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Text Messaging Between School Counselors and Students: An Exploratory Study

Nicholas Gilly

Arcadia University

A DISSERTATION IN EDUCATION

Presented to the Faculties of Arcadia University's School of Education in Partial Fulfillment  
of the Requirements for the Degree of Doctor of Education

Dissertation Committee

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April 22, 2020

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### **Abstract**

This exploratory case study examines the impact of text messaging on mentoring relationships when used as an outreach between school counselors and high school students, where established relationships are lacking. An SMS gateway was used to mediate communication between school counselors (N=2) and students (N=5) over a three-month timeframe. The SMS gateway converted email, sent from counselors, to text messages, which were received on mobile devices of students and allowed students to respond back to counselors. Findings indicate that the use of text messaging may ease scheduling of face-to-face meetings between counselors and students, but evidence does not support any conclusions about the impact of text messaging on mentoring relationships. Students prioritized transactional relationships and perceived direct access to counselors, via text messaging, as a way to mitigate help-seeking barriers and control the counseling process. Ethics of the counseling field, social perceptions of professional communications, and sensitivities to traditional counselor-student relationships are to be considered when applying these findings in practicum. Further study about the ways text messaging can impact relationships in a school setting is necessary to expand our understanding of text messaging as a potential communication tool between high school students and their school counselors.

## **Chapter 1 – Introduction**

### **Research in Brief**

This exploratory investigation into the efficacy of text messaging and its ability to influence the mentoring relationships between students and counselors resulted in findings that can stimulate more in-depth research and application in schools. This is especially pertinent to high school counselors who seek ways to connect to students, with whom, they do not have relationships or are socially isolated. Bridging a connection with these students may lead to increased access to guidance services. Findings suggest that text messaging between students and counselors may bridge barriers and ease the scheduling of face-to-face meetings. The data and discussion expand our current knowledge of text messaging technology as applied to communication between high school students and school counselors. This chapter overviews the significant literature that influenced the research process and details the rationale for the research problem.

### **Literature Background**

#### ***Communication Technologies***

Technological communications are now present in almost every aspect of our lives. The most recent generation has only experienced life with these communication advances, such as text messaging, smartphones, and face-to-face video calling. In ways we know and in ways we have yet to uncover, communication changes are impacting the way we interact with each other and form relationships (Barth, 2014; Sude, 2013). Research struggles to capture the impact of communicative technologies as they are creatively used by a new generation of users with increasingly advanced appetite and aptitude (Nesmith, 2018). There is an opportunity to gain insight on the use of a single technology, such as text messaging, as it is applied across a broad variety of fields. Below are examples of fields generating the backing of this research: counseling (Nesmith, 2018; Wadden et al., 2014), education and

learning (Bouhnik & Deshen, 2014), mental health (Iribarren, 2017; Kamalou et al., 2019; Twenge et al., 2018), language and grammar (Al-Kadi, 2019; Friedrich, 2019; Waldron et al., 2017), adolescent development (Barth, 2014), and behavior (Schroeder & Sims, 2018). The range of fields chosen investigate how text messaging has influenced counseling, relationships, help-seeking, and adolescents.

### ***High School Counselor Role***

High school counselors are dually assigned responsibilities to manage academic and social well-being of students by building relationships (Wilson & Tanner-Smith, 2013). Counselors are uniquely trained to offer a variety of services, including connecting with students about their emotional, social, and academic well-being, gatekeeping programs and specialized services admission, offering personal and academic advice, and helping students to solve personal problems (Fitch and Marshall, 2004; Wells, Miller & Clanton, 1999; Wilson & Tanner-Smith, 2013). At times, counselors take a passive approach, waiting for students to assert themselves to seek help and engage with services (Bohns & Flynn, 2010). Another group of students, may choose not to access guidance services and often lack relationships with school counselors, such as those with social anxieties or at-risk of not graduating. These students may often ‘fall through the cracks,’ becoming so successful at socially isolating that little consideration is given to their success or failure (McCluskey, Noller, Lamoureux & McCluskey, 2004). It is the responsibility of counselors to identify these students by reviewing student data, such as attendance, discipline, academic achievement, out of school environment and mental health profiles or using a professional judgment based upon intimate knowledge or prior relationship with the student (Bulger & Watson, 2006; Moore, 2006; Kaufman, Bradbury, & Owings, 1992; Wells, Miller & Clanton, 1999; White and Kelly, 2010). Once identified, steps must be taken to bridge a connection and address a student’s needs or problems (White and Kelly, 2010; Wells, Miller & Clanton,

1999). While having evolved into a more encompassing role, it can be said that establishing relationships with students and mentoring personal growth may always have been the primary responsibility of counselors (Hazler & Denham, 2002).

### ***Need to Connect and Grow Mentoring Relationships***

Connecting counselors to students and growing relationships has the opportunity to influence their personal and academic growth. Acting as mentors, skilled school personnel can help adolescents, engage youth in making healthy decisions, improve personal outlooks and emotional capabilities, enhance necessary social skills, and plan for academic goals (Antaramian, Huebner, Hills & Valois, 2010; Barron-McKeagney, Woody & D'Souza, 2001; Hazler & Denham, 2002; Phillip & Hendry, 2000; Southwick, Morgan, Vythilingam & Charney, 2005). Increasing the number of students who have access to guidance services and grow mentoring relationships impacts graduation rates (Community Preventive Services Task Force, 2015; Sanchez, Esparza & Colon, 2008), attendance (Sinclair & Kaibel, 2002), drop-out prevention (Wells, Miller & Clanton, 1999), and positive mental health aspects (Ahrens, DuBois, Lozano & Richardson, 2010; Center for Promise, 2015). The academic benefits of mentoring are particularly important to high schools. External pressures have heightened the focus on academic success, such as an increased need for an intellectually skilled workforce (Washington Student Achievement Council, 2015; Workforce Training and Educating Coordinating Board, 2013) and a focus in federal legislation on increasing graduation rates (ESSA, 2015; Heise 1994). Considering the potential social and academic benefits, counselors are obligated to find ways to bridge potential barriers, connect with students, and take steps to grow a relationship.

### ***Barriers to Access***

Students cite barriers that dissuade them from seeking counseling services or socially isolate themselves from adults. Help-seeking barriers are a common element amongst

adolescents within research in online counseling and mental health fields; specifically, suicide (Wilson et al., 2002), social anxieties (Bohns & Flynn, 2010; Clement et al, 2015), and drug and violence prevention (Braciszewski et al, 2018). This is unsurprising, since socially isolated adolescents are prone to experience anxiety, poor decision-making, and, in extreme cases, suicide (Hazler & Denham, 2002; McCluskey, Noller, Lamoureux & McCluskey, 2004). In these studies, perceptions of barriers prevented adolescents from bridging access to counseling services. A variety of barriers were present amongst the studies, with some being more or less prevalent, or more or less influential. Barriers relevant to the findings are: eluding visibility from peers when seeking help in an attempt to avoid social stigmas (Clement et al, 2015; Richards & Vigano, 2013), not wanting to ‘be a bother’ the counselor (Bohns & Flynn, 2010; Gulliver et al, 2010), uneasiness about what will happen once they begin seeking help (Gulliver et al, 2010), diminishing the importance of their individual needs, choosing to solve problems on their own (Gulliver et al, 2010; Clement et al, 2015), and having time available to access services (Gatti et al., 2016; Richards & Vigano, 2013; Wilson et al, 2002). These barriers should be regularly considered programmatically by counselors, having similarly been echoed by the students in this research.

Contributing to the challenges facing adolescents when bridging access to counseling services is a lack of appreciation for underlying help-seeking barriers or awareness that they exist at all (Bohns & Flynn, 2010; Newark et al., 2017). Personal background, life experiences, and social circumstances contribute to the way a student interprets the intentions and overtures of counselors (Bohns & Flynn, 2010; Vogel et al., 2006). Future interactions are highly likely to be influenced by previous, successive experiences perceived to be negative (Wilson et al., 2002). When encountering obstacles, students may choose to deprioritize their need, look to peers for helps, or ignore an issue (Wilson & Deane, 2001).

As a result, counselors overestimate the number of students that they anticipate using services, accessing programs, and seeking help independently (Bohns & Flynn, 2010).

