, p.17). With this method, the teacher embeds positive social and emotional behaviors throughout each

segment of the lesson. The teacher not only models the desired behavior or task, but also steps in to guide and scaffold at times when students are off track.

In conclusion, the 10 methods listed above are considered to be crucial elements of any SEL classroom. These methods are significant because they promote prosocial and healthy emotional behaviors. As screen time continues to soar to drastic new levels, the reinforcement of basic social-emotional skills is more important now than ever before.

Assessment

Assessment is an integral component of any curriculum. Assessing students provides teachers with clear and direct feedback regarding student understanding, student engagement, gaps in student learning, and areas in need of clarification. To understand the efficacy of the series of Digital Life Studies lessons, it is essential that teachers collected data to monitor how the lessons are being interpreted by students.

The assessments administered by the teachers took a variety of forms, but all were distributed at the end of every lesson as a closure activity. Each assessment was designed using a different reflection tool. This was done intentionally in order to play to the strengths of each unique learner. For example, lesson one concludes with students completing a flipgrid video in response to the lesson's guiding questions. Other examples of assessments include padlet, parking lot exit tickets, written responses and, think-pair-shares. Each assessment tool requires students to respond to the lesson's guided question in order for the teacher to evaluate understanding.

Teachers also utilized informal observations during classroom discussion to gauge students' level of understanding. Many of these lessons were discussion driven, which

lends itself well to student evaluation. By taking informal notes during the discussion, teachers were able to get a sense of student engagement, understanding, and learning.

Timeline of Implementation

The timeline for the implementation of this project lasts from early September to the end of the semester in mid-January. Teachers were required to teach these lessons on a weekly basis throughout the first half of the year. By continuing to address the risk factors and effects of online use time and time again on a weekly basis, it is the intention that the message of healthy social media habits will resonate with students sooner rather than later. At the end of the semester in January, teachers will reassess and determine whether there is a need to continue on with social media-specific SEL lessons. There may be some topics that must continue to be addressed compared to others.

Conclusion

In conclusion, the Digital Life Studies capstone project equips students with the tools they need in order to be healthy and mindful social media users. Each week, students are given the opportunity to engage in healthy, open, and safe conversations with their peers regarding some of the hot-button issues stemming from social media platforms. The curriculum I have designed further enhances the school's current SEL curriculum model of Top 20. Both stress the importance of developing a positive and mindful mentality.

Chapter four will serve as a reflection regarding the implementation of my Digital Life Studies curriculum project. I reflect on both its strengths and weaknesses; its successes and shortcomings. I also discuss the necessary modifications that need to be made to the curriculum in order to more effectively support students. This chapter will

conclude my capstone project by effectively answering the question my research question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?*

CHAPTER 4

Conclusion

Introduction

When considering educational topics to explore further for this capstone project, I immediately knew that social media was a topic I was passionate about. As a teacher working in the middle level setting, I constantly field questions from friends and family who are curious as to why working in a middle school is desirable. “How could anyone want to return to middle school?” They often ask. Every single time that question is directed my way, my answer remains the same. My goal has been, and always will be, to make middle school a positive experience. I aim to shift middle school’s notoriety to a perception that is grounded in stronger optimism and favorability. The many developmental changes that adolescent students experience during the middle level years without a doubt make navigating the school scene more challenging, but this can also be an exciting time as well. In order to make middle school a more pleasant experience, it is my role as an educator to equip students with life skills that will transcend my classroom walls. Because social media has become so embedded in adolescents’ daily lives, I selected social media as a topic to learn more about how I can use my position as a teacher to help kids cope and manage their emotions as they relate to social media platforms. My research specifically focused on three different themes: social media’s effect on adolescent cognitive development and academic performance, social media’s effect on adolescent mental health and well-being, and social media’s effect on adolescent communication. The question that my capstone project sought to answer was: *How can*

social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?

