Adolescent social media citizenship

by

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Abstract

The rise in popularity of mobile technology and social media platform use among today’s adolescents have fueled the need for technology and citizenship education that helps students not only navigate and reduce potential risks, but also take advantage of the benefits of having these social tools literally in the palm of their hand. Digital citizenship education focusing on social media is necessary for student social, emotional and academic growth in the 21st century.

The present study continues the efforts of media and education scholars working to define and measure digital citizenship, while at the same time exploring a more narrowed focus of citizenship behavior on the platforms adolescents use most – social media. Previous studies have shown digital citizenship to be a valid and reliable multi-dimensional construct that can be measured using respondent digital technology behaviors, therefore this study takes a multi-factor approach to adolescent social media citizenship, identifying nine dimensions grounded in media uses and gratifications research on adolescent social media behavior and scholarly discourse on traditional and digital citizenship.

To test the social media citizenship construct, 440 middle school and high school students between the ages of 11 and 18 self-reported their social media preferences and use behaviors in the areas of (a) digital harassment; (b) psychological health and well-being; (c) social media shopping; (d) security and safety; (e) misuse of technology; (f) communication and conflict management; (g) problem-solving and collaboration; (h) media literacy; (i) digital identity management. Exploratory factor analysis identified underlying relationships within two factors, suggesting a mix of 30 protective and proactive behaviors that have the potential to unlock higher levels of social media citizenship. The study also suggests that factors such as student age, gender, time spent on social media, preferred platform, reason for social media use, and frequency of parent connectivity contribute significantly to a student’s social media citizenship behavior.

The results of this study can be used to help parents and educators identify and prioritize educational opportunities, as well as create timely and relevant social media citizenship discussions and support materials.
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Chapter 1 - Introduction

The rise in popularity of mobile technology and social media platform use among today’s adolescents have fueled the need for technology and citizenship education that help students not only navigate and reduce potential risks, but also take advantage of the benefits of having these social tools literally in the palm of their hands (Fingal, 2017; Krueger, 2017; Ribble, 2014). Digital citizenship education, focusing on common adolescent social media topics such as information privacy, reputation management, cyberbullying, and information literacy is necessary for student social, emotional, and academic growth in the 21st century.

Many educators, policymakers, and scholars agree that digital citizenship education teaching appropriate and responsible technology use is imperative for young people to thrive in an increasingly online, networked society (Collier, 2009; “Digital Citizenship,” n.d., para 1; Nordin et al., 2016; Oxley, 2010; Ribble, 2012). Moreover, educators have recognized the importance of incorporating social media into classroom instruction to empower student appropriate technology use, open new avenues of learning and teach important new workplace skills (Casa-Todd, 2018; Gleason & von Gillern, 2018; Hagler, 2013; Panke & Stephens, 2018).

Still, others are playing catch up when it comes to awareness of the importance of digital citizenship education, buy-in, intentionality of instruction, and allotted time in an already-packed reading and math-focused school day (Dillon, 2006; Lapus, 2018; Preddy, 2016). At home, parents are also experiencing tension with their children over technology such as underestimation of use, repetitive safety conversations, broken family rules, and desires for mutual attention (Blackwell et al., 2016). Social media has become a prominent fixture in the everyday lives of adolescents (Lenhart, 2015a); it has changed the way they express themselves and find information (Anderson,
2016; “Teen’s Social Media Use,” 2016) and offers a critical outlet for youth identity development (Gleason & von Gillern, 2018; Jones & Mitchell, 2015; Ohler, 2012).

The following study continues the efforts of media and education scholars working to define and measure digital citizenship, while at the same time exploring a more narrowed focus of citizenship behavior on the platforms that adolescents use most – social media. According to Pew Research Center (Anderson & Jiang, 2018), social media platforms like YouTube, Instagram, and Snapchat, are the most popular online platforms among teens, with 45% of respondents indicating they are logged in almost constantly. Previous studies have also shown digital citizenship to be a valid and reliable multi-dimensional construct that can be measured using respondent digital technology behaviors (Choi et al., 2017; Jones & Mitchell, 2017; Nordin et al., 2016). This study therefore takes a multi-factor approach to adolescent social media citizenship, identifying nine dimensions grounded in media uses and gratifications research on adolescent social media behavior, and scholarly discourse on traditional and digital citizenship. For the purpose of this study, adolescent social media citizenship is defined as student propensity to protect themselves from harm on social media and proactively maximize the benefits of participating. To explore this construct, 440 middle school and high school students between the ages of 11 and 18 self-reported their social media preferences and use behaviors in the areas of (a) digital harassment; (b) psychological health and well-being; (c) social media shopping; (d) security and safety; (e) misuse of technology; (f) communication and conflict management; (g) problem-solving and collaboration; (h) media literacy; (i) digital identity management. Further, this study investigates whether respondent factors such as time spent on social media, reasons for using social media, platform preference, and connectivity with parents on social media can predict adolescent social media citizenship behavior. The results of this study can be used to help parents and educators
identify and prioritize educational opportunities, as well as create timely and relevant social media citizenship discussions and materials.
Chapter 2 - Literature Review

Traditional Citizenship

Prior to exploring scholarly discourse on digital citizenship, it is important to understand the origin of digital citizenship within traditional democratic citizenship. As early as ancient Greece and Rome, philosophers and politicians put forth ideas about exactly who citizens were and how they should behave in society. Athenian citizenship, for example, was a privileged status for free men dedicated to public affairs and the “common good” of the city-state (Held, 2006). Social status, customs and gender roles, as well as a thriving slave economy, dictated life in ancient Athenian culture; not everyone living and working in Greece and Rome – women, children, and slaves - were considered citizens (Held, 2006). Parallels to this disparity of roles in early citizenship can be drawn to digital applications of citizenship today. Demographic, geographic and economic factors create technology-access disadvantages among school children (Robinson et al., 2015) and some scholars critique the paradoxical nature of youth digital citizenship, focusing on people “…who are, at best, configured as partial citizens or citizens-to-be or, at worst, not considered citizens at all” (Third & Collin, 2016, p. 28).

In modern times, the concept of citizenship has been discussed by theorists, scholars and philosophers as holding formal, legal rights and duties, as well as active participation in local communities and generating political identity (Djeudo, 2013; Nesbitt & Trott, 2006). Additionally, scholars have drawn distinctions between different discourses attributed to the theory of citizenship. Kymlicka and Norman (1994) identify citizenship-as-legal-status, citizenship-as-desirable-activity and citizenship-as-identity, differentiating between community membership, quality of participation and individual expression of membership. T.H. Marshall, on the other hand, described citizenship as being comprised of three intertwining parts: (a) civil rights and
responsibilities; (b) political participation such as voting; (c) social access to basic goods provided by the community such as welfare, education and medical treatment (Pierson & Castles, 2006). Today, distinctions are also being made within digital citizenship discourse according to type of citizen behavior and falling into one of two classifications: (a) rights and responsibilities; (b) active participation, enacting change (Curran & Ribble, 2017). Community standards policies from social media platforms even exhibit traditional citizenship classification tendencies. Facebook for example, says that its use standards are rooted in three core principles: (a) safety from harmful content; (b) freedom to express individual views and ideas; (c) equality of standards among all users (“Community Standards,” 2018). Snapchat and Twitter follow suit citing both goals to provide a place for self-expression (i.e. access, freedom, and identity formation) and adhering to a set of rules for safety, misuse, and inappropriate content (i.e., responsibilities and desirable activity).

**Digital Citizenship**

Digital citizenship is a continually evolving concept that has been touched on by scholars in education, family and consumer sciences, media, technology, law, and political science and has traditionally blended the teaching of computer skills, digital information literacy, and safe and responsible internet use. Parallel to the literature on traditional citizenship, distinctions have been drawn to classify digital citizenship as either a listing of citizen rights and responsibilities (Collier, 2009; Nordin et al., 2016; Oxley, 2010; Ribble, 2004) or promoting active participation within a community and shaping personal identity (Gleason & von Gillern, 2018; Jones & Mitchel, 2015; Ohler, 2012; Third & Collin, 2016). What’s new is that now these traditional citizenship concepts and values are being applied to the digital age and online, networked society.
Internet safety education, synonymous with cybersafety, developed as early as the mid-1990s in response to public concern about risks adolescents faced online. Adolescents were seen as victims in a hostile media environment, while fear-based anxieties spread among parents about their child’s vulnerability to identity theft, inappropriate content, and digital predators (Collier, 2009; Collier & Forrest-Lawrence, 2014; Third & Collin, 2016). More recently, cyberbullying, sexting (Reid & Weigle, 2014), addictive behavior (Kuss & Griffiths, 2011), misuse of technology, cell phone etiquette (Sharaievska & Stodolska, 2015), information literacy (Metzger, 2007), and personal reputation (Lenhart et al., 2011) have added to parent, educator, and societal concerns about adolescents and technology.

Mike Ribble (2004), widely known as the father of digital citizenship, categorized digital citizenship as standardized “appropriate and responsible behavior with regard to technology use” (p 13) and developed a nine-dimension framework of essential attributes for those living in a digital society:

1. Etiquette: electronic standards of conduct or procedure
2. Communication: electronic exchange of information
3. Education: the process of teaching and learning about technology and the use of technology
4. Access: full electronic participation in society
5. Commerce: electronic buying and selling of goods
6. Responsibility: electronic responsibility for actions and deeds
7. Rights: those freedoms extended to everyone in a digital world
8. Safety: physical well-being in a digital technology world
These nine elements were used to teach students essential skills needed to be responsible digital citizens, knowledgeable about how to access digital media and about their rights and responsibilities, including safeguarding personal information, understanding digital laws, and maintaining a positive digital footprint. Collier (2009) added to the digital rights and responsibilities literature by identifying the freedoms young people can enjoy online in return for behaving appropriately: (a) freedom from physical harm; (b) psychological freedom from cruelty and disturbing material; (c) freedom from long-term reputational and legal consequences; (d) freedom from identity and intellectual property theft.

In addition to educating youth about rights and responsibilities online, many scholars have focused their digital citizenship efforts on active participation, civic engagement and identity development (Curran, 2012; Gleason & von Gillern 2018; Jones & Mitchell, 2015; Ohler, 2011). Digital citizenship from this perspective looks at ideal digital citizens not as those following a prescribed set of rules and norms, but as active citizens solving problems and collaborating with others in online communities. Jones and Mitchell (2015), explained that digital citizenship should provide students with opportunities and activities that practice knowledge sharing, research school or social problems, improve community through outreach and activation and create national and international connections to solve global challenges. Along these lines, Gleason and von Gillern (2018) proposed a student-centered model of digital citizenship that encourages digital media participatory play, emphasizing proactive content creation and content sharing.

In 2017, the Obama Foundation issued a call to re-examine the concept of digital citizenship in an effort to create a more forward-thinking, positive approach (“Digital Citizenship,” 2017). That same year, the International Society for Technology in Education (ISTE) answered the call with an update to its Standards for Educators that introduced digital citizenship as students
using technology to make the world a better place (Sykora, 2017). ISTE now defines 21st century digital citizens to be “PK-12 learners who proactively approach their digital access, participation, and associated rights, accountability and opportunities with empathy, ethics, and a sense of individual, social, and civic responsibility” (Sykora, 2017, para 1). The organization’s Standards for Educators revolve around three vital spheres (“The New Digital Citizenship,” 2017):

1. The student as a Digital Agent – using technology to solve problems and model kindness and compassion
2. The student as a Digital Interactor – collaborating with others, critically examining online sources, and communicating with empathy and authenticity

ISTE’s concept of digital citizenship blends digital citizenship education discourses with the goal of empowering students to critically and responsibly generate their own citizen identities. This study adopts the view that today’s digital citizens must learn not only to be kind, safe, and secure, but also develop a more complex sense of identity and communication skills.

**Theoretical Framework: Uses and Gratifications**

Uses and Gratifications Theory (UGT) is an audience-centered media theory that says individuals are active in their selection, interpretation and use of media content. Katz, Blumler, and Gurevitch (1974) stressed that individuals are self-aware and intentional in their media consumption and are motivated to select media content based on if and how it satisfies a need. In other words, media exposure is chosen by the individual and is selected because the media is beneficial or meaningful to them. The UGT framework also suggests that social and psychological factors may play a role in the generation of media-related needs through (a) easement of tensions
and conflicts; (b) problem identification and problem resolving; (c) as a compliment or substitute to real-life opportunities lost or not offered; (d) affirmation and reinforcement of specific values; (e) familiarity for membership in social groups.

Twenty-first century studies applying UGT to newer forms of technology and digital media have studied not only the types of media being used, but also why audiences use certain tools and applications. Research in the areas of cell phone adoption, online gaming, video streaming, mobile apps, and social media have indicated common, overlapping factors motivating audience use, including social interaction, relief of boredom, mobility, and immediacy (Leung & Wei, 2000; Ferguson et al., 2007; Haridakis & Hason, 2009; Elson et al., 2014; Dinsmore et al., 2017; Ferris & Hollenbaugh, 2018).