Unfortunately, many adult helpers misinterpret low enrolment in programs or services as lack of need or unwillingness to be helped and shutter programs (Bohns & Flynn, 2010).

### *Enhancing Access to Services*

It is the responsibility of a counselor to consider benefits and limitations of novel attempts to connect to students (Wilczenski & Coomey, 2006). Counselors need to consider innovative solutions, such as text messaging, to target and remove specific barriers that prevent students from accessing services (Vogel et al., 2006; Wilson et al, 2002). An example of how a technology can reduce a barrier follows: a socially isolated student, lacking social competence, may prefer using mobile technology to connect with others and feel belonging, while avoiding face-to-face contact (Kim et al., 2009).

Text messaging is the most prevalent communication tool used in the world today (Schroeder & Sims, 2018). The attributes of text messaging lend it to hurdling some help-seeking barriers. Relevant attributes include: ease of use (Horwitz & Detsky, 2011), relative speed of back and forth communication, not being restricted to a location or time (Müssener et al, 2016), the ability to be individualized and directly connected to the target audiences, (Braciszewski et al, 2018; Burgstahler & Cronheim, 2001; Szilagyi & Adams, 2012; Thakkar et al., 2016) and ease of integration into daily routines and job responsibilities (Spring et al., 2013). A literature review of online counseling found text messaging useful to overcome barriers such as: limited mobility, language, stigmas associated with help-seeking, and time considerations (Richards & Vigano, 2013). Additionally, text messaging has proven a low-cost tool to access patients in healthcare by breaking down barriers caused by time and location restrictions (Braciszewski et al., 2018; Buller et al., 2014; Chow et al., 2015; Guftafson et al., 2014; Partick et al., 2009; Thakkar et al., 2016). As found here and

demonstrated in literature, text messaging has a broad appeal across industries to hurdle barriers and allow direct access to services.

### ***Direct Access and Control***

Adolescent students have a desire to control the process of help-seeking with a counselor (Alivernini & Lucidi, 2011; Gatti et al., 2016; Wilson & Deane, 2001). Through texting, students can avoid the social pressures and expectations that accompany a face-to-face conversation (Gibson & Cartwright, 2014; Kamalou et al., 2019). As a result, the power balance between the students and adult is leveled (Richards & Viago, 2013). Students are more likely to engage with counselors, have less fear, and continue the relationship when they feel a sense of control and their personal autonomy is respected (Alivernini & Lucidi, 2011; Gibson & Cartwright, 2014; Wilson & Deane, 2001).

In a counseling relationship text messaging can provide a sense of control that influences safety and privacy. The behaviors that are exhibited during online behavior are similar to those exhibited in face-to-face interactions (Kamalou et al., 2019). For example, a student facing an uncomfortable situation may choose to physically escape or move away; in an online situation, this may take the form of not responding or ignoring the uncomfortable message and responding with a different topic (McCluskey et al., 2004; Schroeder & Sims, 2018). Students using text messaging are empowered to slow down the process of sending, reading, and responding to messages in order to avoid, consider, or deflect from socially uncomfortable situations (Gatti et al., 2016; Kamalou et al., 2019; Richards & Vigano, 2013). A counselor's specific response during texting is important; if a student perceives something to be negative, it is less likely they will return for future assistance (McCluskey et al., 2004).

In situations where the student's identity is unknown to the counselor, anonymity may be seen as another form of control (Aoki & Downes, 2003; Nesmith, 2018). A student may access counseling with precision, only sharing the bounds of a specific issue without the

counselor being influenced by other aspects of their personality (Gatti et al., 2016; Gibson & Cartwright, 2014). Students do not always trust counselors to keep confidentially (Clement et al., 2015; Gulliver et al., 2010; Joyce & Weibelzahl, 2011). By selectively withholding information, a student can take time to evaluate the help as beneficial and trustworthy or inadequate and subsequently rejected. (Newark et al., 2017).

### ***Relationships***

Mentoring relationships are formed by a series of trust-building experiences (Clement et al, 2015; McCluskey, Noller, Lamoureux & McCluskey, 2004). The behaviors of a mentor are more impactful when tailored to support the specific needs of an individual, avoiding broad assumptions about what a typical adolescent may want or need (Ahrens, DuBois, Lozano & Richardson, 2010; Collier, 2005; De Anda, 2001; Welsh & Dixon, 2016). Trust is often developed with mentors who demonstrate the virtues of care, integrity, courage, and prudence (Johnson, 2003; Wilson & Johnson, 2001). Attempting to connect with students is considered to be a caring act and often perceived positively during the early stages of relationship building (Collier, 2005; Ohrtman & Preston, 2013; Black, Suarez, & Medina, 2004;). Care is a common virtue necessary for mentoring (Johnson, 2003; Wilson & Johnson, 2001) and is often described as part of the core nature of a counselor (Vogt, 2002; Collier, 2005). Counselors who are able to establish mentoring relationships are often associated with a series of outcomes that align with responsibilities of a counselor: demonstration of person as individual, demonstration of emotional response, demonstration of virtues, modeling, coaching, professional counseling, professional responsibilities, encouragement, sponsorship (Black, Suarez, & Medina, 2004). While evidence of these outcomes may be indicative of a relationship and in connection with other evidence, establish a pattern of mentoring behaviors, it does not alone prove a mentoring relationship. The



operating definition of mentoring relationships further clarifies and defines how mentor relationships were applied for this investigation.

## **Operational Definitions**

### ***Mentoring Relationship***

Many definitions exist for mentoring relationships, in both common folklore and within the professional and academic scope. Traditionally accepted viewpoints show a mutual benefiting relationships with an imbalance of power and experience between mentor and mentee (Fritzberg & Alemayehu, 2005). Grey Owl defined “a mentor [as] a person whose hindsight can become foresight” (McCluskey, Noller, Lamoureux & McCluskey, 2004). Grey Owl’s straightforward definition is commonly accepted as a foundation that is referenced and supported either directly or indirectly in more complex definitions (Brown, 2002; Fritzberg & Alemayhu, 2005; McCluskey, Noller, Lamoureux & McCluskey, 2004). Using modified language from Grey Owl’s premise and observable actions of mentoring relationships in practice, the following definition of mentoring relationships will be used during this study:

Mentoring relationship occurs between a mentee, who demonstrates a willingness to consider or accept guidance, and an adult, who based upon personal experiences and knowledge, considers the individuality of the mentee, responds to the mentee's emotional needs, provides the mentee moral guidance, and models and coaches positive behaviors and thoughts. (Black, Suarez, & Medina, 2004; Fritzberg & Alemayhu, 2005; Brown 2004; McCluskey, Noller, Lamoureux & McCluskey, 2004).

## **Research Questions**

1. Does the use of mobile phone outreach impact the mentoring relationship between students and counselors?

- a. If so, in what manner? If not, for what reasons?
2. What are students' and counselors' perceptions of using text messaging when exploring a mentoring relationship?
  - a. In what ways did participants use text messaging?

### **Research Problem**

Specific to this research, the counseling field has a responsibility to proactively study the benefits and limitations of methods to bridge access to services and relationships for students who do not independently seek them (Barth, 2014; Bouhnik & Deshen, 2014; Fitch and Marshall, 2004; Wilson & Deane, 2001). Typical adolescent physical and mental development experiences are now occurring as part of or through technologies, like text messaging; this represents a departure from past social contexts. (Barth, 2014). As communication technology influences how students see and experience the world, behaviors they use to establish relationships with others evolves. Counselors must too evolve their own understanding of how communication technologies can be used in practice to connect, establish relationships, and offer services that meet student needs (Sude, 2013; Twenge et al., 2018).