Now that I have gathered information on the implications of social media usage and have had the opportunity to reflect through the creation of my Digital Life Studies curriculum, this chapter will focus on my key takeaways and insights throughout this project. To begin, I will discuss how my findings from the literature review in Chapter Two guided the creation of my Digital Life studies curriculum. Then, I will review the potential implications this project may have for students in the middle level setting. After, I will describe some of the limitations from my research. Next, I will explain my hopes for this project moving forward and how it could be used in classrooms in the future. To conclude this chapter, I will share a personal reflection regarding my research process, new learnings, and my capstone project.

Relevance of Literature Review

While crafting my Digital Life Studies curriculum, I relied on my research findings to serve as a guide. To begin with, my research demonstrated a significant need for social media centered instruction. A Common Sense Media survey confirmed that 81% of all teenagers (defined as those between the ages of 13-17) access social media platforms (Rideout & Robb, 2018). Within this population, 38% reported that they check their social media updates numerous times within an hour (Rideout & Robb, 2018). This data demonstrates that a majority of teenagers have access to these platforms and use them frequently throughout the day. Additionally, the data highlighted that social media platforms heavily influence students' perception about themselves. Regarding their social media use, 20% reported feeling more confident, 21% reported feeling more popular, and

25% reported feeling less lonely (Rideout & Robb, 2018). Overall, my findings confirmed that social media is *powerful*. Not only is it growing in popularity, but it is also playing a prominent role in driving students' self-perceptions and emotions. It became abundantly clear to me that social media is becoming too widespread and influential to ignore. With this knowledge in mind, I knew I had to develop a curriculum that provides students with tools and strategies to manage and develop a positive mindset online.

Throughout this process, I was interested to see how social media usage impacts the whole child. I was well-versed with the finding that social media can be detrimental to emotional and mental health, but I was exceedingly curious about the other ways in which social media can impact adolescent development. I learned early on in my research that increased social media usage correlated with stunted brain development, as well as decreased academic performance (Blakeslee, 2007; Dunckley, 2014; Glass & Kang, 2018; Hou et al., 2012; Miller, n.d). I was previously unaware that social media quite literally alters the development of important brain regions, such as the insula, which as a result affects adolescents' ability to empathize (Blakeslee, 2007). I often cannot help but wonder how our current generation of adolescents will function as adults in the real world given their high exposure to screens on a daily basis?

Another component of my research that was unexpected was how drastically social media changes students' confidence and comfort level with communicating face-to-face. The data demonstrated that teens are spending an increasing amount of time communicating with others over text messaging, and that it is on its way up to becoming the most preferred communication method (Rideout & Robb, 2018). When kids do spend time together in person, screens often play a role and detract from the conversation. The

rapid decline in face-to-face communication is concerning for future generations because it prevents adolescents from learning how to relay information both verbally and nonverbally (Fuller, n.d.). The ability to decode nonverbal cues is a critical component to adolescent socialization. Amongst my own students, I have even observed the difficulty with understanding nonverbal cues and with personal communication. Some of my students struggle to make eye-contact with me when asking a question in class, or do not always respond appropriately when another classmate is feeling sad. How will human communication be impacted moving forward with the high level of screen exposure children are receiving?

The component of my literature review that proved to be the most important or my capstone project was social media's effect on student mental health. I know from my own personal experience with social media, as well as observing my students, that using these apps can often lead to feelings of inferiority and insecurity. With all that is happening in our world today in 2021, my top priority as a teacher is to support students with their mental health. Unfortunately, I have found that social media acts as a roadblock for developing strong self-confidence and positive self-esteem (Odgers & Robb, 2020). This research specifically inspired me to create the Digital Life Studies curriculum. My lessons and activities bridged the topics of social media and mental health together, so that students can use these apps and not lose sight of how incredible they truly are.