Sundar and Limperos’ (2013) perspective on new media suggests that the technologies themselves have shaped user needs, thereby creating new and distinct gratifications for highly motivated and involved audiences: desire for cool and trendy multimedia capabilities, users as content and community creators, interactive features and real-time engagement, and ease of navigation, browsability, and play. The application of these new media gratification typologies is reflected in the increase of online customer created reviews and their ability to influence other customers’ purchase intentions (Ketelaar et al., 2015) and the use of social media platforms as real-time customer response and support tools for national brands (Knight & Carpenter, 2012). New media gratifications are also evidenced in the migration of young people away from Facebook to newer, visual platforms like Snapchat and Instagram (Guynn, 2017; Lang, 2015), seen as popular and trendy among their peers and as having unique features like messaging streaks, photo lenses and filters, and cartoon avatars geo-located on a map.
Scholars have routinely applied the UGT perspective to social media research on platform preferences and uses among different social groups and the extent to which specific platforms can fulfill user needs (Quan-Hasse, 2012). For the purpose of this study, UGT will provide a more comprehensive understanding as to why adolescents use social media and serve as a critical foundation for identifying and exploring the multi-dimensions of social media citizenship.

Adolescent social media uses and gratifications. A 2015 Pew Research Center study on teens, technology and social media revealed that 92% of adolescents ages 13 to 17 go online daily and 24% go online almost constantly (Lenhart, 2015a). Just three years later, a replication of the study revealed that 95% of adolescents have access to a smartphone which in turn fuels online activity - 45% now go online almost constantly (Lenhart, 2018). With preferences for online platforms Snapchat, YouTube, and Instagram, social media use is a part of their daily lives to interact with friends and family, easily access news and information, and connect with new people (Lenhart, 2018).

Stemming from Katz, Blumler, and Gurevitch’s uses and gratifications theory, Jeffrey Arnett (1995) outlined five typologies related to how young people use media: (a) entertainment; (b) identity formation; (c) sensation-seeking; (d) coping; (e) youth culture identification. Although the addition of new media technologies available to youth in the last 20 years - iPods, tablets, gaming consoles, cell phones - have increased access and use of media by young people, Arnett’s typologies are still relevant today.

Entertainment. According to a 2015 Common Sense Media report, adolescents consume an average of six to nine hours of entertainment media per day (“Landmark Report: U.S. Teens Use an Average of Nine Hours of Media Per Day, Tweens Use Six,” 2015). The report also found that 39% of screen time on computers, tablets, and smartphones was spent on passive
entertainment behaviors such as watching, listening, or reading, 25% was spent on active entertainment behaviors like playing games or browsing online, 26% was spent communicating with others via social media or video-chat, and three percent was spent on content creation such as writing or making digital art or music.

**Identity formation.** Today, adolescents are using social media profiles to virtually present themselves to others. Individual social profiles include a wide range of information – from photos and video to descriptive bios and posted comments and likes – that assist young people in forming identities and, just as important, in forming social comparisons, judgements, and opinions about others. While examining the relationship between social networking sites and adolescents’ social and identity development, Shapiro and Margolin (2014) note that while social media has the potential to intensify the identity development experience, such as increases in online self-disclosure and social comparisons, social media provides opportunities for adolescents to explore common interests with others and seek peer support, as well as interact with people outside of their peer group “thereby building understanding, empathy, and openness” (p. 12).

Moreover, scholars have noted tensions and conflict felt by young people when using social media to create their virtual identities, including pressures to maintain content, develop a following online, and temptations to continuously check platform notifications (Redden & Way, 2016). A 2015 Pew Research Center study on social media and friendship found that 40% of adolescent social media users feel pressure to post content that makes them look “good” or “perfect” to others, while 39% feel pressure to post popular content that will get them a large number of comments or likes (Lenhart, 2015b).

**Sensation-seeking.** The Centers for Disease Control and Prevention (CDC) says “the teen years are a time of rapid growth, exploration, and risk taking” (“Monitoring Your Teen’s
Activities,” 2012, para 1). Scholars have identified a number of adolescent sensation-seeking behaviors on social media – sexting, cyberbullying, oversharing, accessing adult content, streaming violent or dangerous acts – with some noting that encouragement of self-disclosure and uninhibited personal expression may lead adolescents to feel bolder and more empowered when using social media (Lenhart et al., 2011; Moreno et al., 2009).

Adolescent social media use can also play out the rush and fear of getting caught (Homayoun, 2017). Technology-savvy teens are cloaking their communication in the form of social media aliases, fake accounts, and subversive forms of communication that target individuals with specific content but never address the individuals by name.

**Coping.** Some young social media users log in to share frustrations, relieve stress and seek emotional support from friends. A 2018 Pew Research Center study about teen social media habits and experiences revealed that teens believe their social media use results in closer relationships with friends (81%) and the existence of a support system in tough times (68%) (Anderson & Jiang, 2018). Adolescents have “embraced social media to connect with others who can encourage them, mentor them, inspire them and – most of all – show them they are not alone” (Hinduja, 2016, para 3).

**Youth culture identification.** More than one in four teens say social media use makes them feel less shy and more outgoing, leading to greater socialization (“Social Media, Social Life,” 2012). Social media provides an outlet for adolescents to comfortably get to know other students at their school and connect with new people who share common interests. Social media is also an efficient and convenient form of communication that aides in relationship formation and reinforcement (Urista et al., 2009). Social media platforms popular among young people such as Snapchat and Instagram are always accessible via smartphones for managing communication with
friends and can instantaneously distribute a message to many people by a single post or to a small peer group via private message. Social media helps teens maintain relationships with friends, making them feel more connected to friends’ feelings and daily lives (“Social Media, Social Life,” 2012).

**Social Media Citizenship**

The present study draws on two distinct frameworks to provide a conceptualization of adolescent social media citizenship: (a) traditional and digital citizenship behaviors categorized as protective (rights and responsibilities) or proactive (active participation) and (b) adolescent social media uses and gratifications. Social media citizenship is therefore defined as student propensity to protect themselves from harm and proactively maximize the benefits of participating. From previous scholarly work, nine dimensions have been identified as potential factors from which items can be drawn to measure a student’s social media citizenship behavior:

1. digital harassment
2. psychological health and well-being
3. social media shopping
4. security and safety
5. misuse of technology
6. communication and conflict management
7. problem-solving and collaboration
8. media literacy
9. digital identity management

**Digital harassment.** Digital harassment, often called cyberbullying, occurs when an individual or group uses social media to harass or threaten another person with the intention to
cause embarrassment or psychological harm. Common types of cyberbullying on social media involve rumor spreading, creating profiles in someone else’s name, and sharing humiliating content, sending negative, cruel or threatening messages, and posting inappropriate photos or videos of someone (Reid & Weigle, 2014). Cyberbullying has been associated with increased levels of distress and anxiety, low self-esteem, higher rates of depression, school and academic problems, and higher thoughts of suicide (Juvonen & Gross, 2008; Kowalski & Limber, 2012). Cyberbullying has also distinguished itself from traditional face-to-face bullying in its continuous nature, potential to reach a large audience and invisibility of the perpetrator (Slonje & Smith, 2008).

UGT has been used to better understand digital harassment among adults and adolescents. Leung’s (2014) study on predicting Internet risks suggests that increases in online risks – harassment from cyberbullies, privacy exposure, and viewing of inappropriate content – could be due to active gratifications sought from Internet use such as status-gaining or recognition, expressing opinions, and identity experimentation, as opposed to those seeking more passive gratifications like entertainment, escapism, or passing time. Additional UGT research has proposed links between cyberbully perpetration and higher frequency of technology use (Tanrikulu, 2015) and self-evaluative incentives that regulate negative psychological states like stress (Ramierz et al., 2008).

Previous research has also proven digital harassment to be a relational factor when measuring digital citizenship. Jones and Mitchell’s 2015 study identified online respect and online civic engagement as valid constructs measuring youth digital citizenship, and both constructs were found to be related to online harassment. Respondents measuring higher in online respect were less likely to harass others and were more likely to help someone being targeted by online
harassment. Respondents measuring higher in online civic engagement were significantly less likely to harass others and were more likely to help targets of online harassment.

**Psychological health & well-being.** The American Psychological Association says that adolescents experience dramatic cognitive and affective changes that impact how they think, reason, relate to others, and cope with stress and anxiety (“Teens,” 2018). Because adolescents are more susceptible to peer pressure, low self-esteem, and mental health issues, negative effects from social media use on sleep, anxiety, loneliness, self-identity, fear of missing out (FOMO), and body image have been subject to scholarly discussion (Andreassen et al., 2016; Banyai et al., 2017; Blackwell et al., 2017; Richards et al., 2015; Sagioglou & Greitemeyer, 2014; Woods & Scott, 2016).

Social media activity for adolescents is a competition about who can garner the most followers, likes, active chats, and comments. Many teens on social media worry about how they are perceived by others. A 2015 Common Sense Media research brief about children, teens, media, and body image revealed that 35% of young people worry about being tagged in unattractive photos, 27% feel stressed about how they look in posted photos, and 22% feel bad about themselves if others don’t respond or react to their posted photos, resulting in compulsive checking of content.

Media uses and gratifications literature has drawn a link between the satisfaction of staying connected and socializing with online communities to potential social media addiction (Blackwell et al., 2017; Kuss & Griffiths, 2011). Additional gratifications such as information seeking, aesthetic experience, diversion, and personal status have also been found to be related to online addiction tendencies (Song et al., 2004). Blackwell and colleagues’ (2017) study of extraversion,
neuroticism, attachment style, and FOMO found that FOMO predicts social media use and addiction above and beyond personality traits and attachment style.

Social media shopping. Although most adolescents prefer to shop at brick-and-mortar stores (“Despite Living A Digital Life,” 2017), brands are still targeting them where they hang out. Advertisements pepper YouTube videos, celebrity product endorsements pop up in news feeds, platforms like Instagram are launching in-app product purchasing features, and Snapchat branded filters and lenses add unique effects to users’ photos. Not surprisingly then, a 2017 study from IBM and the National Retail Federation found that generation Z consumers – those born between the mid-1990s and early 2000s - are interested in purchasing products directly from social media: 44% cite social media as a source for product inspiration and 37% have increased their use of social media as a source for purchase decision-making in the last year (“Generation Z to Switch the Majority of Purchases,” 2017).

Within UGT literature, common digital shopping motivations (i.e., positive predictors of e-commerce intention to use, purchase, and seek information) include entertainment gratification, perceived usefulness, and technology ease of use (Huang, 2008). All three motivations have been noted by scholars as 21st century gratifications for newer forms of technology and media use. Considering the visual and interactive nature of popular social media platforms for adolescents, like Instagram and Snapchat, and brands’ affinity for marketing on these platforms, it is also important to note that e-commerce literature identifies aesthetic stimuli, such as enlarged product photos, as a vulnerability for compulsive consumers (Kim & Larose, 2003). Muratore’s (2016) study about teens as impulsive buyers revealed that adolescents are sensitive to sale offers and prestige items because they satisfy positive self-esteem gratifications.
**Security and safety.** Protection from identity theft and online predators is paramount when young people are sharing more information about themselves on social media than ever before, including personal photos and videos, school name, birthdate, the city or town in which they live, email addresses, and phone numbers (Madden et al., 2013). Sharing of private information online comes with a range of safety risks for adolescents, leaving them subject to identity theft, hacking, online predators, and, just as important, a false sense of security that information is only seen by close friends. Interestingly, when asked about social media privacy and safety, adolescents say they tend to feel safe online and instead focus more on their feelings of discomfort that someone could access their accounts without permission and their annoyance that there is no real privacy online (Agosto & Abbas, 2015).

UGT research in the areas of social media security and safety suggest an interesting paradox: social media users are aware of social media privacy and safety issues, yet they remain increasingly open, revealing private details and thoughts on social media and sharing real-time activity. For example, Debatin and colleagues’ (2009) study involving Facebook privacy, revealed that respondents perceived the benefits of social media – such as earned social capital - as outweighing any risks of disclosing personal data. Early social media research has also shown that individuals with social media profiles have significantly greater risk-taking attitudes than those without profiles (Fogel & Nehmad, 2009).

**Misuse of technology.** Adolescent misuse of social media can include accessing social media on a cell phone at inappropriate times, sharing of content without permission, and stress injury from repetitive and excessive use of cell phones. Influence Central’s 2016 Digital Trends Study about children and technology revealed that on average, a child in the United States gets their first smartphone with Internet access at age 10. By age 12, 50% of children have social media
accounts. Scholarly research has shown that the presence of a cell phone can have negative effects on performance when tasks are more attentionally and cognitively demanding. Such tasks include interpersonal interactions, driving, school performance, and workplace productivity (Thornton et al., 2014). Cell phone use has also been found to be a significant negative predictor of student grade point average (Lepp et al., 2015).