Students who lack relationships with counselors, or tend towards social isolation, often prefer text messaging as an alternative to face-to-face interactions (Boase & Kobayashi, 2008; Chung, 2011; Hong, Chiu, & Huang, 2012). Some students feel safer using text messaging, by removing themselves from social stressors caused by social norms of face-to-face communication (Gatti et al., 2016; Kamalou et al., 2019; Richards & Vigano, 2013). Almost paradoxically, the ability to connect to others is a primary purpose of using text messaging (Ahn & Shin, 2013; Walsh, White, & Young, 2009). The unique attributes of text messaging allow students to simultaneously communicate and physically distance (Ahn & Shin, 2013; Gibson & Cartwright, 2014; Kim et al., 2009). Incorporating similar technologies

into strategies to bridge access to services may result in more students, who do not have a regular relationship with their school counselors, bridging access to counseling and forming mentoring relationships. The benefits of forming a trusting mentor relationship between a counselor and student are well-established. These may include: increased graduation rates (Community Preventive Services Task Force, 2015; Sanchez, Esparza & Colon, 2008), attendance (Sinclair & Kaibel, 2002), drop-out prevention (Wells, Miller & Clanton, 1999), and positive mental health aspects (Ahrens, DuBois, Lozano & Richardson, 2010; Center for Promise, 2015). Socially, students may benefit by learning to reprioritize their life decisions, find new problem-solving alternatives, and make positive choices as a result of newfound mentoring (McCluskey, Noller, Lamoureux & McCluskey, 2004). The efficacy of text messaging to benefit, limit, or influence the way that students bridge access to guidance services and mentoring relationships was a primary research aim. Findings support conclusions associated with accessing guidance services and text messaging, but fall short of establishing conclusions about mentoring relationships.

I spent my career teaching, advocating as an administrator, and connecting with students who lack relationships to school and community services; it is with great pleasure I may advance knowledge on their behalf. As a student I experienced and overcame many of the same barriers to help-seeking. These experiences influenced my personal journey to become an advocate for similar students; a journey that has been personally fulfilling and educational. I can reflect upon leadership decisions where I incorrectly supported changes to counseling services based solely upon the number of students enrolled. A more enlightened response would have been to ask deeper questions about the underlying experiences of target students and listening to them without judgment (Bohns & Flynn, 2010). I view the findings of this research as a way to disentangle similar misconceptions about help-seeking, connecting, and relationship building from management behaviors that allow students to ‘fall

through the cracks.’ Above all, the findings here may bridge barriers that school counselors and school leaders experience, preventing them from creatively experimenting with ways to connect to those students who do have relationships with their counselors.

### **Ethical Considerations**

In a public school setting, concerns about professional ethics, social perceptions, and sensitivities to feelings about traditional counselor student relationships are valid and deserve appropriate consideration. In an effort to address concerns, codes of professional school counseling ethics and position papers about technology and online counseling were consulted (American School Counselor Association, 2017; Surprenant, 2020, March 30). Through the research development process, necessary precautions to ensure the safety of participants were built into the study design and thoroughly vetted by university professors and school administrators. A core adjustment to alleviate professional, legal, and privacy concerns was to use an SMS Gateway that allowed the text messaging intervention to function similarly to email and route messages through school servers. The local context was accepting of the design of the study and ethical precautions taken.

Despite having addressed many of the concerns specific to this research, the design cannot be simply copied and pasted to other contexts, as complexities and preferences differ amongst local communities. In consultation with national counselor ethics recommendations that directly address social media, the need for collaboration with local school administration is apparent. “The technology utilized, including, but not limited to, social networking sites or apps, should be endorsed by the school district and used for professional communication and the distribution of vital information” (American School Counselor Association, 2017).

### **Setting**

Suburban High School was invited to participate in this study because its students’ needs, cultural dynamics, and leadership vision closely matched the research objectives.

Suburban High School has made increased attempts over the past years to improve graduation rates by targeting at-risk student groups in grades 9-12. Some of these methods experienced success in bridging students towards academic and social support structures while others fell short of engaging students. Attempts to hurdle barriers and establish a mentor relationship by using text messaging was not one of the methods attempted by the high school previously.

Suburban High School is part of a school district located in a suburban county neighboring a major mid-Atlantic city in the United States; locally it includes a borough surrounded by three townships. The school district consists of four elementary buildings, a middle school, and Suburban High School, and enrolls approximately 5,500 students in kindergarten through twelfth grade. The community represents a diversity of social classes. The district can be described as an emerging, high-achieving school district in an economically recovering community setting. The school district is active using technology in the classroom and had established a one to one computer program at some levels. Students regularly used district provided laptops for their academic learning.

### **Participants**

Counselor participants were invited from a total pool of six certified school counselors at Suburban High School. Five counselors were responsible for an alphabetical range of students in grades nine through twelve. Each of the five counselors had approximately 375 students in each caseload. One counselor worked specifically with college and career planning for junior and senior students, in conjunction with the alphabetical range counselors. Five of the six counselors volunteered for participation, but only two were chosen. Low interest from students caused some counselors to not have a participating student assigned from their caseload.

The student pool was created by asking counselors committed to the study to generate a list of students who fit a particular profile. That description was as follows: students with whom the counselors believe the relationship with themselves could be better. 50 students were initially invited to participate, but the pool was expanded after low initial interest. Ultimately five students assented to participate in the study. Four students were paired with one counselor and one was paired with another.

### **Data Generation**

Data was generated over a three-month period and consisted of the following: transcripts from twenty-one individual interviews with participants, transcripts of the text message communications between counselors and students, general demographic information (specifically: age, grade, gender, ethnicity), grade 9-12 attendance report, grade 9-12 academic transcript, grade 9-12 behavioral record, and a researcher note of a phone call. Three interviews took place with each participant; one prior to the study, one at the midpoint, and one final interview. Between each interview, data was analyzed and coded to uncover emerging themes and additional questions for the next interview generated. The purpose of these additional questions was to explore, confirm or disconfirm emerging themes.

### **Significance of the Study**

The data and discussion from this intervention provide a vivid, thorough, and encompassing qualitative analysis of the influence of text messaging to access guidance services and ease the scheduling of face-to-face meetings. The findings identify barriers to help-seeking, ways that text messaging can help overcome barriers, and a student's desire to control the counseling process. As an exploratory study, the learnings here beg to be investigated further by researchers and trialed in schools. Having witnessed little drawbacks as of yet and potentially positive gains, school counselors can take away aspects that may inform local outreach programs for students with whom they lack relationships.

## **Conclusion**

As text messaging and other technologies are inescapably woven into our lives, our communication and approach to forming relationships changes. Research will continue to catch up to the pace of text messaging, as it is applied over many fields, including education. By investigating how text messaging influences the process of bridging barriers and forming relationships with counselors, another layer to this knowledge base is added. The gap of specific literature and findings using text messaging in a school environment lead me to begin the conversation by introducing an exploratory qualitative investigation. The data and discussion speak directly from the participants' experiences and draw heavily from multiple fields of literature that have influenced the design and findings. Those who wish to extend these findings in their own experimentation may find interest in the following chapters that provide an overview of available literature and detail the study design.

## **Chapter 2: Literature Review**

### **Technology and Relationship Building**

#### ***Growth of Communicative Technologies***

Continued technological advancements, multiplying ease of use and practicality, has made mobile communication nearly inseparable with our daily human lives (Horwitz & Detsky, 2011). In an environment where media surrounds, it is virtually impossible to avoid interacting with it (Ahn & Shin, 2013). In communications, technological devices are serving as a substitute for face-to-face communication in adolescents (Pierce, 2009). The relationship between these technologies and culture is cyclical; the culture changes as a result of the new technology, the technology adapts to the culture, and new norms of communication, reciprocity, and availability are being established in society in response (Aoki & Downes, 2003; Geser, 2006; Twenge et al., 2018). Over time, each technological advancement

becomes more socially acceptable, in particular, social tools to communicate (Richards & Viago, 2013).

Social communication has evolved past the limitations of those prior. This evolution in communication has mirrored the evolution of devices, from beepers to smart phones, leading to text messaging and social sites that provide novel ways of sharing information (Pierce, 2009). When introduced, the landline telephone evolved communication and provided new and different methods for people to interact, leading to a replacement of face-to-face interactions (Pierce, 2009). A major drawback to the stationary landline telephones is limited mobility, forcing them to interact only at a particular place and time (Geser, 2006). Enter the mobile phone, allowing individuals to always be at work and accessible to all of their employees and customers (Geser, 2006). Preferable to landlines, they are a key attribute of modern life, allowing youth to venture further from home and make contact immediately upon encountering difficulty among a plethora of other advantages over landlines (Aoki & Downes, 2003; Devitt & Roker, 2009). Text messaging has evolved to become the most common method of communication to make direct connections between each other (Aoki & Downes, 2003; Iribarren, 2017; Nesmith, 2018). Texting is a multidimensional behavior and not merely something that someone either does or does not do (Schroeder & Sims, 2018).