Implications

This project was created to ensure that adolescent students received an education regarding social media risk factors, as well as strategies for navigating different conflicts stemming from online activity. The implementation of the Digital Life Studies curriculum

allows students to engage in authentic conversations and learn about important life skills, such as problem solving strategies and tools for maintaining a healthy mindset. An implication for this project is that it drives students to become more literate in technology and social media. When students log onto Instagram, this curriculum will help them become more aware of the posts they are seeing, as well be more mindful of the posts they generate themselves. My ultimate goal for this project has been to promote ways for students to keep a positive view of themselves after using online platforms. My curriculum brings awareness to some of the dangers of social media, which I hope students will keep in mind when they see these factors play out on their own devices.

Limitations

My research project is centered on negative outcomes stemming from social media usage. The findings support the conclusion that social media can negatively impact adolescent cognitive development, academic performance, mental health, and communication abilities. My decision to primarily focus on negative effects originated from my personal observations as a teacher. I have found through my own teaching experiences that students need to be educated on the risks of social media, rather than the rewards or benefits. Many students download social media apps in the first place because they hear from others how fun and appealing they are. However, students do not often realize that these platforms can inflict harm and hurt on others and themselves. My intention in creating the student curriculum is to not only teach students to *understand* the risk factors associated with social media usage, but also to provide strategies and tips to resolve online conflict and maintain a positive mindset online. For those reasons, I made the decision to not focus my research on the positive effects of social media usage.

In regards to my Digital Life Studies curriculum, I feel that my lessons only covered a fraction of social media related topics. As more research continues to be published on the impacts of social media, I anticipate that this curriculum will grow and expand. With the timeline of this project, I could only introduce eight lessons, meaning that some social media related topics did not get addressed. For example, I would love to add an additional lesson about the power of the like button, or how social media platforms rely on phishing methods to target their advertising. With eight lessons, I feel like I scratched the surface of social media and that there is much more to dive into.

Looking Forward

My hope for this project is that it can be of use to other teachers in the middle level setting. As I reflect on the content of my Digital Life Studies curriculum, I am proud of what I have created. Each of the lessons were carefully designed with my own sixth grade students in mind. I often asked myself, “If I were to teach this to my students tomorrow, what would I do? How would this look?” This project has ultimately inspired me to be more aware of the stronghold that social media possesses.

As I mentioned in my limitations section, these lessons scratch the surface of social media related risk factors. I would love to eventually see this curriculum grow and expand to include more topics for discussion. With the digital world we are living in, I am confident that more research will continue to be published about social media usage as it relates to adolescents. Part of my role as an educator is to help students navigate the “ins and outs” of middle school–friendships, resolving conflicts, getting good grades, study habits, etc. Today, social media has entered our teaching territory. Teachers need to be prepared to help their students when conflict stemming from social media arises. The

best way for us to do that is to be educated on the current research so we can implement best practices.

Summary

My capstone project sought to answer the question: *How can social and emotional learning (SEL) be used as a tool in the classroom to address and combat the toxicity stemming from adolescent social media usage?* In this chapter, I reviewed the relevance that the research provided in Chapter Two has on students' today. I described the implications that my project has for students, as well as the limitations that my project presented. To conclude the chapter, I shared my hopes and desires for this project moving forward.

In our digital day and age, it is clear that social media will not disappear anytime soon. Rather, it is likely to continue to soar in popularity. When our students come to us, we need to acknowledge that a significant part of their daily lives is lived online. For me personally, the research conducted for this project has served as a crucial reminder to find time for yourself that does not include the presence of a screen. It is evident that high screen exposure can lead to a world of hurt, and that it is healthier to simply be present. This research has influenced my personal life in the sense that I have become increasingly aware of how my social media platforms are affecting me. I have even noticed that since the start of this project, I have cut down on my own social media usage in the hopes of regaining a more positive mindset (which I am proud to say I most definitely have).

My hope for this project moving forward is that this curriculum makes middle school a better place. Rather than looking back on their middle years with a cringe, I hope

that my capstone project helps students find a way to be at peace with themselves at an age where so many developmental changes are taking place. As younger generations of students enter our classrooms, it is vital that teachers are both educated and equipped to navigate the cognitive, mental and social effects that increased social media use has on adolescents.

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