For many adolescents, texting is an essential way to communicate. A 2015 Pew Research Center study on teens, technology, and friendships revealed a number of platforms and devices accessed on smartphones to communicate with friends: 88% of all adolescents text with friends, 79% instant message, 72% use social media to communicate with friends, and 59% use video chat. UGT research in this area tells us that ease of access and convenience of cell phones are the primary reasons texting is implemented so heavily (Grellhesl & Punyanunt-Carter, 2012). Tulane and colleagues’ (2017) study on adolescent perceptions of texting in school indicated that although text messaging allowed students the opportunity to stay in continual connection with family members and friends, most students felt text messaging was a “major distracter in the learning process” (p. 719). Ease of access and convenience gratifications have also led to the existence of what Cingel and Sundar (2012) call ‘techspeak’ – word adaptation using abbreviation, initialisms, omission of essential letters, substitutions of homo-phones, and de-emphasis of proper punctuation and capitalization - which in turn has been found to have a negative relationship with adolescent grammar skills.

Social media use among adolescents is also continually redefining societal boundaries. At home, parents monitor teen social media privacy settings, time spent on social networking, and the kinds of information shared. Perceptions about where and when social media and cell phone usage are inappropriate include specific times such as during meals or late in the evening, and locations
such as church, family gatherings, and school (Sharaievskà & Stodolska, 2015). In 2018, 15 states had banned talking on a hand-held cellphone while driving, 38 states restricted use of cellphones by young drivers, and 48 states had completely banned texting while driving (“Distracted Driving,” 2018).

Online boundaries also occur within the realm of copyright law, public domain, and fair use. With image-based search tools like Google Images and Instagram, it’s easy for adolescents to grab the first image they see and post it to social media without documenting its source or providing attribution. Tara Woodall (2017), media specialist, high school librarian, and Common Sense Media contributor, believes it is important to teach young people about copyright law, public domain, and fair use to convey the moral and ethical importance behind checking who owns a piece of creative work and giving credit where credit is due.

Because adolescents accessing social media do so through their cell phones, and many do so constantly (Lenhart, 2015a), physicians and chiropractors have also begun to encourage physical boundaries. Increased frequency of mobile device use has been associated with neck pain due to users holding the device below eye height and looking down at the screen. This repetitive motion of flexed head and neck posture can also lead to muscle strain (Guan, 2016; Queiroz et al., 2017).

**Communication and conflict management.** A 2011 Pew Research Center study on teens, kindness, and cruelty on social media revealed that while more than half of social media-using teens report their peers are mostly kind to each other on social media and experience positive personal outcomes from their social media interactions, 88% have witnessed other people be cruel or mean in their communication on social media (Lenhart et al., 2011). Among potential negative outcomes from experiences on social media, 25% of teens have had experiences result in face-to-
face arguments or confrontation with someone, and 22% have had an experience that ended their friendship with someone (Lenhart et al., 2011).

Digital conflict between adolescents can be complex and difficult to navigate; without face-to-face interaction, non-verbal cues are missed that can indicate someone’s involvement (or lack of involvement) in the conflict. Marwick and Boyd’s (2014) interviews, focus groups, and participant observation with adolescents ages 13 to 19 identified a type of conflict called drama and defined it as “performative, interpersonal conflict that takes place in front of an active, engaged audience, often on social media” (p. 5). Types of social media drama include bad mouthing, the sharing of inappropriate videos and photos, cries for attention, breakups, jealousies, jokes, and aggressive or passive-aggressive interactions. Digital technology-use factors such as anonymity, invisibility, asynchronicity, altered self-boundaries, frequency, and mobility (Groshek & Cutino, 2016; Suhler, 2004) suggest the potential for these interactions to be quite uncivil.

**Problem-solving and collaboration.** The connectedness available through social media makes it a popular place for social media-savvy teens to identify and research problems and collaborate with peers, educators, and professionals to create solutions. Research suggests that 21st century media and technology, including social media, can act as a facilitator for civic engagement and collective action (Earl & Kimport, 2011; Obar et al., 2012; Seo et al., 2014).

Many educators have adopted the use of social media in the classroom as a tool to encourage civic and global engagement, develop digital competencies of producing, sharing, and discussing important topics that benefit themselves and their communities as well as teach workplace skills such as collaboration and creativity (Gleason & Gillern, 2018; Hagler, 2013). Studies have also shown that utilizing digital technology in the classroom can lead to enhanced learning in the areas of information immediacy, communication and content collaboration,
variability of the learning process, and situated learning in applicable contexts (Gikas & Grant, 2013).

Uses and gratifications theory applied to digital media and educational contexts suggests that students’ use of digital media for educational purposes is related to their gratification of affective, personal integrative, and social integrative expectations (Mondi et al., 2008). In other words, aesthetic design and emotional fulfillment, internalization of new learning experiences, and social collaboration facilitate successful integration of digital technology into curriculum to enhance the student learning process.

**Media literacy.** A 2017 Common Sense Media study about young peoples’ perceptions of news revealed that nearly half of adolescents ages 10 to 18 get their news from social media and other websites or mobile apps (“News and America’s Kids,” 2017). News of interest to them from platforms like YouTube and Snapchat include education, technology, neighborhood stories, and the environment. Additionally, the study found that most children are fooled by fake news, or news that is specifically created to misinform or deceive readers. Less than half of respondents said they could tell fake news stories from real ones and many had shared stories they later found were wrong or inaccurate. Adolescents’ increasing use of social media points to the need for digital citizenship education that focuses on the accessibility, analysis, evaluation, and creation of content, i.e. media literacy.

UGT research in this area tells us that age is an important predictor of news consumption motivations in a modern media environment. Older age groups are more likely to consume news for information and opinion purposes; however younger consumers of news are more likely driven by entertainment and leisure purposes, as well as socializing to develop and maintain relationships on social media (Lee, 2013). The sharing of news on social media has also been linked to
socialization and status-seeking gratifications (Lee & Ma, 2011). Metzger (2007) hints that user motivation “moderates the degree to which users will critically evaluate online information” (p. 2087). Adolescents’ focus on entertainment, socialization, and status-seeking, when it comes to news consumption and sharing, could indicate a reduced priority in assessing news source and content credibility.

**Digital identity management.** When adolescents create social media profiles and share content and engage with others, they are adding to their permanent online identity and ultimately shaping their very own personal digital brand. A 2011 Pew Research Center study on teens, kindness, and cruelty, found that adolescents are starting to think more about the long-term implications of posting inappropriate content on social media and how it might affect their reputations, membership in clubs and sports teams, job opportunities, and even college acceptances. Over half of study respondents reported deciding not to post something to social media because they were concerned about its association with their name and that it might reflect poorly on them in the future.

While UGT research in the area of digital identity management was not easily identified, scholars have made connections between personality traits, such as extraversion, self-efficacy (the belief we have in our own abilities to succeed), and successful impression management on social media (Kramer & Winter, 2008).

**Research Questions and Hypotheses**

Using multiple frameworks - traditional and digital citizenship education, media uses and gratifications theory, and adolescent social media literature - the following research question and six hypotheses are introduced.
This study proposes a research question to explore the relationship between nine identified dimensions of social media citizenship and the self-reported social media behavior of adolescents.

RQ: How well do the following nine factors represent social media citizenship in adolescents? 
(a) digital harassment; (b) psychological health and well-being; (c) social media shopping; 
(d) security and safety; (e) misuse of technology; (f) communication and conflict management; (g) problem-solving and collaboration; (h) media literacy; (i) digital identity management 

Rationale for this research question first comes from previous literature exploring the measurement of digital citizenship. Results from these studies support the idea that digital citizenship is a multi-dimensional construct that can be measured (Choi et al., 2017; Jones & Mitchell, 2015; Kim & Choi, 2018; Nordin et al., 2016). Aligning with previous scholarly work, several of this study’s identified nine dimensions originated from Mike Ribble’s (2004) nine elements of digital citizenship, which were then updated to incorporate both uses and gratifications theory surrounding adolescent social media use, and the more recent blending of digital citizenship education discourses that encompass both protective and proactive behaviors and values (Curran, 2012; Gleason & von Gillern 2018; Jones & Mitchell, 2015; Ohler, 2011). 

H1: The older a student becomes, the higher their social media citizenship behavior

H2: A student’s preferred social media platform will predict higher or lower social media citizenship behavior

H3: More time spent on social media per day will have a negative effect on social media citizenship behavior

Scholarly research on media uses and behavior reveal a substantial difference by age, social media platform, and frequency of use. The younger a social media user skews, the more
likely they are to prefer YouTube, Snapchat, Instagram, and Twitter over alternatives (Lauricella et al., 2014; Smith & Anderson, 2018). Social media platforms preferred by younger audiences offering ephemeral communication – where content is deleted or otherwise not made available after a relatively-short period of time – have been associated with deviant social media use in the areas of cyberbullying, sexting, and otherwise hidden activity from parents (Vaterlaus et al., 2016). Younger social media users are also more likely to exhibit higher frequency of use (Lauricella et al., 2014; Smith & Anderson, 2018). More time spent on social media has been linked to greater risks for depression and need for mental health support (Sampasa-Kanyinga & Lewis, 2015; “More Time on Social Media,” 2016), excessive tiredness/sleepiness, (Van den Bulck, 2007), cyberbullying behaviors (Tanrikulu, 2015) and addiction (Stockburger & Omar, 2013). Therefore, this study hypothesizes that (a) older students will exhibit higher social media citizenship behavior; (b) platform preference will predict higher or lower levels of adolescent social media citizenship behavior; (c) more time spent on social media will reduce social media citizenship behavior.

H4: There is a difference between the social media citizenship behaviors of males and females

Previous studies on digital citizenship behavior among adolescents have provided inconclusive results when studying the gender variable – most likely because there has not been consistency of factors across studies measuring digital citizenship behaviors. Nordin and colleagues’ (2016) study, for example, revealed no significant difference between males and females across etiquette, responsibility, well-being, commerce, and security factors. Jones and Mitchell’s 2015 study, on the other hand, showed males scoring significantly lower than females across harassment victimization and perpetration sub-scales. Multiple studies referenced within the adolescent social media uses and behavior context – most notably in the areas of self-esteem, identity development, social connections and addiction - identify gender as a significant
moderating factor to adolescent social media uses and gratifications behavior. Therefore, this study hypothesizes there is a difference between the social media citizenship behavior of male and female adolescents.

H5: Higher frequency of parent connectivity has a positive effect on social media citizenship behavior

A 2016 Pew Research Center study on parents and social media monitoring revealed that over half of parents monitor the actions of their children on social media through friend or follow connections and most of them encourage their child to use technology in an appropriate and responsible manner (Anderson, 2016). Wang and Xing’s 2018 study explored the relationship between parent involvement, socioeconomic status, and teen digital citizenship with results indicating that parent involvement - such as parental monitoring of teen online interactions - had a positively significant effect on teen digital etiquette and digital safety. Therefore, this study hypothesizes that parent connectivity (how often students and parents engage with each other on social media through likes, comments, messages, etc.) will lead to increased levels of student social media citizenship behavior.

H6: A student’s reason for social media use will predict higher or lower social media citizenship behavior

Previous research indicates that reasons for social media use have the potential to predict positive and negative behavior. Using social media to achieve status and recognition, for example, has been linked to privacy exposure and viewing of inappropriate content (Leung, 2014). Using social media to collaborate with others or to learn new information has the potential to result in positive student learning outcomes (Mondi et al., 2008). Therefore, this study hypothesizes that
the reasons behind why adolescents use social media will predict higher or lower levels of social media citizenship behavior.
Chapter 3 - Methodology

Sample

The sample in this study consists of 473 students from two middle schools and two high schools (grades seven through nine) in the Manhattan Ogden Unified School District (USD) 383 and Wamego USD 320. After examining results, survey responses from 33 students were eliminated because of either extensive missing data or because response patterns suggested extreme or non-accurate responses. Responses from students who indicated they did not use social media were also eliminated. The final sample includes 440 students.

Respondent demographic information is included in Table 3.1. Students range in age from 11 to 18 with an average age of 13 ($M = 13.13$, $SD = 1.26$), gender nearly equally split between males ($n = 212, 48\%$) and females ($n = 228, 52\%$), and an average age for setting up a first social media account of 10 ($M = 10.87$, $SD = 1.75$). Most students describe themselves as White ($n = 299, 67\%$), while a significant number of students describe themselves as Asian ($n = 32, 7\%$), Black or African American ($n = 30, 7\%$), and Hispanic or Latino ($n = 30, 7\%$).