Most adolescents have access to a mobile phone and texting is the leading form of social interaction (Guillot-Wright et al., 2018). Users feel lost without having their phone available to them (Aoki & Downes, 2003). Texting remains so popular that it continues to be a tool targeted by health research, being available to a wide audience and multitude of devices (Iribarren et al., 2017). Examples include: counseling (Nesmith, 2018; Wadden et al., 2014), education and learning (Bouhnik & Dshen, 2014), mental health (Iribarren, 2017; Kamalou et al., 2019; Twenge et al., 2018), language and grammar (Al-Kadi, 2019; Friedrich, 2019; Waldron et al., 2016).



### ***Technology as Part of Our Daily Lives***

Mobile communication technologies allow access to activities and services, once only for the privileged, are now available for those of less privileged societal standing (Vanden Abeele & Roe, 2013). Mobile phone use is such a societal norm that it is no longer a luxury for adults and youth (Liao & Wan, 2009). Low cost access has spread access to mobile communication evenly across the socio-economic spectrum (Chow et al., 2015). Whether those new advantages and options provided by technological advances can fully transform groups of individuals and reduced the gap between social spheres remains to be seen (Vanden Abeele & Roe, 2013). The increase in making social connections between people of all backgrounds independent of traditional space and time restrictions is a clear result of rapid transformation of communication tools over the past century.

A broad spectrum of consideration needs to be given to ways that communicative changes are causing both positive and negative changes (Wilczenski & Coomey, 2006). A specific example is the impact of text messages on the way we interpret and use the English language. While the particular findings may be unique and specific, there is no disagreement that the introduction of communication technology is having impact; (Al-Kadi, 2019; Friedrich, 2019; Waldron et al., 2016) making permanent changes in ways that are incomparable to what societies have prior experienced (Friedrich, 2019). Potentially harmful impacts can be exemplified in a 2018 study finding adolescents reporting a significant drop in social well-being, that is highly correlated to an increase in technological screen time and mobile devices (Twenge et al., 2018).

### ***Communicative Technology's Impact on Counseling***

The question is not whether to address the changing dynamics associated with the interactivity between social changes and technology, but when and how? (Barth, 2015). We now have generations who have not witnessed a world without texting, chatting, and email;

these groups will be expecting their counseling to follow suit (Mallen et al., 2017). Normal developmental changes associated with adolescents are being experienced through social media technologies (Barth, 2015). Modern technologies are now competing with parents and schools as formal educators of and communicators to children (Sanchez-Martinez & Otero, 2009). Research will struggle to keep pace in the counseling realm with the rapid advancements with technology as it is applied across all aspects of what we thought we knew (Wilczenski & Coomey, 2006). To meet this demand there has been a rise in online and text-based counseling services that will continue to expand (Nesmith, 2018; Novotney, 2017; Richards & Viago, 2013; Sude, 2013;). Online counseling is an inevitable branching of the field and offers a broad range of counseling services can be delivered well in an online environment (Richards & Viago, 2013). Tele-psychology (phone, webcam, text, email) may be a new idea to the general public, but it has been used for over 20 years in the military (Novotney, 2017).

## **Relationships**

### ***Mentoring Relationship Defined***

Many definitions exist for mentoring, in both common lore and within the professional and academic scope. In one way, mentoring can be described as "a process aimed at strengthening an individual at risk through a personal relationship with a more experienced and caring person" (Barron-McKeagney, Woody & D'Souza, 2001). Mentors are often seen as brokers, or people who help navigate youth through circumstances by allowing the opportunity to test theories before an actual event (Phillip & Hendry, 2000). Fritzberg & Alemayehu's literature supports conceptualizations by Kochan & Tirmble (2000) and Jipson & Paley (2000) regarding the power and benefits to both parties, seeing the relationship as mutual mentoring (2005; Black, Suarez, & Medina, 2004). The feminist perspective of mentoring reinforces this idea, where the relationship has a mutual give and

take. This is different from some traditionally accepted viewpoints held in institutions where mentoring is more one-way communication (Fritzberg & Alemayehu, 2005). Grey Owl, favoring simplicity, stated, "a mentor is a person whose hindsight can become foresight" (McCluskey, Noller, Lamoureux & McCluskey, 2004). This is supported directly by Brown, who believes that adults have learned from their own struggles can be turned into a road map for youth to follow (2004). For the benefit of academic study, concrete and observable characteristics of mentoring are necessary to be included in a definition. An assortment of these include: consideration of the individuality of the mentee, responding to the mentee's emotional needs, providing the mentee moral guidance, and modeling and coaching positive behaviors and thoughts. (Black, Suarez, & Medina, 2004; Fritzberg & Alemayehu, 2005; Brown 2004; McCluskey, Noller, Lamoureux & McCluskey, 2004). A more explicit exploration of these is available in the Initial Mentoring Quality Coding Matrix (Appendix J).

Mentoring is perceived by youth as taking a number of different forms (Phillip & Hendry, 2000). Many mentors identify themselves as being different from the other people in the lives of the youths (Phillip & Hendry, 2000). Students attribute a change in their personal attitudes and behavior to their mentors, although the topics were never explicitly broached (Anda, 2001). Mentors provide a needed "counter-balance" of positives to overcome negatives that occur in a student's life over time (Brown, 2004). Mentors facilitate academic, career, and personal success of their protégées, amongst many other things (Burgstahler & Cronheim, 2001). A mentor's role can be seen as providing support and guidance to their youth partners as well as gaining insight into the experiences of the youths (Phillip & Hendry, 2000).

### ***Trust and Relationship Building***

Establishing a mentoring relationship forms gradually through stages of trust-building

(Clement et al, 2015; McCluskey, Noller, Lamoureux & McCluskey, 2004). Trust was an important factor in who to seek help when faced with a problem (De Anda, 2001; Gulliver et al, 2010; Wilson & Deane, 2001). Integrity is seen as a cornerstone for trust building between two people (Wilson & Johnson, 2001) and prudence defining the boundaries of good judgment and appropriateness (Johnson, 2003). Based upon these virtues, both mentors and mentees need to identify the ethical boundaries that exist between the two parties and define the relationship so that they can act honestly (Black, Suarez, & Medina, 2004).

A mentor's ability to recognize the myriad of challenges that young people face when growing as an adult is a key element of gaining an adolescent's trust (Phillip & Hendry, 2000). Descriptions of mentors tended to center around those that would specifically help with a mentee's current needs, as opposed to making sweeping generalizations and assuming characteristics to be universal amongst youth. (Welsh & Dixon, 2016; De Anda, 2001; Collier, 2005). Other studies have found similar results, suggesting that naturally developed mentors tailor the support to the needs of the individual, making it more difficult to identify anything beyond general traits (Ahrens, DuBois, Lozano & Richardson, 2010). Having a trusting relationship with mentors is important to youths who wish to discuss sensitive issues (Wilson & Deane, 2001).

Young people are just as forward and active in seeking out help from adults with whom they have relationships, but tend to hold a smaller circle of trust (Center for Promise, 2015). Existing negative relationship factors can inhibit outward growth with school-based adults. For example, students tend to avoid interactions with school adults perceived as threatening or who discourage them to take intellectual risks (Bernstein-Yamashiro, 2004). Some school adults are perceived as treating all members of a student population as one large group, speaking arbitrarily to the masses, while not acknowledging individuality (Ohrman & Preston, 2013). Perceived power struggles between a youth and school adults may be an

additional reason why at-risk students avoid some relationships in favor of others (Phillip & Hendry, 2000). Productive mentorship with youths best occurs in locations with less power imbalance, on more equal footing, and usually outside of a formal institution like a school or work (Phillip & Hendry, 2000). Youths actually have a deep desire to have a strong personal relationship with a school-based adult, despite appearing socially distant at times while navigating the variety of school adult relationship challenges (Bernstein-Yamashiro, 2004). Students tend to seek help from those people where they have had a previous and open relationship (Wilson & Deane, 2001).