**TABLE 3.1**

*Respondent Demographic Information*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>212</td>
<td>228</td>
</tr>
<tr>
<td>%</td>
<td>48.18</td>
<td>51.81</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>11 years</th>
<th>12 years</th>
<th>13 years</th>
<th>14 years</th>
<th>15 years</th>
<th>16 years</th>
<th>17 years</th>
<th>18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>3</td>
<td>143</td>
<td>187</td>
<td>60</td>
<td>16</td>
<td>15</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>%</td>
<td>0.68</td>
<td>32.5</td>
<td>42.5</td>
<td>13.63</td>
<td>3.63</td>
<td>3.41</td>
<td>2.72</td>
<td>.91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>White</th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic/Latino</th>
<th>Native American</th>
<th>Hawaiian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>299</td>
<td>32</td>
<td>30</td>
<td>30</td>
<td>5</td>
<td>1</td>
<td>41</td>
</tr>
<tr>
<td>%</td>
<td>67.95</td>
<td>7.27</td>
<td>7.27</td>
<td>7.27</td>
<td>1.13</td>
<td>0.23</td>
<td>9.31</td>
</tr>
</tbody>
</table>
Although socioeconomic information was not able to be collected while surveying underage participants, the Kansas State Department of Education’s 2017–2018 Kansas Building Report Card (2019) indicates the following percentages of students eligible for their school’s free and reduced price meals under the National School Lunch Program (a) Eisenhower Middle School 52% economically disadvantaged; (b) Anthony Middle School 33% economically disadvantaged; (c) Manhattan High School 35% economically disadvantaged; (d) Wamego High School 30% economically disadvantaged.

**Procedure**

Data collection occurred in the form of a self-reported, 41-item questionnaire (Table 3.2) measuring social media citizenship behavior, as well as 12 demographic and media use questions. Students self-rated their social media behavior using five-item Likert scales related to their behavior or agreement with listed statements. Questionnaires were completed during the school day on iPads through a provided link to Qualtrics, an online survey tool (see Appendix A – Qualtrics Survey). Survey administration at each school was overseen by a combination of the researcher, librarians, technology teachers, and principals.

Parental consent procedures were approved by each participating school principal. Consent forms to opt into the study were printed and sent home approximately two weeks prior to data collection (see Appendix B – Parent Consent Form Sample). Only those students who brought back signed consent forms were able to participate in the study.

At the time of data collection, students were reminded of the definition of social media so that responses were given with only Facebook, Facebook Messenger, Instagram, YouTube, Twitter, Snapchat, and Instagram in mind (i.e., not Netflix and games like Roblox or Fortnite) and that their responses were anonymous to encourage truthfulness and accuracy.
Measures

This study proposes an adolescent social media citizenship construct with nine dimensions: (a) digital harassment; (b) psychological health and well-being; (c) social media shopping; (d) security and safety; (e) misuse of technology; (f) communication and conflict management; (g) problem-solving and collaboration; (h) media literacy; (i) digital identity management. These dimensions are drawn from an extensive review of traditional and digital citizenship literature, media uses and gratifications theory, and adolescent social media use behaviors.

Survey items are drawn from previously conducted studies and modified to suit both the context of social media use and the respondent’s age and reading level. For example, Jones and Mitchell’s (2015) online harassment perpetration factor includes the item “you made rude or mean comments to someone on the Internet.” This study’s item is modified to read “you made rude or mean comments to someone using social media.” Choi and colleagues’ (2017) critical perspective factor includes the item “I think online participation is an effective way to make a change to something I believe to be unfair or unjust.” This study’s item is modified to read “I think social media participation is a good way to make a change to something I believe to be unfair or unjust.” Nordin and colleagues’ (2016) wellbeing/health factor includes the item “I make sure my eyes are parallel to the computer screen and keep them at a proper distance from the screen.” This study’s item is modified to read “I make sure my eyes are parallel to the cell phone or computer screen and keep them at a proper distance.” Questions for each factor were also grouped together in the survey to eliminate random noise and to enhance factor analysis reliability.
<table>
<thead>
<tr>
<th>Digital harassment</th>
<th>In the past year have you…</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1</td>
<td>Made rude or mean comments to someone using social media?</td>
</tr>
<tr>
<td>DH2</td>
<td>Used social media to harass or embarrass someone that you were mad at?</td>
</tr>
<tr>
<td>DH3</td>
<td>Spread rumors about people using social media?</td>
</tr>
<tr>
<td>DH4</td>
<td>Shared something about someone with others on social media that was meant to be private?</td>
</tr>
<tr>
<td>DH5</td>
<td>Posted or shared a video or picture of someone on social media when you knew it might hurt or</td>
</tr>
<tr>
<td></td>
<td>upset them?</td>
</tr>
<tr>
<td>DH6</td>
<td>Participated in a social media group where the focus was on making fun of someone you know?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychological health and well-being</th>
<th>In the past year have you…</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHW1</td>
<td>Found it difficult not to look at messages on social media when you were doing something else</td>
</tr>
<tr>
<td></td>
<td>(such as schoolwork)?</td>
</tr>
<tr>
<td>PHW2</td>
<td>Found that you can’t think of anything else but the moment that you will be able to use social</td>
</tr>
<tr>
<td></td>
<td>media again?</td>
</tr>
<tr>
<td>PHW3</td>
<td>Sat waiting until something happened on social media again?</td>
</tr>
<tr>
<td>PHW4</td>
<td>Felt the need to use social media more and more often?</td>
</tr>
<tr>
<td>PHW5</td>
<td>Used social media to take your mind off your problems?</td>
</tr>
<tr>
<td>PHW6</td>
<td>Used social media to escape from negative feelings (like anger, sadness, frustration or anxiety)?</td>
</tr>
<tr>
<td>PHW7</td>
<td>Compared yourself with others when reading news feeds or checking out others’ photos?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social media shopping</th>
<th>Indicate your agreement with the following…</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS1</td>
<td>Shopping on social media is reliable.</td>
</tr>
<tr>
<td>SMS2</td>
<td>Social media is safe for me to conduct personal business, like shopping.</td>
</tr>
<tr>
<td>SMS3</td>
<td>I am comfortable making purchases on social media.</td>
</tr>
<tr>
<td>SMS4</td>
<td>Social media shopping can be trusted.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security and safety</th>
<th>Indicate your agreement with the following…</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS1</td>
<td>If I receive a friendship request from someone I have never met in person, I will not accept this request.</td>
</tr>
<tr>
<td>SS2</td>
<td>I limit access to my personal information on social media (address, age, school, phone number).</td>
</tr>
<tr>
<td>SS3</td>
<td>I do not reply to messages from people I don’t know on social media.</td>
</tr>
<tr>
<td>SS4</td>
<td>I do not disclose my personal information (age, address, school name, phone number) on social media.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Misuse of technology</th>
<th>Indicate your agreement with the following…</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT1</td>
<td>I obey social media bans. (Bans occur when you are asked not to be on social media or your cell phone. Examples include in the classroom, during dinner with your family or while you are driving.)</td>
</tr>
<tr>
<td>MT2</td>
<td>I am aware of the community standards and ‘terms of use’ of social media sites.</td>
</tr>
<tr>
<td>MT3</td>
<td>I am aware of copyright infringement when using social media. (Copyright infringement = using someone else’s image or written word and passing it off as your own.)</td>
</tr>
<tr>
<td>MT4</td>
<td>I make sure my eyes are parallel to the cell phone or computer screen and keep them at a proper distance from the screen.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication and conflict management</th>
<th>Indicate your agreement with the following…</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCM1</td>
<td>If I disagree with people on social media, I watch my language, so it doesn’t come across as mean.</td>
</tr>
<tr>
<td>CCM2</td>
<td>I am careful about how I say things on social media, so they don’t come across the wrong way.</td>
</tr>
<tr>
<td>CCM3</td>
<td>I state my reasons when I disagree with something on social media.</td>
</tr>
<tr>
<td>CCM4</td>
<td>I don’t encourage online fights even if I encounter one.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem-solving and collaboration</th>
<th>Indicate your agreement with the following…</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSC1</td>
<td>I am more informed about political or social issues through using social media.</td>
</tr>
<tr>
<td>PSC2</td>
<td>I am more aware of global issues through using social media.</td>
</tr>
<tr>
<td>PSC3</td>
<td>I think social media participation is a good way to make a change to something I believe to be unfair or unjust.</td>
</tr>
</tbody>
</table>
I use social media to improve my school or my town in some way.
I use social media to learn how I can help friends or other kids in general.

**Media literacy**
When you encounter news, product, or health-related information on social media, do you…
ML1 Check to see if the information is current?
ML2 Consider whether the views represented are facts or opinions?
ML3 Seek out other sources to validate the information?
ML4 View the author’s (or poster’s) qualifications or credentials?

**Digital identity management**
When using social media, do you…
DIM1 Like to present yourself as someone making positive choices?
DIM2 Share things you are good at?
DIM3 Think about making sure that things you say and post on social media will not be something you regret, or feel bad about, later?

**Digital harassment.** Defined as using social media to intentionally harass or threaten another person with the intention to cause embarrassment or psychological harm, digital harassment is measured using all six items from Jones and Mitchell’s (2015) online harassment perpetration factor.

**Psychological health and well-being.** Defined as excessive, competitive and compulsive social media use, psychological health and well-being is measured using all six items from van den Eijnden and colleagues’ (2016) social media disorder scale and one item from Lee’s (2014) social media social comparison scale.

**Social media shopping.** Defined as investigating reliability and trustworthiness of vendors on social media, social media shopping is measured using four items from Badrinarayanan and colleagues’ (2012) channel trust factor.

**Security and safety.** Defined as protection from identity theft and online predators when using social media, security and safety is measured using one item from Hierman and colleagues’ (2016) behavioral intention measure related to acceptance of strangers as social media network friends and three items from Lwin and colleagues’ (2012) protection motivation scale.

**Misuse of technology.** Defined as using social media at inappropriate times, sharing of content without permission and repeated stress injury from excessive use, misuse of technology is measured
using four items from Nordin and colleagues’ (2016) etiquette, responsibility, and wellbeing/health sub-scales of digital citizenship.

**Communication and conflict management.** Defined as kind communication and managing conflict on social media, communication and conflict management is measured using two items from Jones and Mitchell’s (2015) online respect sub-scale and two items from Nordin and colleagues’ (2016) etiquette sub-scale of digital citizenship.

**Problem-solving and collaboration.** Defined as using social media to identify and research problems and collaborate with others to create solutions, problem-solving and collaboration is measured using three items from Choi and colleagues’ (2017) local/global awareness and critical perspective factors of digital citizenship and two items from Jones and Mitchell’s (2015) online civic engagement sub-scale of digital citizenship.

**Media literacy.** Defined as using social media to access, analyze, evaluate, and create content, media literacy is measured using four items from Metzger’s (2007) model for evaluating online information.

**Digital identity management.** Defined as consciously and consistently managing a digital presence on social media, digital identity management is measured using three items from Jones and Mitchell’s (2015) online civic engagement and online respect sub-scales of digital citizenship.

**Time spent on social media.** Time spent on social media is measured by asking respondents how much time they spend on social media in a typical day using the following scale: Under 1 hour, 1-3 hours, 4-6 hours, 7-9 hours, 10-12 hours, or 13 hours or more.

**Preferred social media platform.** Preferred social media platform is measured by asking respondents to think about their social media use in a typical day and how much they use each of the most commonly used social media platforms: Facebook, Facebook Messenger, Twitter, Instagram,
Snapchat, YouTube, and Other. A 5-item Likert scale is used: never, sometimes, about half the time, most of the time, or always.

**Frequency of parent connectivity.** Defined as parents and adolescents looking at each other’s videos and photos, liking or commenting on each other’s posts or chatting/messaging with each other, frequency of parent connectivity is measured by asking respondents how often they engage in these types of behaviors on social media using a 5-item Likert scale: not at all, a little, a moderate amount, a lot, or a great deal.

**Reason for social media use.** Defined as common reasons adolescents use social media, primary reason for social media use is measured by asking respondents to indicate their degree of agreement for use from a list of 14 items. These items are adopted from Martin and colleagues’ (2018) study of middle school students’ use of social media from among four broad categories: information, communication, entertainment, and general. A 5-item Likert scale is used: strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree.
Chapter 4 - Results

Adolescent Social Media Citizenship

The research question was assessed using exploratory factor analysis (EFA) to examine how well nine factors represent the construct of adolescent social media citizenship. Forty-one items were subjected to principal components analysis (PCA) and oblique rotation using SPSS version 25. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .85 and Bartlett’s Test of Sphericity reached statistical significance \( p < .001 \), indicating appropriate relationships among items to conduct a meaningful EFA. From the original 41 items, 11 items were eliminated from the EFA (i.e., social media shopping 1, 2, 3, 4; security and safety 2, 4; communication and conflict management 3; problem-solving and collaboration 1, 3; media literacy 3, 4). A .40 cut-off is considered a statistically meaningful rule of thumb (Guadagnoli & Velicer, 1988; Matsunaga, 2010; Tabachnick & Fidell, 2007) and was therefore used as the cut-off for eliminating factor loadings (view Table 4.1 for reliability coefficients of items).