### ***Care in Relationship-Building***

Care's place in relationships has its foundation in basic human virtues. Core virtues, defined by Wilson and Johnson (2001) as a "distinctly good or admirable human qualities that denote moral excellence, righteousness, or uprightness in the way we live our lives" (Johnson, 2003). Commonly accepted virtues that are necessary for mentoring are: care, integrity, prudence, and courage (Johnson, 2003; Wilson & Johnson, 2001). Amongst the four, care is often cited as part of the core of a teacher's nature (Vogt, 2002; Collier, 2005). Teacher mentors who hold the virtue of care outwardly exhibit empathy, and genuine concern for those they mentor (Johnson, 2003). School-based adults possess a strong efficacy of care that has potential to be transferred to students by way of modeling and mentoring (Collier, 2005; Johnson, 2003; Vogt, 2002). Caring actions are often perceived positively when relationships are first forming (Collier, 2005; Ohrtman & Preston, 2013) and visible as outgrowth of relationships that already exist (Black, Suarez, & Medina, 2004). Some teachers are perceived as uncaring when they do not acknowledge an attempt to connect from a student (Collier, 2005; Black, Suarez, & Medina, 2004; Ohrtman & Preston, 2013).

### ***Mentoring Relationship Social Benefits***

It is for these reasons that mentoring programs are focused on finding, and taking

advantage of help-seeking behaviors of adolescent youth (Wilson & Deane, 2001); they can begin benefiting from alternative problem-solving models provided by school-based mentors. With proper mentoring, at-risk youth can reprioritize their life decisions, find new problem-solving alternatives, and make positive choices (McCluskey, Noller, Lamoureux & McCluskey, 2004). In medical fields, mentors and role models are a consistent theme in the recovery process for at risk youth (Brown, 2004). Multiple studies have shown that students who have been through trauma have better educational attainment and success when they have a mentor (Southwick, Morgan, Vythilinggam & Charney, 2005). When an individual seeks help in a situation of mental distress, it often leads to a reduction in that stress (Wilson & Deane, 2001). Mentees developed confidence that they could experience success despite their personal disabilities or struggles (Burgstahler & Cronheim, 2001). Within relationships with mentors, adolescents can test out individual ideas and find their own identity (Ohrman & Preston, 2013). Adult relationships with students are an important to validate and enable reflection amongst students (Collier, 2005; Bernstein-Yamashiro, 2004). Burgstahler & Cronheim (2001) found that both academic and personal exchanges were frequently exchanged between mentors and mentees looking at over more than 12,500 exchanges. Mentors are likely to talk about success and failures from their own experiences in life (Collier, 2005; Sanchez, Esparza & Colon, 2008) in the hopes that mentees can translate priorities and lessons learned to their current situations.

## **Graduation Expectations and Drop-Out Prevention**

### ***School Dropout Legislation***

Dropping out of high school has been shown to have an adverse effect on the over-all well-being and life quality of young adults in the United States. High school dropouts have been associated with many negative consequences that affect the quality of a person's life post-graduation, including a trend of low wages, unemployment, imprisonment, and the

potential to live in poverty conditions (Wilson & Tanner-Smith, 2013). The Community Preventive Services Task Force findings consider education achievement a health issue, finding that high school completion is linked to long-term health, and programs directed to these areas are likely to improve health equity because they are commonly implemented in racial and ethnic minority or low-income communities (2015). This is supported by similar efforts by The Center for Youth Wellness in San Francisco, creating a screening model for stress and poor health outcomes when people have multiple difficult experiences in their lives, specifically designed for educators and community organizations (Center for Promise, 2015). The Federal government has taken notice of these trends and, through legislation, set national goals and support programs that increase high school completion outcomes.

The continued Federal effort to provide better educational opportunities en route to a more productive, healthy, and employed citizenry has its roots in the 1994 legislation Goals 2000: Educate America Act (National Association of State Directors of Special Education, 1994). Initiated by President Bill Clinton to target specific areas for improvement, Goals 2000 includes working with at-risk populations and helping them to graduate high school (Heise 1994). The Federal administration that followed continued to amend the Elementary and Secondary Education Act in the form of No Child Left Behind in 2001. This alteration created an emphasis on dropout rates and percentage graduation targets for schools to achieve (United States Department of Education, 2015). Within the private sector in 2001, Greene conducted a study concluding that the health of schools, measured solely by graduation rates varied widely between urban and rural environments as well as socioeconomics of the community (Stanard, 2003). Additionally, the rise of public school ranking systems by, most notably, Great Schools.org and Newsweek<sup>TM</sup>, incorporate the graduation statistic into their calculations (Newsweek, 2015; Great Schools.org, 2015). Combined, these above cases, amongst many others, demonstrate the specific emphasis being placed on schools to graduate

students from high school and avoid high school dropouts. US News and World Report™, another large ranking system for schools, does not use graduation rate, but heavily emphasizes traditionally underachieving population data in their calculations (US News and World Report, 2015).

### ***School-Based Mentoring as a Dropout Prevention***

Focus on school drop-outs and those at-risk, have turned school personnel to think about the humanistic relationships they have with students (Alivernini & Lucidi, 2011; Collier, 2005; Ohrtman & Preston, 2013). As in other research, school-related adults in particular appear to have a strong effect on educational success of youth; at-risk youth in particular are greatly affected (Ahrens, DuBois, Lozano & Richardson, 2010; Ryan, Miller-Loessi & Nieri, 2007). Most studies highlight the importance of student teacher relationships to the academic success of students (Bernstein-Yamashiro, 2004; Black, Suarez, & Medina, 2004). School adults that exude a genuine care about a student, alleviate the initial anxiety that can interfere with student performance (Bernstein-Yamashiro, 2004). There is a strong value in listening to these students to understand why they may not be interested in learning in school (Bernstein-Yamashiro, 2004; Ohrtman & Preston, 2013). Developing relationships with school adults creates learning opportunities that can lead to better community building amongst the entire school (Collier, 2005; Alivernini & Lucidi, 2011).

Across the country, schools have instituted formal and informal mentoring programs as an attempt to address the emotional and social needs of youth, and seen results in reducing the chances of students dropping out of high school. A recent U.S. Department of Education survey, focused on collecting a big picture view of mentoring in K-12 schools, found that over one third of schools had some version of a mentoring program in place (US Department of Education, 2017). Check & Connect, a university supported program, aimed at information-sharing with established mentors and schools demonstrated improved attendance



and academic performance as well as a reduction in the number of skipped classes and out-of-school suspensions (Sinclair & Kaibel, 2002). Wells, Miller & Clanton found a reduction in school dropouts from approximately 21 % to 3% for enrolled students when one on one mentoring was applied to a summer dropout intervention program (1999). Students in a Community Preventive Services Task Force report found those who were a part of mentoring and counseling, on average, had a 9.4% greater chance of graduation attainment than comparison populations (2015). A comprehensive meta-analysis from studies between 1985 and 2010 appear to concur with the above specific literature, concluding that graduation rates were effectively reducing drop-out rates, regardless of type and population. (Wilson & Tanner-Smith, 2013). In fact, the specific language within the Every Student Succeeds Act, citing mentoring programs as examples of actionable items that may be taken to improving matters with at-risk youth, lends credence to the validity of mentoring programs as a viable programmatic choice for schools (ESSA, 2015). In summation, in general mentoring programs have shown concrete, through varied positive results on academic performance (Sanchez, Esparza & Colon, 2008) and promise to continue raising graduation rates.

Regardless of the type of program addressing the needs of at-risk students through mentoring, positive net effects will result if the program is implemented with fidelity and tailored for the local setting (Wilson & Tanner-Smith, 2013). For example, the Montreal Prevention program, mentoring training to parents and providing social skills training to at-risk boys as young as 7 and 9 saw long-term results, with 42% higher chance of graduating high school by age 24 and 33% less likely to have a criminal record (Boisjoli, et al., 2007). A meta-analysis of three large random assignment studies of mentoring programs found positive net effects in non-academic areas, specifically truancy, absenteeism, and school-related behavior (Wheeler, Keller, & Dubois, 2010). Non-academic, social supports, such as comfort, care, and trust, and psycho-emotional benefits, such as connectedness and self-

awareness that can result from mentoring have a great benefit to at-risk students, (Center for Promise, 2015) and set up conditions, ripe for measurable academic success (Wheeler, Keller, & Dubois, 2010). Self-esteem, in addition to other mental health outcomes, have been associated with a mentoring relationship with an adult (Ahrens, DuBois, Lozano & Richardson, 2010).