The results of EFA identify two dimensions of adolescent social media citizenship. Interpretation of these dimensions is consistent with previous digital citizenship literature noting the dichotomy of the construct between protective and proactive citizenship behaviors. Based on eigenvalues greater than one and a scree plot, 22 items loaded favorably on the protective social media citizenship dimension (Cronbach's \( \alpha = .89 \)), consisting of rights and responsibilities behaviors within sub-scales (a) digital harassment; (b) communication and conflict management; (c) misuse of technology; (d) psychological health and well-being; (e) security and safety. Eight items loaded favorably on the proactive social media citizenship dimension (Cronbach's \( \alpha = .71 \)), consisting of active participation and enacting change behaviors within sub-scales (a) problem-solving and collaboration; (b) media literacy; (c) digital identity management. The total cumulative variance
explained by the two factors is 30.61%. Protective citizenship explains the largest total variance (18.94%), followed by proactive citizenship (11.67%).

TABLE 4.1

Factor loadings of adolescent social media citizenship

<table>
<thead>
<tr>
<th>Item</th>
<th>Pattern Coefficients</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Cronbach α</th>
<th>Eigenvalue</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protective Behaviors (Factor 1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH1</td>
<td>Rude/Mean Comments</td>
<td>.686</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH2</td>
<td>Harass/Embarrass Someone</td>
<td>.652</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH3</td>
<td>Spread Rumors</td>
<td>.643</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH4</td>
<td>Shared Someone’s Private Info</td>
<td>.625</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH5</td>
<td>Posted Hurtful Photo/Video</td>
<td>.639</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH6</td>
<td>Group Making Fun of Someone</td>
<td>.639</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PHW1</td>
<td>Difficult Not To Look</td>
<td>.462</td>
<td>-.346</td>
<td></td>
<td></td>
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<tr>
<td>PHW2</td>
<td>Can’t Think Of Anything Else</td>
<td>.511</td>
<td>-.391</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHW3</td>
<td>Sat Waiting Until Something Happened</td>
<td>.514</td>
<td>-.514</td>
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<td></td>
<td></td>
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<tr>
<td>PHW4</td>
<td>Felt Need To Use More And More</td>
<td>.506</td>
<td>-.473</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHW5</td>
<td>Take Mind Off Problems</td>
<td>.456</td>
<td>-.437</td>
<td></td>
<td></td>
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<tr>
<td>PHW6</td>
<td>Escape From Negative Feelings</td>
<td>.438</td>
<td>-.417</td>
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<tr>
<td>PHW7</td>
<td>Compared Self To Others</td>
<td>.440</td>
<td>-.539</td>
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<tr>
<td>SMS1</td>
<td>Shopping Is Reliable</td>
<td>.397</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SMS2</td>
<td>Safe For Personal Business</td>
<td></td>
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<tr>
<td>SMS3</td>
<td>Comfortable Making Purchases</td>
<td></td>
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<td>SMS4</td>
<td>Shopping Can Be Trusted</td>
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<td>SS1</td>
<td>Do Not Accept Strange Friend Requests</td>
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<td>SS2</td>
<td>Limit Access To Personal Info</td>
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<td>SS3</td>
<td>Do Not Reply To Unknown Messages</td>
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<tr>
<td>SS4</td>
<td>Do Not Disclose Personal Information</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MT1</td>
<td>Obey Social Media Bans</td>
<td>.602</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT2</td>
<td>Aware of Community Standards</td>
<td>.455</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT3</td>
<td>Copyright Infringement</td>
<td>.424</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT4</td>
<td>Eyes Parallel To/Proper Distance From Screen</td>
<td>.452</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CCM1</td>
<td>Watch My Language</td>
<td>.602</td>
<td>.355</td>
<td></td>
<td></td>
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<tr>
<td>CCM2</td>
<td>Careful About How I Say Things</td>
<td>.628</td>
<td>.305</td>
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<tr>
<td>CCM3</td>
<td>State Reasons When I Disagree</td>
<td></td>
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<tr>
<td>CCM4</td>
<td>Don’t Encourage Fights</td>
<td>.534</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ML1</td>
<td>Check To See If Info Is Current</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML2</td>
<td>Consider If Views Are Facts/Opinions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML3</td>
<td>Seek Out Info To Validate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML4</td>
<td>View Author’s Qualifications/Credentials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIM1</td>
<td>Making Positive Choices</td>
<td>.381</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIM2</td>
<td>Share Things You Are Good At</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proactive Behaviors (Factor 2)</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC1</td>
<td>More Informed Of Political And Social Issues</td>
<td>.381</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC2</td>
<td>More Aware of Global Issues</td>
<td>.420</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC3</td>
<td>Change Something Unfair or Unjust</td>
<td>.360</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC4</td>
<td>Improve My School/Town</td>
<td>.455</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC5</td>
<td>Learn How I Can Help Friends</td>
<td>.521</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML1</td>
<td>Check To See If Info Is Current</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML2</td>
<td>Consider If Views Are Facts/Opinions</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ML3</td>
<td>Seek Out Info To Validate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ML4</td>
<td>View Author’s Qualifications/Credentials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>DMI1</td>
<td>Making Positive Choices</td>
<td>.381</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMI2</td>
<td>Share Things You Are Good At</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMI3</td>
<td>Won’t Regret What You Say Later</td>
<td>.534</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Items with factor loadings above .40 were considered statistically meaningful and were included in the associated dimension and overall adolescent social media citizenship construct.

**Item DIM3 loaded favorably on both factors. A review of the literature suggested moving the item to factor 2 representing proactive social media citizenship behavior and Cronbach alpha of the proactive dimension was improved by its addition from $\alpha = .67$ to $\alpha = .71$.**
It is important to note that EFA resulted in digital identity management (DIM3) loading favorably on both protective and proactive dimensions. The digital identity management sub-scale in this study is defined as consciously and consistently managing a digital presence on social media and is measured using one of three items from Jones and Mitchell’s (2015) online civic engagement and online respect sub-scales of digital citizenship. Although DIM3 loaded slightly higher on protective behaviors, it was moved to the proactive dimension to align with the other two comparable scale items. Moving DIM3 also improved the proactive dimension’s scale reliability from $\alpha = .67$ to $\alpha = .71$.

**Contributing Factors**

Six hypotheses were introduced to identify contributing factors to determining a student’s social media citizenship behavior.

**Age.** H1 was investigated using multiple linear regression to determine the predictive power of students’ age on their protective and proactive social media citizenship behaviors. Although there is no significant predictive power of age on protective social media citizenship behavior, a significant result was found for proactive behavior $\beta = .15$, $p = .001$, $F(1, 438) = 10.66$, $R^2 = .024$. In other words, the older adolescents become, the more likely they are to engage in proactive behavior on social media. In sum, age was found to be a significant positive predictor of proactive social media citizenship behavior, but not protective social media citizenship behavior. Therefore, H1 is partially supported.

**Preferred social media platform.** H2 was assessed using multiple linear regression to determine the predictive power of students’ preference to use a particular social media platform on their protective and proactive social media citizenship behaviors. Although there is no significant predictive power of platform preference for proactive social media citizenship behavior, a significant result was found for protective behavior $p < .001$, $F(7, 116) = 4.69$, $R^2 =$
A closer look at the data indicates Snapchat is the only social media platform making a significant contribution ($\beta = -0.21$, $p < 0.05$) to predicting protective social media citizenship behavior (see regression coefficients per platform in Table 4.2). In other words, students’ protective social media citizenship behavior decreases as time spent on Snapchat increases. In sum, preference for Snapchat was found to be a significant negative predictor of protective social media citizenship behavior, but not proactive social media citizenship behavior. Therefore, H2 is partially supported.

### TABLE 4.2
Regression coefficients for platform preference and protective citizenship behavior

<table>
<thead>
<tr>
<th>Social Media Platform</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>-0.142</td>
<td>0.117</td>
<td>-0.149</td>
<td>-1.217</td>
<td>0.226</td>
</tr>
<tr>
<td>Facebook Messenger</td>
<td>-0.003</td>
<td>0.104</td>
<td>-0.004</td>
<td>-0.033</td>
<td>0.974</td>
</tr>
<tr>
<td>Twitter</td>
<td>-0.063</td>
<td>0.067</td>
<td>-0.085</td>
<td>-0.932</td>
<td>0.353</td>
</tr>
<tr>
<td>Instagram</td>
<td>-0.042</td>
<td>0.040</td>
<td>-0.108</td>
<td>-1.057</td>
<td>0.292</td>
</tr>
<tr>
<td>Snapchat</td>
<td>-0.079</td>
<td>0.039</td>
<td>-0.212</td>
<td>-2.019</td>
<td>0.046*</td>
</tr>
<tr>
<td>YouTube</td>
<td>-0.051</td>
<td>0.042</td>
<td>-0.105</td>
<td>-1.214</td>
<td>0.227</td>
</tr>
</tbody>
</table>

*Significance achieved at the 0.05 level

**Time spent on social media.** H3 was investigated using a one-way between subjects ANOVA to compare the effect of time spent on social media each day on student protective and proactive social media citizenship behaviors. Although there is no significant effect of time spent on proactive social media citizenship behavior ($F(2, 437) = .29$, $p = .749$), there is a significant effect of time spent on protective social media citizenship behavior ($F(2, 437) = 34.73$, $p < .001$). Post hoc comparisons using the Tukey HSD test indicate that the mean scores for 0–3 hours ($M = 4.24$, $SD = .51$, $p < .05$), 4–9 hours ($M = 3.88$, $SD = .55$, $p < .05$), and 10 plus hours ($M = 3.42$, $SD = .49$, $p < .05$).
$SD = .94, p < .05$) are all significantly different from each other (see a review of post hoc comparisons in Table 4.3).

Specifically, students who spend 4 – 9 hours per day or 10 plus hours per day on social media have significantly lower protective social media citizenship behavior than those who spend 0 – 3 hours per day. In sum, time spent on social media is found to have a significant effect on protective social media citizenship behavior, but not proactive social media citizenship behavior. Therefore, H3 is partially supported.

**TABLE 4.3**

*Post hoc comparisons for time spent on social media and protective citizenship behavior*

<table>
<thead>
<tr>
<th>Time Spent</th>
<th>Time Spent</th>
<th>Mean Difference</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 3 hours</td>
<td>4 – 9 hours</td>
<td>.352</td>
<td>.000*</td>
</tr>
<tr>
<td>10 + hours</td>
<td></td>
<td>.818</td>
<td>.000*</td>
</tr>
<tr>
<td>4 – 9 hours</td>
<td>0 – 3 hours</td>
<td>-.352</td>
<td>.000*</td>
</tr>
<tr>
<td>10 + hours</td>
<td></td>
<td>.466</td>
<td>.001*</td>
</tr>
<tr>
<td>10 + hours</td>
<td>0 – 3 hours</td>
<td>-.818</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>4 – 6 hours</td>
<td>-.466</td>
<td>.001*</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level

**Gender.** H4 was assessed using an independent-samples t-test to compare protective and proactive social media citizenship behaviors between males and females. There is no significant difference in protective behavior between males ($M = 4.05, SD = .59$) and females ($M = 4.13, SD = .58$); $t(438) = -1.52, p = .128$. However, there is a significant difference in proactive behavior between males ($M = 22.96, SD = 4.86$) and females ($M = 24.76, SD = 4.36$); $t(438) = -4.10, p < .001$. In other words, female students have significantly higher proactive social media citizenship behaviors than their male counterparts. In sum, there is a difference in proactive social media
citizenship behavior between males and females, but not protective social media citizenship behavior. Therefore, H4 is partially supported.

**Parent connectivity.** H5 was investigated using a one-way between subjects ANOVA to compare the effect of frequency of parent connectivity on social media each day on student protective and proactive social media citizenship behaviors. Although there is no significant effect of parent connectivity and protective social media citizenship behavior $F(2, 437) = .57, p = .569$, there is a significant effect in proactive social media citizenship behavior $F(2, 437) = .10.17, p < .001$. Post hoc comparisons using the Tukey HSD test indicate that the mean scores for no connectivity with parents ($M = 22.87, SD = 5.32, p < .05$) and some connectivity with parents ($M = 23.42, SD = 4.50, p < .05$) are significantly different from a lot of connectivity with parents ($M = 25.32, SD = 4.18, p < .05$) (see a review of post hoc comparisons in Table 4.4).

In other words, students who connect with their parents on social media a lot each day have higher proactive social media citizenship behaviors than those who sometimes or never connect with their parents. In sum, parent connectivity is found to have a significant effect on proactive social media citizenship behavior, but not protective social media citizenship behavior. Therefore, H5 is partially supported.