Mentors push students to think more positively about their educational future (Sanchez, Esparza & Colon, 2008). Students' academic performance is associated with positive mental health in students that can be enhanced by the addition of a mentor (Antaramian, Huebner, Hills & Valois, 2010). It is though worthy of note that time, commitment, and external factors to the mentoring relationship have a great effect on an individual student's ability to use the benefits of mentoring to overcome life obstacles en route to measurable academic gains (Wheeler, Keller, & Dubois, 2010). Later in this review a number of these benefits will be discussed in further detail, but it is first imperative to define mentoring itself and how it is related to this particular study.

## **School Counselors Services and Relationships**

### ***Counselor Responsibilities***

In a general sense, counselors have three overarching tasks – communicating, helping their clients with their problems, and gatekeeping. Counselors have ownership of programs and services that allow them to limit or grant access, acting as “gatekeepers (Wilson & Deane, 2001). Acting as "gatekeepers" school-based mentors can be highly influential guides for youths as they navigate help-seeking for challenges (Fitch and Marshall, 2004). Emotionally, counselors must provide support when students are negative about school, are performing poorly academically, disruptive or a discipline issue, or socially isolated. Alleviating distress, anxiety, and concerns are a portion of the socio-emotional assistance counselors give to students as part of guidance services (Richards & Viago, 2013). Effective

communication can be considered the glue that holds the many duties together. Maintaining contact and relationships with parents, reaching out and helping students who are distraught, and communicating with teachers about academics are a few, among many communicative tasks (Fitch & Marshall, 2004; Wilczenski & Coomey, 2006).

In choosing guidance counselors, a balance is maintained between their abilities, resources, and expected outcomes of the study (Wilson & Tanner-Smith, 2013). School counselors possess a niche skill to accurately identify at-risk students that could benefit from some type of intervention program (Wells, Miller & Clanton, 1999). Counselors are tasked with identifying students who are at-risk for dropping out of school (White & Kelly, 2010). Counselors play an integral role in identifying students who are at-risk by examining data associated with these students (White & Kelly, 2010). Types of data may include: attendance and discipline profiles, academic achievement, out of school environment, and mental health (Bulger & Watson, 2006; Moore, 2006; Kaufman, Bradbury, & Owings, 1992; White and Kelly, 2010). Counselors have a knowledge of the students from everyday interactions that, in addition to formal training, gives them insight into selection of students who may be at-risk (Wells, Miller & Clanton, 1999). In a study of school counselors, they were found to accurately predict which students were at risk for dropping out of school by using their own judgment as a formal dropout prediction scale (Wells, Miller & Clanton, 1999). Counselors should first use their natural instinct to identify students, then confirm the judgment with quantitative methods (Wells, Miller & Clanton, 1999). Though only a small group of students may need the full range of counselor services, given that many self-refer or have external supports that guide them to seek help (Hazler & Denham, 2002) having a full complement of field-specific skills is advantageous.

The values of school counselors cannot be defined only by academic performance (Fitch & Marshall, 2004). Counselors have critical task to "break through various forms or

social isolation" and expand the number of relationships that students rely upon (Hazler & Denham, 2002). Adults are in a unique position and often those who students turn to first when confronted with a problem, as a result they hold a lot of sway in a students' problem-solving approach (Wilson & Deane, 2001). Students look to teachers to confirm that they are normal and can have success (Bernstein-Yamashiro, 2004). By making comments about their own situations and listening to the care and value the teacher place on their personal relationships, students are able to adapt them to their own life (Collier, 2005). A part of addressing needs is helping students develop a special sense of connectedness with their counselor (Gibson & Cartwright, 2014).

Teachers bring a broad ethical view to conversations with students that are not shared amongst similarly aged peers (Bernstein-Yamashiro, 2004). School-adults have a great sense of right and wrong, as well as have wisdom to share without having the presence of parental authority (Vogt, 2002). The complexity of help-seeking behavior and mixed confidence in adolescents increases the value of finding a stable school-based mentor. Counselors are correct to have concerns about youth who are in a "less-than-supportive" environment and in need of help to "reframe" their worldview (Hazler & Denham, 2002). However, training demands that the educators use a great deal of objectivity to avoid doing harm to students (McCluskey, Noller, Lamoureux & McCluskey, 2004).

### ***School Counselors as a Mentor***

When investing in relationship building programs, like mentoring, time is a high-level consideration (Center for Promise, 2015) to foster meaningful, long-lasting relationships (Spencer, Basualdo-Delmonico, Walsh, & Drew, 2017). For mentoring, time is an equation of longevity and sustainability of relationships, noting that the longer the relationship lasts, the larger the impact on the mentee (Spencer, Basualdo-Delmonico, Walsh, & Drew, 2017; Wheeler, Keller, & DuBois, 2010). Mentors may have negative effects for at risk children if

the mentoring is of a short duration, or if the contact is infrequent (Southwick, Morgan, Vythilingam & Charney, 2005). Students whose mentoring relationships were cut short report negative feelings towards reengaging with a mentor and often saw negative outcomes (McCluskey, Noller, Lamoureux & McCluskey, 2004). As a result, wisdom dictates the intervention design takes into account the potential for longevity in the relationship, including how to conclusively end the mentoring relationship (Spencer, Basualdo-Delmonico, Walsh, & Drew, 2017).

Not to be taken lightly or ignored is a separate, yet impactful, set of considerations dealing with the social and emotional aspects of a mentoring program. Schools need to consider how the relationships that they have with students will play a part in the identity of students as they develop into adults (Black, Suarez, & Medina, 2004; Bernstein-Yamashiro, 2004). Strengthening successful interpersonal relationship-building and self-control training can support life goals and educational aspirations of youth (Hong, Chiu, & Huang, 2012).

Which school-based adults have conversations and make out-reach efforts to at-risk students is a very important consideration (Wilson & Deane, 2001). In a formal setting, the most effective mentors are previously trained to provide multiple forms of support (Sanchez, Esparza & Colon, 2008). Mentoring at-risk students presents difficulties requiring intensive training and planning from support personnel, especially in a school setting (McCluskey, Noller, Lamoureux & McCluskey, 2004). In addition to the knowledge of at-risk students, an extensive training about being a mentor and how to mentor is necessary (De Anda, 2001; McCluskey, Noller, Lamoureux & McCluskey, 2004). In highly private relationships, mentoring becomes risky and adults must maintain an ethical balance (Phillip & Hendry, 2000). This begs careful consideration into the training and background of the individuals to be involved as mentors to the participants in the study.

### **Barriers to Help, Relationships and Accessing Services**

Much literature on help-seeking was established from counseling and mental health fields. Some of the fields consulted here are suicide (Wilson et al., 2002), social anxieties (Bohns & Flynn, 2010; Clement et al, 2015), drug and violence prevention (Braciszewski et al, 2018). Barriers to help-seeking found in the literature, listed below, are described across fields of study.

### ***Barriers to Help-seeking***

Some barriers to help-seeking are closely associated with perceptions that an individual has about the environment around them. Many students saw time as a factor to help seeking. This can be associated with priorities in their own lives that compete for time or the helpers not being available when help is needed (Gatti et al., 2016; Richards & Viganò, 2013; Wilson et al, 2002). Some students believe that their needs are a bother to others who may be able to help (Bohns & Flynn, 2010; Gulliver et al, 2010). They often struggle to visualize themselves getting helped, when witnessing another receiving time from a helper. Students may have trouble recognizing that helpers will have the ability to help them to the same degree as others (Newark et al., 2017). They may also misinterpret the level of guilt that helpers feel when they do not have the ability to fully meet someone's needs (Newark et al., 2017). Being unsure, some people do not prefer to ask for help, instead asking merely for advice (Newark et al., 2017).

Students also have limited trust in either the helper or the process. This is closely associated with fear or uneasiness of the unknown of helping. They are unsure about what will happen when they seek help, what the help may look like, and down what road the help might take them (Gulliver et al, 2010; Wilson et al., 2002). More specifically, students worry that the helper will not keep confidentiality, or that the process to get help will result in their privacy being infringed upon (Clement et al., 2015; Gulliver et al., 2010; Joyce & Weibelzahl, 2011). The fear of private information 'getting out' was much associated with

peers and an associated stigma. This can be in the form of being seen going to receive help (Clement et al, 2015; Richards & Vigano, 2013) and resulting in an embarrassing stigma amongst peer groups (Gulliver et al., 2010). Often times, the level of potential embarrassment felt by those seeking help is widely underestimated by those in a helping position (Bohns & Flynn, 2009). Clement refers to this as an internal stigma, where shame, embarrassment, fear, and stress become associated with help-seeking as its own stigma (2015).

The barriers to help-seeking are very much rooted in prior experiences from those who need help and assistance. For example, if a prior experience was not considered helpful, the chances of a student returning to the same helper is low (Bohns & Flynn, 2009). Negative attitudes, often developed from successive bad experiences are highly likely to influence how they perceive future ones (Wilson et al., 2002). The personal backgrounds and life experiences of students have a degree of influence on how they interact with counselors. Passive policies, such as having an ‘open door’ are generally interpreted differently through the lens of someone with a different background (Bohns & Flynn, 2010; Vogel et al., 2006). Adults and adolescent tend to prioritize things differently and this too may influence their actions (Gibson & Cartwright, 2014). This may lead many students to feel that help was not something they needed to receive from others. These students had a preference for solving the problem on their own (Gulliver et al., 2010; Joyce & Weibelzahl, 2011; Wilson et al., 2002).

Those who are in a position of providing help and services can be passive in approach; practically speaking, they are waiting to be asked for help (Bohns & Flynn, 2009). This approach underestimates the difficulties people face when help-seeking. Some socio-emotional factors include, anxiety, discomfort, and fear (Bohns & Flynn, 2009). Helpers commonly overestimate the amount of people that will use the services without active

outreach (Bohns & Flynn, 2009). To understand why help-seekers do or do not get help, we must consider the degree to which they feel they will be rejected or the help beneficial (Newark et al., 2017).

### ***Social Isolation and Social Anxieties and At-Risk Youth***

The term, “fall through the cracks” is generally meant to describe those students who have successfully socially isolated themselves from both school-based adults, as well as peers, until little consideration is given to their success or failure (McCluskey, Noller, Lamoureux & McCluskey, 2004). Those considered to be “troubled individuals” often neglect, consciously ignore, or avoid human contact, almost instinctively judging a situation from an animalistic fight or flight standpoint (Hazler & Denham, 2002). The isolation that many students feel can progress quickly from normal social dissonance to, at times, poor decision-making (Hazler & Denham, 2002; McCluskey, Noller, Lamoureux & McCluskey, 2004). In extreme cases, much research has linked social isolation to youth suicide (Hazler & Denham, 2002). Symptoms of social isolation from at-risk youth may be a preview of future negative life experiences for those who do not graduate (Wilson & Tanner-Smith, 2013).

The increase in mobile phone use amongst youths, may be a contributor to social isolation of youth. Mobile phones narrow the potential communication partners by abandoning the traditional city-wide phone book and only allowing a pre-selection of individuals to be accessed and have access to communicate (Geser, 2006). Increased mobile phone use among participants that have shared sentiments about things, may result in its own form of social isolation by keeping out a diversity of thought (Chung, 2011). Relationships with peers can be compromised by abandoning real-world relationships in favor of virtual ones (Yen et al., 2009) and additionally perceiving relationships as stronger through the mobile communication than they are face-to-face ((Boase & Kobayashi, 2008; Hong, Chiu, & Huang, 2012). As youth increasingly mask real-world relationships in favor of virtual ones



interpersonal sensitivity (Ha et al., 2008) or depressed feelings may result (Yen et al., 2009). These negative potential outcomes considered, the mobile device is only increasing in use amongst youths, and it is yet to be seen if the potential to connect is greater than to isolate in amongst at risk youth.

The ability to develop a variety of strategies to establish social connections with others may be another contributing factor of social isolation in at-risk youth (Walsh, White, & Young, 2010). It is a bit paradoxical that mentoring relationships with school-based adults cannot begin to further develop strategies and show relationship benefit unless barrier placed by the social isolation of at-risk youth is broken down (Black, Suarez, & Medina, 2004; Wilson & Deane, 2001; McCluskey, Noller, Lamoureux & McCluskey, 2004). A person can neither learn nor grow productively in isolation from others (Hazler & Denham, 2002) and if schools are serious connecting at-risk students with adults, efforts in this specific area of need may be greatly enhanced by considering mobile communication as a tool. The mobile phone may serve individuals on the margin of population groups to connect to others, outside of the normal day scope, because of its ease and informal use (Geser, 2006).

## **Text Messaging and Counseling**

### ***Text Messaging as a Bridge to Relationships***

The goal of counseling, in a general sense, is to make the person seeking counseling feel better, so investigating what factors influence this are necessary (Althoff et al., 2016; Fitch and Marshall, 2004; Wilson & Deane, 2001). Innovative technologies will continue to offer ways to impact school counseling and it is a responsibility to consider the benefit and limitations of these (Wilczenski & Coomey, 2006). Instead of casting off the new technologies, counselors, will have to embrace them to some degree (Sude, 2013; Twenge et al., 2018). Text messaging has shown much promise for school-based interventions targeting positive messaging (Guillot-Wright et al., 2018). Text messaging has a unique set of

attributes, one of which is the ability to connect people (Ahn & Shin, 2013; Walsh, White, & Young, 2009). As an example, Whatsapp allows teacher and students to use a technology without either having the upper-hand as a more proficient user (Bouhnik & Deshen, 2014). Additionally, increasing the interaction between messages sent to students via text messaging have lead to changes in behavior and increased communication with others (Guillot-Wright et al., 2018). Checking in on others is a common nurturing communication style focuses on interpersonal relationships (Schroeder & Sims, 2018) Students reported receiving messages from institutions as making them feel safe and special (Guillot-Wright et al., 2018). They also reported messages sent directly to a person's phone were more likely to be given attention than in other, less personal forms (Guillot-Wright et al., 2018). Counselors should seek to make this experience as painless as possible for adolescents (Wong et al., 2018). If the initial contact is in a basic form, and uses media, it may encourage many potential clients that would never otherwise have engaged, to do so. (Wong et al., 2018).

Additionally, to finding alternatives to traditional models, educational research bodies have indicated a need to explore how school personnel can interact with youth in an extended role outside of the school day (Ohrman & Preston, 2013). Much of a young person's life, in and outside of school, on or off computers, in or out of community organizations, present opportunities where continued education and mentorship may occur (McCluskey, Noller, Lamoureux & McCluskey, 2004). When formal structures are released, students are most vulnerable to a lapse or judgment and continue to continue past behavioral patterns (Brown, 2004). In this sphere, the health field has experienced measurable successes in individualizing service outcomes using text messaging as a communication means to reach people in non-traditional times.

### ***Text/ Text-Based compared to Face-to-Face Counseling***

Direct comparisons between online or text-based counseling services and traditional face-to-face interactions can be described as inconclusive. One study found that the many advantages that text messaging offers make the communication tool favorable or most favored amongst students when compared to face-to-face meetings (Braciszewski et al., 2018). However, a Wong et al study clarified this, finding that those who preferred the online medium for counseling indicated that online was the only medium that they would use. (2018). The same study found a small, but statistically significant preference for face-to-face counseling (Wong et al., 2018).