**TABLE 4.4**

*Post hoc comparisons for parent connectivity and proactive citizenship behavior*  

<table>
<thead>
<tr>
<th>Parent Connectivity</th>
<th>Parent Connectivity</th>
<th>Mean Difference</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Some</td>
<td>-.555</td>
<td>.590</td>
</tr>
<tr>
<td></td>
<td>A Lot</td>
<td>-.2456</td>
<td>.000*</td>
</tr>
<tr>
<td>Some</td>
<td>None</td>
<td>.555</td>
<td>.590</td>
</tr>
<tr>
<td></td>
<td>A Lot</td>
<td>-1.901</td>
<td>.001*</td>
</tr>
<tr>
<td>A Lot</td>
<td>None</td>
<td>2.456</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Some</td>
<td>.506</td>
<td>.001*</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level*
**Reason for social media use.** H6 was assessed using a multiple linear regression to determine the predictive power of 14 reasons for social media use on student protective and proactive social media citizenship behavior. All 14 reasons for social media use were run in a single regression for each dimension. A significant result was found for protective behavior $F(15, 123) = 3.76, p < .001, R^2 = .31$. A closer look at the data indicates popularity ($\beta = -.24, p < .05$), passing the time ($\beta = -.2, p < .05$), and freedom from adults ($\beta = -.21, p < .05$), make significant negative contributions to predicting protective social media citizenship behavior. In other words, the more students use social media for popularity, passing the time, and freedom from adults, the lower their protective social media citizenship behavior.

A significant result was also found for proactive behavior $F(15, 123) = 3.52, p < .001, R^2 = .30$. A closer look at the data indicates global awareness ($\beta = .36, p < .05$) and freedom from adults ($\beta = -.23, p < .05$) make significant contributions to predicting proactive social media citizenship behavior. In other words, the more students use social media for global awareness, the higher their proactive social media citizenship behavior. On the other hand, the more students use social media to be free from adults, the lower their proactive behavior. Using social media for global awareness is found to be a significant positive predictor of proactive social media citizenship, while freedom from adults is found to be a significant negative predictor of proactive social media citizenship.

In sum, using social media for popularity, passing the time and freedom from adults are found to be significant negative predictors of protective social media citizenship behavior. Using social media global awareness is a significant positive predictor of proactive social media citizenship behavior and using social media for freedom from adults is a significant negative
predictor of proactive behavior. A review of regression coefficients for protective and proactive citizenship behaviors is revealed in Tables 4.5 and 4.6. Therefore, H6 is fully supported.

**TABLE 4.5**

*Regression coefficients for reason for social media use and protective citizenship behavior*

<table>
<thead>
<tr>
<th>Reason For Use</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Communicate With Friends</td>
<td>.003</td>
<td>.058</td>
<td>.005</td>
<td>.046</td>
</tr>
<tr>
<td>Popularity</td>
<td>-.112</td>
<td>.042</td>
<td>-.240</td>
<td>-2.673</td>
</tr>
<tr>
<td>Communicate With Family</td>
<td>.040</td>
<td>.040</td>
<td>.087</td>
<td>1.007</td>
</tr>
<tr>
<td>Pass The Time / Escape Boredom</td>
<td>-.119</td>
<td>.055</td>
<td>-.202</td>
<td>-2.138</td>
</tr>
<tr>
<td>Learn Things Outside Of School</td>
<td>.055</td>
<td>.043</td>
<td>.109</td>
<td>1.287</td>
</tr>
<tr>
<td>Feel Better When Down</td>
<td>-.038</td>
<td>.041</td>
<td>-.086</td>
<td>-.941</td>
</tr>
<tr>
<td>See What Peers Are Up To</td>
<td>-.002</td>
<td>.053</td>
<td>-.005</td>
<td>-.042</td>
</tr>
<tr>
<td>See What Celebrities Are Up To</td>
<td>-.022</td>
<td>.039</td>
<td>-.053</td>
<td>-.565</td>
</tr>
<tr>
<td>Entertainment</td>
<td>.091</td>
<td>.065</td>
<td>.123</td>
<td>1.410</td>
</tr>
<tr>
<td>Share Photos &amp; Videos</td>
<td>-.005</td>
<td>.047</td>
<td>-.011</td>
<td>-.105</td>
</tr>
<tr>
<td>Share Ideas &amp; Opinions</td>
<td>-.029</td>
<td>.050</td>
<td>-.061</td>
<td>-.578</td>
</tr>
<tr>
<td>Make New Friends</td>
<td>-.006</td>
<td>.041</td>
<td>-.015</td>
<td>-.154</td>
</tr>
<tr>
<td>Global Awareness</td>
<td>.028</td>
<td>.044</td>
<td>.058</td>
<td>.633</td>
</tr>
<tr>
<td>Freedom From Adults</td>
<td>-.087</td>
<td>.040</td>
<td>-.210</td>
<td>-2.188</td>
</tr>
</tbody>
</table>

*Significance achieved at the 0.05 level
### TABLE 4.6
Regression coefficients for reason for social media use and proactive citizenship behavior

<table>
<thead>
<tr>
<th>Reason For Use</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Communicate With Friends</td>
<td>.114</td>
<td>.466</td>
<td>.025</td>
<td>.244</td>
</tr>
<tr>
<td>Popularity</td>
<td>.159</td>
<td>.338</td>
<td>.043</td>
<td>.470</td>
</tr>
<tr>
<td>Communicate With Family</td>
<td>.376</td>
<td>.322</td>
<td>.102</td>
<td>1.169</td>
</tr>
<tr>
<td>Pass The Time / Escape</td>
<td>-.306</td>
<td>.447</td>
<td>-.065</td>
<td>-.686</td>
</tr>
<tr>
<td>Boredom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learn Things Outside Of</td>
<td>.354</td>
<td>.344</td>
<td>.088</td>
<td>1.030</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel Better When Down</td>
<td>.090</td>
<td>.329</td>
<td>.025</td>
<td>.274</td>
</tr>
<tr>
<td>See What Peers Are Up To</td>
<td>.399</td>
<td>.429</td>
<td>.104</td>
<td>.928</td>
</tr>
<tr>
<td>See What Celebrities Are Up To</td>
<td>.018</td>
<td>.315</td>
<td>.005</td>
<td>.058</td>
</tr>
<tr>
<td>Entertainment</td>
<td>-.020</td>
<td>.520</td>
<td>-.003</td>
<td>-.039</td>
</tr>
<tr>
<td>Share Photos &amp; Videos</td>
<td>.156</td>
<td>.376</td>
<td>.044</td>
<td>.415</td>
</tr>
<tr>
<td>Share Ideas &amp; Opinions</td>
<td>.319</td>
<td>.400</td>
<td>.086</td>
<td>.798</td>
</tr>
<tr>
<td>Make New Friends</td>
<td>.011</td>
<td>.331</td>
<td>.003</td>
<td>.033</td>
</tr>
<tr>
<td>Global Awareness</td>
<td>1.354</td>
<td>.355</td>
<td>.356</td>
<td>3.819</td>
</tr>
<tr>
<td>Freedom From Adults</td>
<td>-.748</td>
<td>.320</td>
<td>-.227</td>
<td>-2.341</td>
</tr>
</tbody>
</table>

*Significance achieved at the 0.05 level

Overall, six hypotheses were introduced to identify contributing factors to determining a student’s social media citizenship behavior. H1 – H5 are partially supported and H6 is fully supported. A review of results can be viewed in Table 4.7.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: The older a student becomes, the higher their <em>protective</em> social media citizenship behavior</td>
<td>Not Supported</td>
</tr>
<tr>
<td>The older a student becomes, the higher their <em>proactive</em> social media citizenship behavior</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: A student’s preferred social media platform will predict higher or lower <em>protective</em> social media citizenship behavior</td>
<td>Supported</td>
</tr>
<tr>
<td>A student’s preferred social media platform will predict higher or lower <em>proactive</em> social media citizenship behavior</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H3: More time spent on social media has a negative effect on <em>protective</em> social media citizenship behaviors</td>
<td>Supported</td>
</tr>
<tr>
<td>More time spent on social media has a negative effect on <em>proactive</em> social media citizenship behaviors</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H4: There is a difference between the <em>protective</em> social media citizenship behaviors of males and females</td>
<td>Not Supported</td>
</tr>
<tr>
<td>There is a difference between the <em>proactive</em> social media citizenship behaviors of males and females</td>
<td>Supported</td>
</tr>
<tr>
<td>H5: Higher frequency of parent connectivity has a positive effect on <em>protective</em> social media citizenship</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Higher frequency of parent connectivity has a positive effect on <em>proactive</em> social media citizenship</td>
<td>Supported</td>
</tr>
<tr>
<td>H6: A student’s primary reason for social media use will predict higher or lower <em>protective</em> social media citizenship behavior</td>
<td>Supported</td>
</tr>
<tr>
<td>A student’s primary reason for social media use will predict higher or lower <em>proactive</em> social media citizenship behavior</td>
<td>Supported</td>
</tr>
</tbody>
</table>
Chapter 5 - Discussion and Implications

The present study is an effort to explore the construct of adolescent social media citizenship and identify factors predicting higher and lower levels of citizenship behavior among students. Using a media uses and gratifications approach, this study identifies two dimensions of adolescent social media citizenship – protective behavior and proactive behavior – consisting of 30 items in the areas of digital harassment, psychological health and well-being, security and safety, misuse of technology, communication and conflict management, problem solving and collaboration, media literacy, and digital identity management. Additionally, this study identifies student age, gender, preferred social media platform, time spent on social media, reason for social media use, and parent connectivity on social media as factors affecting social media citizenship behavior. Although additional work is needed to validate the measurability of an adolescent social media citizenship scale, findings of this study provide a valuable baseline from which future scholars and educators can apply a more media-centric and practical approach to studying student social media use and teaching citizenship behavior.

Dimensions of digital citizenship. This study offers additional evidence to support the notion that digital citizenship is a multi-dimensional construct (Choi et al., 2017; Jones & Mitchell, 2015; Kim & Choi, 2018; Nordin et al., 2016). Exploratory factor analysis identified two dimensions - protective and proactive - to students’ self-reported social media citizenship behavior. Protective behaviors encompass 22 items in the areas of digital harassment, communication and conflict management, misuse of technology, psychological health and well-being, and security, while proactive behaviors consist of eight items in the areas of problem solving and collaboration, media literacy, and digital identity management.

Interestingly, the items within each dimension neatly align with scholarly distinctions between two traditional and digital citizenship discourses: (a) rights and responsibilities (i.e., protective
behaviors) and (b) active participation and enacting change (i.e., proactive behaviors) (Curran & Ribble, 2017; Jones & Mitchell, 2015). Early digital citizenship discourse has been criticized for focusing too much on risk and safety, thereby hindering adolescents from exploring and maximizing the full benefits of engaging online (Third & Collin, 2016). While some digital citizenship scholars have begun to include more proactive factors in their measurement scales, dimensions are not consistent and are not fully representative of the entire digital citizenship construct. (See a review of digital citizenship measurement scales in Table 5.1).

**TABLE 5.1**

*Sampling of Previous Digital Citizenship Measurement Scales*

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year Published</th>
<th>Protective Dimensions</th>
<th>Proactive Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones &amp; Mitchell</td>
<td>2015</td>
<td>Respectful Online Behavior</td>
<td>Online Civic Engagement</td>
</tr>
<tr>
<td>Choi et al.</td>
<td>2017</td>
<td>Technical Skills</td>
<td></td>
</tr>
<tr>
<td>Kim &amp; Choi</td>
<td>2018</td>
<td>Ethics, Fluency, Reasonable Activity, Self-Identity</td>
<td>Socio-Cultural Engagement</td>
</tr>
</tbody>
</table>

Unlike previous digital citizenship scholarly work, the current study’s two citizenship dimensions and 30 corresponding items are representative of the diverse areas within digital citizenship literature and thus provide a more complete approach to studying digital citizenship. The dimensions also report reliability indexes of $\alpha = .89$ (protective) and $\alpha = .71$ (proactive).

**Introduction of adolescent social media citizenship.** This study introduces the construct of adolescent social media citizenship, defined as student propensity to protect themselves from harm on social media and proactively maximize the benefits of participating. Previous studies have explored adolescent digital citizenship as consisting of all online activity (Choi et al., 2017; Jones & Mitchell, 2015; Kim & Choi, 2018; Nordin et al., 2016), largely missing the opportunity to focus on the online
platforms where adolescents spend most of their time: social media (Anderson & Jiang, 2018). Narrowing the focus of digital citizenship to just social media allowed this study to provide a more practical analysis of student-exhibited media use behaviors. Applying a media uses and gratifications perspective to the adolescent social media citizenship construct also bridges digital citizenship and media literature, providing a path towards better understanding why students are engaging with social media and which needs are being satisfied from their behavior.

As this is an exploratory study, it is also important to note that previous research has suggested online shopping is an important aspect of digital citizenship for students. Mike Ribble’s (2004) digital citizenship construct described the growth of a digital economy and how students should be taught to become smart and savvy digital consumers. Nordin and colleagues’ (2016) study also provided statistical evidence that digital commerce was a valid, measurable factor within digital citizenship, highlighting the need for adolescents to be careful consumers who are aware of the potential for identity and credit card theft, as well as commercial rip-offs. While the current study identifies that nearly 77% of survey participants have purchased something from an online retailer, such as Amazon, nearly 70% have never purchased something directly from social media (see Table 5.2 for online shopping responses). Exploratory factor analysis did not identify any of the four proposed social media shopping items as contributing to either protective or proactive adolescent social media citizenship behavior. For these reasons, the entire social media shopping factor was removed from the final construct. Because UGT literature identifies common social media gratifications - self-esteem, aesthetic, and interactivity – as vulnerabilities for compulsive and impulsive teen shoppers, because brands continue to market to adolescents on these platforms, and because of newly introduced social media in-app purchasing features from platforms like Instagram, future social media citizenship research should further explore social media shopping’s importance and applicability to the construct.
### TABLE 5.2

**Respondent Shopping Information**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>338</td>
<td>102</td>
</tr>
<tr>
<td>%</td>
<td>76.8</td>
<td>23.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>93</td>
<td>347</td>
</tr>
<tr>
<td>%</td>
<td>21.1</td>
<td>78.9</td>
</tr>
</tbody>
</table>

**Contributing factors to adolescent social media citizenship behavior.** The present study provides evidence that social media citizenship is significantly associated with other relevant student factors: age, gender, social media platform preference, time spent on social media, frequency of parent connectivity, and reason for social media use.

Support for H1 reveals that as students age, from 11 years to 18 years, their proactive social media citizenship behavior increases. Interestingly, previous digital citizenship research has missed the opportunity to explore age as a factor to the construct. Because media literature has shown age and lifecycle stage to be important factors in predicting motivations for technology use (Bolton et al., 2013; Lee, 2013; Shaw et al., 2001), it was important to include it in the present study. Results of this study indicate that teaching protective social media citizenship behavior at any age is important. However, higher proactive social media citizenship behaviors among older adolescents could be explained by the more active nature of the behaviors exhibited within the sub-scale - intentionally using social media to become more aware of global issues, to improve the local community, and to actively seek out other sources to check information currency (i.e., actions that are indicative of a more experienced and confident social media user).

Support for H2 suggests that higher daily Snapchat use negatively predicts student protective social media citizenship behaviors. The present cohort of 440 students closely aligns with national
adolescent social media use preferences. Pew Research Center’s 2018 study on teens, social media, and technology revealed that YouTube, Instagram, and Snapchat are the most popular online platforms among this age group, with Snapchat and YouTube being used most often (Anderson & Jiang, 2018). Students in this study use YouTube most often in a single day, followed by Instagram and Snapchat. Higher daily Snapchat use appears to have a negative predictive effect on students’ protective behaviors in areas such as managing communication and conflict, misuse of technology, being safe and secure, and taking care of their psychological health and well-being. Although some scholarly work has indicated intense Snapchat use as being tied to facilitating social interactions and networking among close family and friends (Piwek & Joinson, 2016), UGT research has linked Snapchat use with deviant behavior such as sexting, saving and sharing incriminating snaps, and cyberbullying (Vaterlaus et al., 2016). The ephemeral, or cryptic, nature of Snapchat communication - where images and messages are sent and then “self-destruct” shortly after - can lead adolescents to feel a false sense of security and reduce inhibition.

Findings related to H3 indicate that as students spend more time on social media per day, their protective behaviors on social media decrease. Convenience and constant access to smartphones have been attributed to increases in social media use among adolescents (Anderson & Jiang, 2018; Lenhart, 2015). Between 2015 and 2018, the percentage of adolescents with access to smartphones increased by nearly 27%. During this same time period, the percentage of adolescents going online almost constantly rose by nearly 88%. While preferred platforms among this age group may have changed over the course of three years – Facebook to Snapchat – the increasing draw of social media into the daily lives of adolescents is unmistakable. Reduced protective social media citizenship behaviors among respondents in this study could be explained by scholarly-proposed links between spending more time on smartphones and social media, and negative effects such as addiction, distraction from
everyday activities and obligations, reduced grade point averages, sleep deprivation, pressures to maintain content, cyberbullying behaviors and need for mental health support (Jacobsen & Forste, 2011; Lin et al., 2015; Redden & Way, 2017; Sampasa-Kanyinga & Lewis, 2015; Tanrikulu, 2015; Van den Bulck, 2007; Van den Eijnden et al., 2016). Researchers Bovill and Livingstone (2001) also hint at the privatization of media use among adolescents and the existence of a media-rich bedroom culture as contributing factors to increasing screen-time. Isolation with a smartphone, away from parents and autonomy over media selection and use have the potential to lead to negative media effects if not well regulated (Coyne et al., 2013).

Support for H4 reveals that although there is no significant difference between male and female students when it comes to their protective social media citizenship behaviors, there is a difference in their proactive behaviors: females have statistically significant higher proactive behaviors on social media than their male counterparts. It was expected for gender to affect both protective and proactive behaviors since previous research has shown gender to be a factor affecting attitudes and behaviors regarding social media – though not at all consistently. Martin and colleagues (2018), when studying middle school student social media use for example, found that girls are more likely to accept a friend request from a stranger and more frequently check social media notifications. Jones and Mitchell (2015), on the other hand, found adolescent boys scoring significantly lower than girls in online respect and civic engagement sub-scales of their online digital citizenship construct. Increased proactive adolescent social media citizenship behaviors by females in the context of this study – such as using social media to help a friend or share things they are good at - could be explained by the fact that older adolescent girls, ages 15 to 17, are more likely to share self-authored content online - like artwork, blogs videos, photos – and are more tech-savvy and confident online explorers than their male counterparts (Lenhart & Madden, 2005).
Findings related to H5 indicate students who frequently connect with their parents on social media – through likes, comments, and messages - exhibit higher proactive social media citizenship behaviors such as making positive choices, problem solving, and collaborating with others. Support for this finding can be found in Clark’s (2011) proposal of participatory learning as a form of 21st century parent-mediation. Participatory learning promotes digitally enhanced, collaborative learning that sees parents less as hierarchal authority figures and more involved in promoting conversations, encouraging creativity, and as guides into new experiences. Previous research in the area of parent involvement with adolescent technology use indicates that parent involvement can have a significant positive effect on digital etiquette and safety (Wang & Xing, 2018) and can heighten feelings of connectivity, leading to higher prosocial behavior toward family and reduced relational aggression and internalizing problems (Coyne et al., 2014). It is also important to note that nearly all respondents in the present study indicated communicating with family as one of the reasons they use social media. A UGT perspective would support parent connectivity on social media as it satisfies an adolescent social need or desire.

Support for H6 suggests that a student’s reason for using social media does have predictive power over their protective and proactive social media citizenship behavior. Media uses and gratifications theory assumes that individuals actively choose from a diverse range of media options to satisfy their individual preferences and personalities and in the context of the current study, can invite positive and negative social media behavior. Table 5.3 includes a review of average respondent responses regarding their reasons for social media use.
TABLE 5.3
Descriptive Analysis of Respondent Reasons for Social Media Use

<table>
<thead>
<tr>
<th>Reason for use</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entertainment</td>
<td>4.46</td>
<td>0.80</td>
<td>440</td>
</tr>
<tr>
<td>Communicate with Friends</td>
<td>4.25</td>
<td>1.05</td>
<td>440</td>
</tr>
<tr>
<td>Pass the Time / Escape Boredom</td>
<td>4.13</td>
<td>1.00</td>
<td>437</td>
</tr>
<tr>
<td>See What Peers Are Up To</td>
<td>3.74</td>
<td>1.22</td>
<td>439</td>
</tr>
<tr>
<td>Global Awareness</td>
<td>3.57</td>
<td>1.23</td>
<td>439</td>
</tr>
<tr>
<td>Learning Things Outside of School</td>
<td>3.54</td>
<td>1.17</td>
<td>440</td>
</tr>
<tr>
<td>Communicate with Family</td>
<td>3.51</td>
<td>1.28</td>
<td>439</td>
</tr>
<tr>
<td>Feel Better When Down</td>
<td>3.41</td>
<td>1.32</td>
<td>440</td>
</tr>
<tr>
<td>Share Photos &amp; Videos</td>
<td>3.17</td>
<td>1.32</td>
<td>440</td>
</tr>
<tr>
<td>Share Ideas &amp; Opinions</td>
<td>3.09</td>
<td>1.26</td>
<td>439</td>
</tr>
<tr>
<td>Make New Friends</td>
<td>2.87</td>
<td>1.36</td>
<td>440</td>
</tr>
<tr>
<td>See What Celebrities Are Up To</td>
<td>2.85</td>
<td>1.41</td>
<td>440</td>
</tr>
<tr>
<td>Freedom from Adults</td>
<td>2.84</td>
<td>1.43</td>
<td>437</td>
</tr>
<tr>
<td>Popularity</td>
<td>2.32</td>
<td>1.26</td>
<td>440</td>
</tr>
</tbody>
</table>

A 5-item Likert scale was used: strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree

**Popularity.** Using social media for popularity negatively predicts a student’s protective social media citizenship behaviors. Specific items within the protective sub-scale – difficulty staying away from social media, compulsive checking of content, comparing self to others, information disclosure, and even responding to strangers – have been linked to technology-based, status-seeking behaviors (Bolton et al., 2013; Leung, 2014; Nesi & Prinstein, 2015).

**Pass the time / escape boredom.** Using social media to pass the time, or cure boredom, negatively predicts a student’s protective behaviors. The common media use theme of escape has been applied to idle time before or after work and school, as well as in moments of boredom during work and school (Whiting & Williams, 2013), thereby negatively influencing certain items within the protective sub-scale such as obeying social media bans, escaping problems, escaping negative feelings, and digital harassment. Specifically, research has shown relief of boredom to be both one of many motivations for cyberbullying (Notar et al., 2013; Varjas et al., 2010) and a factor in some forms of social media addiction related to diversion or distraction from every day activities and obligations (Song et al., 2004).
**Global awareness.** Using social media for global awareness positively predicts a student’s proactive behavior. The compatibility of a global perspective and specific items within the present study’s proactive social media citizenship sub-scale – including media literacy and civic engagement – have been hinted at in the work of digital citizenship scholars proposing a more active approach of collaboration and problem-solving (Choi et al., 2017; Curran, 2012; Gleason & von Gillern 2018; Jones & Mitchell, 2015; Kim & Choi, 2018; Ohler, 2011). Media literacy has also been named an asset in increasing civic responsibility and democratic participation (Kohen & Kahne, 2012), while cross-cultural awareness and global cognition have been proposed to generate a cognitive shift towards comparative, long-term, and solution-oriented thinking (Hanvey, 1982).

**Freedom from adults.** Using social media to gain freedom from adults negatively predicts a student’s protective and proactive social media citizenship behavior. Increased demands on parent time and availability, underestimation of media influence on children, and parent economic and technology limitations have paved the way for a technology knowledge gap, leaving parents uninformed about their children’s digital and mobile technology activities (Clark, 2011). Social media use by adolescents exists within this technology knowledge gap and has satisfied the need for freedom and autonomy desired by adolescents (Redden & Way, 2017). Parents have also underestimated how much time their children are spending on social media and are not as aware of what applications they are using (O’Keeffe, 2016). As previously mentioned, studies have linked increased use of social media to negative effects such as addiction, distraction, cyberbullying behaviors, and need for mental health support. With adolescents seeking social media as a refuge from the watchful eyes of parents, the opportunity for parent involvement and engagement has been limited.
Implications

To my knowledge, the present study is the first to explore and define social media citizenship and the first to apply a media uses and gratifications approach to studying digital citizenship. This unique combination of firsts provides valuable theoretical implications for media and digital citizenship scholars, as well as practical implications for educators, school administrators, and professionals working with adolescents and families.

**Reframing digital citizenship in social media contexts.** To more closely align digital citizenship scholarship with current media trends among adolescents, this study introduces and explores the construct of social media citizenship. Reframing digital citizenship for this age group in social media terms, allows for improved scholarly perspective and increased communication and connection with adolescents. As technology changes, and the specific media that adolescents value most changes, digital citizenship scholars must also adjust the way they approach the construct. Failure to adjust will result in adolescent rejection of digital citizenship and cynicism towards attempts to educate future generations. This study lays the groundwork for digital citizenship scholars and educators to create practical and applicable strategies for maximizing positive digital communication behaviors among adolescents.

**Predicting social media citizenship behavior via media uses and gratifications.** The variety of social media platforms available to adolescents and their diversity in motivation to use and interpret such media justifies the need to approach digital citizenship scholarship from a media uses and gratifications perspective. The present study enriches the current understanding of digital citizenship by taking it from simply a list of construct dimensions to a deeper understanding of the determinants of citizenship behavior. Findings from this study indicate that adolescents select and engage with social media to satisfy a diverse range of needs and desires. Consistent with previous adolescent UGT
literature, most study participants associate their social media use to fulfilling a need for entertainment, communication with friends and to pass the time or escape from boredom. This study goes one step further to reveal new connections between specific media uses and social media citizenship behaviors. Using social media to pass the time or as a cure for boredom, for example, predicts negative protective social media citizenship behaviors such as digital harassment, social media addiction, and reduced identity protection. While popularity scores the lowest among study participants’ reasons for social media use, a remaining 17% do associate it with their individual social media use. Using social media for popularity, like passing the time, predicts negative protective social media citizenship behavior. Parents and educators should work to introduce media-use motivations that encourage positive citizenship behavior. Understanding why adolescents use social media and how that use has the potential to influence their behavior is essential to developing successful teaching and learning strategies that guide and motivate future, positive communication behavior.

**Encouraging parent-child connections on social media.** The National Education Association (NEA) links parent involvement in education with increased academic performance, educational aspirations, and student motivation (Van Roekel, n.d.). Parent involvement to achieve student success should not be relegated to reading and math-focused education initiatives, it should also include citizenship education that prepares students to be successful in a 21st century digitally mediated environment – most importantly on social media. While technology tensions between parents and their children have been observed over safety, frequency of use, family rules (Blackwell et al., 2016), isolation, and secrecy (Coyne et al, 2013; Vaterlaus et al., 2016), this study finds that students want to connect with family on social media. And when they do connect and engage on a more frequent basis, students exhibit increased decision-making, problem solving, and collaboration skills. Opportunities exist for parents to deploy participatory learning strategies that remove the authoritative
constraints of traditional parent mediation and instead allow parents to take a co-learner role that guides new ways of using social media, promotes conversations, and encourages content creation and sharing.

**Teaching adolescent social media citizenship.** Social media citizenship cannot be taught in one day, or even achieved during an annual school safety week. Adolescents are routinely immersed in social media and thus their citizenship education must be equally immersive. Social media as an educational tool used by teachers and parents has been sporadic, resulting in informal and incidental learning by students active on social media (Mao, 2014). Students must have the opportunity to routinely exercise their protective and proactive social media citizenship skills alongside teachers performing the role of interactive guide. Embedding social media citizenship discussions and activities into everyday subjects, rather than teaching in isolation, will allow learning to more closely align with how adolescents use social media outside of the classroom (i.e., in every aspect of their lives). Exploration of social media use in this study reveals that leisure and social connection are top reasons for adolescent use of social media. Therefore, social media citizenship education comprised of participatory learning in student areas of interest, with elements of socialization and play, has the potential to reduce student resistance to incorporation of citizenship behaviors in their personal social media use.

Finally, this media-use and subject immersion approach to citizenship education fuels the need for educators to become well-versed in adolescent media-use, including knowledge of and experience using the most widely used social media platforms among this age group, media theories involving adolescents, and media literacy. An improved understanding of student social media perspectives and reasons behind why they use social media will improve the development of social media learning activities and technology integration. Thus, a need exists for universities that are educating the
educator to expand course offerings to include media training and certification from media professionals, perhaps through strategic partnerships with university media and strategic communications departments.

**Limitations**

It is important to note the present study’s findings represent the initial exploration of an adolescent social media citizenship construct and therefore limitations must be considered.

**Demographics, geographic location and school option.** A more representative sample at the demographic level would provide more generalizable findings. This study is based on responses from 440 adolescents ages 11 to 18, however, nearly 76% of respondents were under the age of 14. A more representative sample would have included a larger number of high school-age students leading to more insight and comparability across age groups, most notably for H1 predicting the older a student becomes, the higher their social media citizenship behavior. The parent consent form process was particularly difficult to overcome with high school-aged students and future researchers should work at district levels to add parent approval to participate in a survey to the annual enrollment packet, rather than trying to send forms home with students, which then need to be signed and returned.

Technology trends indicate that adolescents are receiving their first smartphone at age 10 and this study reveals the average age of a student’s first social media account is also 10. The present study’s youngest respondents are 11 years old and in middle school. Future studies should look to survey students as young as 10 years old in either fifth or sixth grade.

Future research should also study the construct of adolescent social media citizenship across geographic boundaries and school options. The generalizability of the present study is limited by both the geographic scope of the sample in suburban and rural communities in central Kansas, and the school option of public school. Future studies should look to replicate this study with students
attending private schools and homeschooling, as well as students on the East or West coast of the United States and in urban areas.

**Social media platforms.** The context of social media in this study is limited to Facebook, Facebook Messenger, Instagram, Twitter, Snapchat, and YouTube to align with existing studies in academia and industry. Survey respondents were given the opportunity to write in additional social media platforms consistently used and it is therefore interesting to note that Pinterest, Twitch, and TikTok were the most commonly mentioned. These mentions were not significant enough to warrant inclusion in the study, however, should use among adolescents show a sizeable increase on these platforms or others, future research should consider their inclusion.

**Conclusions**

The adolescent social media citizenship construct introduced and explored in this study is a first step toward realigning the digital citizenship discussion with current media trends and student media-use behaviors. Adolescents spend most of their time online using social media, therefore measurement and interpretation of digital citizenship behaviors should reflect these media preferences. Grounding the theoretical approach to studying this construct in media uses and gratifications also allows scholars and educators to better understand how student factors - such as age and gender, preference for certain social media platforms, frequency of social media use, desires and needs met through social media, and even parent connection on social media - have the power to hinder or promote positive digital citizen behavior. The adolescent social media citizenship dimensions presented in this study and the predictive nature of student media-use factors can be used to help parents and educators identify and prioritize educational opportunities, as well as create timely and relevant social media citizenship activities, discussions, and support materials for students.
References


Ellis, J. (2012, December 11). Young adult readers may have abandoned print but they’ll take news in their pockets. Retrieved from http://www.niemanlab.org/2012/12/young-adult-readers-may-have-abandoned-print-but-theyll-take-news-in-their-pockets/


Appendix A - Qualtrics Survey

WELCOME MESSAGE

Dear Student,
Thank you for taking part in this research study about your social media use. You will be asked to answer several questions about how you use social media, as well as how you feel when you use it. The survey should not take you more than ten minutes to complete.

As you answer the questions in this survey, remember that this study defines social media as YouTube, Snapchat, Instagram, Twitter and Facebook (including Facebook Messenger).

All information you share is confidential, meaning no one will know how you answered the questions. Please answer all questions honestly. Information for the entire school may be shared with administrators but only in an effort to add classroom activities that support students having safe, healthy and rewarding social media time.

If you have any questions, please ask the teacher or administrator in the room. Or, feel free to contact Jana Thomas at Kansas State University at janamthomas@k-state.edu, or the Kansas State University Research Compliance Office Chair Dr. Rick Scheidt at 785.532.3224.

By clicking "proceed" below, you understand that you don’t have to participate in this study and you may stop answering the questions at any time.

SURVEY QUESTIONS

Instruction: The following questions are about how you personally use social media. Remember that for this study, "social media" includes Facebook, Facebook Messenger, Instagram, Snapchat and YouTube.

Please respond with your agreement to each of the following statements.

1. I am more informed with regard to political or social issues through using social media.
2. I am more aware of global issues through using social media.
3. I think social media participation is a good way to make a change to something I believe to be unfair or unjust.
4. I use social media to improve my school or my town in some way.
5. I use social media to learn how I can help friends or other kids in general.

Please respond with your agreement to each of the following statements.

6. If I disagree with people on social media, I watch my language so it doesn’t come across as mean.
7. I am careful about how I say things on social media so they don’t come across the wrong way.
8. I state my reasons when I disagree with something on social media.
9. I don’t encourage online fights even if I encounter one.
Instruction: These questions involve shopping and social media. Shopping on social media occurs when you see an ad for a product like clothing, makeup, music or jewelry, click on the ad and make a purchase on your cell phone or computer.

Please respond with your agreement to each of the following statements.

10. Shopping on social media is reliable.
11. Social media is safe for me to conduct personal business, like shopping.
12. I am comfortable making purchases on social media.
13. Social media shopping can be trusted.

Instruction: The following questions are about how you personally use social media. Remember that for this study, "social media" includes Facebook, Facebook Messenger, Instagram, Snapchat and YouTube.

Please respond with your agreement to each of the following statements.

14. If I receive a friendship request from someone I have never met in person, I will not accept this request.
15. I limit access to my personal information on social media (address, age, school, phone number).
16. I do not reply to messages from people I don’t know on social media.
17. I do not disclose my personal data (address, age, school, phone number) on social media.
18. I obey social media bans. (Bans occur when you are asked not to be on social media or your cell phone. Examples include in the classroom, during dinner with your family or while you are driving.)
19. I am aware of the community standards or ‘terms of use’ of social media sites.
20. I am aware of copyright infringement when using social media. (Copyright infringement = using someone else’s image or written word and passing it off as your own.)
21. I make sure my eyes are parallel to my cell phone or computer and keep my eyes at a proper distance from the screen.

When you encounter news, product or health-related information on social media do you…

22. Check to see if the information is current?
23. Consider whether the views represented are facts or opinions?
24. Seek out other sources to validate the information?
25. View the author’s (or poster’s) qualifications or credentials?

When using social media, do you…

26. Like to present yourself as someone making positive choices?
27. Share things that you are good at?
28. Think about making sure things you say and post will not be something you regret, or feel bad about, later?
Instruction: The following questions are about your social media behavior. Remember that your answers are confidential, meaning no one will know how you personally answered. Please answer all questions honestly.

I the past year, have you…

29. Made rude or mean comments to someone using social media?
30. Used social media to harass or embarrass someone that you were mad at?
31. Spread rumors about people using social media?
32. Shared something about someone with others on social media that was meant to be private?
33. Posted or shared a video or picture of someone on social media when you knew it might hurt or upset them?
34. Participated in a social media group where the focus was making fun of someone you know?
35. Found it difficult not to look at messages on social media when you were doing something else (such as schoolwork)?
36. Found that you can’t think of anything else but the moment that you will be able to use social media again?
37. Sat waiting until something happened on social media again?
38. Felt the need to use social media more and more often?
39. Used social media to take your mind off your problems?
40. Used social media to escape from negative feelings (like anger, sadness, frustration or anxiety)?
41. Compared yourself with others when reading news feeds or checking out others’ photos?

Additional Questions:

42. How often do you connect with your parent(s) or guardian(s) on social media? For example, looking at each other’s videos and photos, liking or comments on each other’s posts or chatting or messaging with each other.
43. Have you ever bought something online from an ad you saw on social media?
44. Have you ever bought something online, like from Amazon?
45. How older were you when you first started your first social media account?
46. On a typical day, how much time do you spend on social media, including Facebook, Messenger, Twitter, Instagram, Snapchat and YouTube? Under 1 hour, 1-3 hours, 4-6 hours, 7-9 hours, 10-12 hours, 13 hours or more
47. Please respond with your agreement to each of the following statements. I use social media because I want to… Communicate with Friends, Look Popular/Be Popular, Communicate With Family, Pass the Time/Escape Boredom, Learn Things Outside of School, Feel Better When I am Down, See What my Peers are up to, See What Celebrities are us to, Be Entertained, Share my Own Photos or Videos, Share my Ideas and Opinions, Meet new People/Make New Friends, See What’s Happening Around the World, Be Free From Adults, Other.
48. Think about your social media use in a typical day and respond with how much you use each of the social media platforms: Facebook, Messenger, Twitter, Instagram, Snapchat, YouTube, Other. Never, Sometimes, About Half the Time, Most of the Time, Always

49. What grade are you in?
50. What is your age?
51. What is your race or ethnicity?
52. What is your gender?

DEBRIEFING STATEMENT

The survey you have just finished looks at what it means to be a social media citizen. Your participation will help us better understand how young people like yourself are using social media and how adults can help them have healthy, safe and rewarding social media time.

If you have any questions about the study, please feel free to contact Jana Thomas at Kansas State University at janamthomas@k-state.edu, or the Kansas State University Research Compliance Office Chair Dr. Rick Scheidt at 785.532.3224.

If you have any questions or concerns about the information you shared or about the questions asked, please reach out to a parent, teacher or other trusted adult.

Thank you for your time.
Appendix B - Parent Consent Form Sample

Parent Consent Form – Student Social Media Use Survey

Dear Parent or Legal Guardian,

On [INSERT DATE], your student will be asked to participate in a survey about their social media use and behavior. The survey will be conducted by a Kansas State University master’s degree student who is studying social media use and behavior among middle school and high school students. All information shared by your student in the survey will remain confidential, however information for the entire school may be shared with administrators. Surveys will be conducted during the school day and on school computers. If you have any questions about the study, please feel free to contact Jana Thomas at janamthomas@k-state.edu or call the Kansas State University Research Compliance Office Chair Dr. Rick Scheidt at 785.532.3224.

Because your student is under the age of 18, the researcher must receive your written consent for them to participate in the study. Please fill out the form below and have your student return to their teacher by [INSERT DATE].

CONSENT:
By signing below, I understand this survey is part of a research project, and that my student’s participation is voluntary. I also understand that if my student decides to participate in this study, they may stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which they may otherwise be entitled. I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to allow my student to participate in this study under the terms described.

STUDENT NAME:

PARENT OR LEGAL GUARDIAN SIGNATURE (IF UNDER 18 YEARS OF AGE):

 Date: ____________________________

Please have your student return this signed form to their teacher by the due date.