Emotionally face-to-face and online counseling have some noted intricacies. Face-to-face counseling was found to have more positive, but also more negative effects than online counseling services (Mallen et al., 2017). Interestingly, students found face-to-face groups able to achieve a more common rate of satisfaction and closeness than their online peers (Mallen et al., 2017). Concerns about ethics raised by of face-to-face counselors were mirrored by online counselors (Richards & Viago, 2013). Among those, participants noted balancing students' confidentiality and privileges as more difficult counseling online (Richards & Viago, 2013; White et al., 2019). Some students felt more comfortable texting an online counseling service, because they feared that some types of counselors would become overly involved in the problem (Gibson & Cartwright, 2014). Students were likely to explain their emotional needs in terms of academic difficulties when using a university system of support than to outright state that they have feelings of depression (Joyce & Weibelzahl, 2011).

### ***Technology to Reduce Barriers***

Counselors who wish to reach specific students with mental health services need to consider innovative solutions (Vogel et al., 2006). With increased use of mobile text messaging, youth are more apt to bridging barriers than to bond with already established

friends (Boase & Kobayashi, 2008). Examples of barriers overcome from text messaging in mental health include; accessing treatment because of limited mobility, using native language, social stigmas, and time considerations (Richards & Vigano, 2013). Counselors should be exploring ways to uncover barriers to accessing help and targeting each one individually (Vogel et al., 2006; Wilson et al, 2002).

On the whole, text messaging interventions have a positive impact on the lives of students (Ersahin& Hanley, 2017). Delivery of messages can be adapted to fit into the life demands of any individual and to the exact times they needed assistance (Gatti et al., 2016). Texting has a definitive utility value to bridge help-seeking barriers as a result of texts having been sent to them (Joyce & Weibelzahl, 2011). In a Guillot-Wright et al. study, (2018) text messages could be so tailored to the individual, they could encourage individualized responses; students were much more likely to respond in these circumstances. In this way, delivery of services through text message shows much potential for supporting the unique social and emotional needs of students (Ersahin& Hanley, 2017). A worthy example in technologies, like text messaging is what can happen to a person with social fears. A person has the ability to connect to another and work toward building a relationship, while seemingly contradictory, alleviating fears of face-to-face interactions (Ahn & Shin, 2013; Gibson & Cartwright, 2014; Kim et al., 2009). Students that have an awareness of their own problems and how they would like them handled are often more likely to move past barriers (Gulliver et al, 2010). With respect to this, social fears can be reduced in creative ways if the path to help is worthy of their efforts, transparent, and the actions required are clear ((Vogel et al., 2006; Wilson et al., 2002). However, there is much promise if efforts are made to make the first experience positive, noting that barriers can be effectively reduced from this alone (Gulliver et al, 2010).

Socially isolated individuals may find that mobile phone use can gratify their need for

belonging, because media can be easily accessed by those lacking social competence (Kim et al., 2009). Boase & Kobayashi (2008) found a majority of students report using mobile phones as a way to build stronger relationships with friends (Ahn & Shin, 2013). Mobile phone use allows individuals to perceive that they belong to a broader network of socialization (Walsh, White, & Young, 2009). Mobile phone users appear to derive pleasure, not from a sense of euphoria, as found in addictive relationships, but as a feeling of being valued and loved (Walsh, White, & Young, 2008). The specific style of response from individuals within a social group may be established norms that help to maintain exclusive social ties (Igarashi, Motoyoshi, Takai, & Yoshida, 2008). However, the exclusive use of mobile phones may not be able to gratify the need to belong completely, particularly if the need is based on an intrinsic desire to completely escape social isolation (Ahn & Shin, 2013).

Pertaining to this study, using mobile texting for its positive outcomes of connecting and strengthening established social ties, may enhance the ability of school-based adult mentors to develop independent social skills with at-risk youths. All adolescents need to learn the social skills to develop and maintain significant and varied interpersonal relationships with peers and adults (Hazler & Denham, 2002). Mentors build up the social skills of the youths to translate those into relationships with others (Barron-McKeagney, Woody & D'Souza, 2001; Phillip & Hendry, 2000). Adolescents are in need of social support as they struggle to become their own social being (Hazler & Denham, 2002). Teaching interpersonal skills through role-playing is a common and effective mentoring method of bettering the ability of a socially isolated person to enhance relationship quality (Hazler & Denham, 2002). Mentees increase their social learning when they imitate the behavior of the mentor. It is in through this process that new neural branches are formed in the brain. Given enough time they become habit (Southwick, Morgan, Vythilinggam & Charney, 2005). Speaking psychologically, students may be able to "borrow" characteristics of strength from

the mentors until they are practiced enough to assume those traits independently (Southwick, Morgan, Vythilinggam & Charney, 2005). Mentees generally increase their social network as a result of a mentor, which increases the chance of finding new forms of social support (Southwick, Morgan, Vythilinggam & Charney, 2005). With the addition of a mentor, exposure to outside groups for socially isolated youth expands the options for students to engage and be supported in multiple ways that one person cannot (Hazler & Denham, 2002).

### ***Texting to Bridge Difficult Conversations with Adults***

Not all at-risk youth feel ease in communicating directly with parental or non-adults about sensitive or personal problems that are occurring in their lives. Considering the myriad of challenges faced by at-risk youth beyond similar peers, this is of particular concern (Center for Promise, 2015). Plainly stated, some youth report feeling uncomfortable reaching out to family members for help, fearing punishment or judgment (Bernstein-Yamashiro, 2004). In some cases, this perception of fear has driven students, healthily, to join intervention programs or reach out to trusted adults (Anda, 2001). In this respect, students are forced to evaluate the problems they are facing and determine if they are worthy of outside counsel (Wilson & Deane, 2001). Many feel that their personal problems are novel, and are only likely to seek help if they feel their problem has been already "normalized and validated" by others (Wilson & Deane, 2001). These general feelings of sensitivity around approaching difficult conversations with adults are also reflected in the mobile phone literature.

### **Text Messaging as a Sense of Control**

#### ***Text Messaging as Control over Accessing Services***

Adolescent help-seekers prefer or need a measure of control over the help-seeking and the counseling process (Alivernini & Lucidi, 2011; Gatti et al., 2016; Wilson & Deane, 2001). Students need to experience a measure of control and power over relationships with counselors (Gibson & Cartwright, 2014). When a person seeking help feels in control, they

often have less fear and increase the amount of time engaging in counseling (Vogel et al., 2006). When given the opportunity to feel as though they are directing their own help and that their autonomy is respected, students are more likely to continue to engage with adults (Alivernini & Lucidi, 2011; Wilson & Deane, 2001). Since adolescents may see adults as attempting to suppress their independence (Gibson & Cartwright, 2014), feeling personally empowered by an adult can be seen as a motivator to sustain the relationship (Black, Suarez, & Medina, 2004). In a texting situation, the power balance between the two parties is equalized (Richards & Viago, 2013). The nature of online services for counseling can help students feel more control of the counseling process (Gatti et al., 2016).

### ***Control as Safety***

Any type of mobile communication is inherently an indirect communication; providing benefits of control that are unavoidable using face-to-face communication (Burgstahler & Cronheim, 2001; Liao & Wan, 2009). Mobile phones can provide a feeling of safety, in case of emergency, providing a sense of psychological security, (Aoki & Downes, 2003). As a result, those who have a comfort or need to escape the confines of face-to-face interactions find using mobile communication, in particular text messaging, advantageous. (Liao & Wan, 2009). Texting allows students to escape social constraints associated with face-to-face encounters (Gibson & Cartwright, 2014). Youth can slow down the process of communication; reading, interpreting, choosing to respond to messages when they wish (Gatti et al., 2016; Richards & Vigano, 2013). Texting, to escape a social interaction, is not intended to be used as a means of connection, but as a way to alleviate one anxiety (Schroeder & Sims, 2018). Online allows people to reduce the possibility of receiving negative social messaging and hide themselves. (Kamalou et al., 2019). Ignoring initial gestures of building trust can lead to connection being quickly retracted when outreach behaviors are ignored (Collier, 2005; Black et al., 2004; Ohrtman & Preston, 2013). Having

negative experiences may contribute to a withdrawal from seeking new experiences or texting with intent to escape (McCluskey et al., 2004; Schroeder & Sims, 2018). In general, people will engage in the same safety strategies that have been effective offline in an online setting (Kamalou et al., 2019).

### ***Time and Space Control as Privacy and Anonymity***

Mobile phones can be a measure to manage privacy (Aoki & Downes, 2003). Being anonymous is a way of being in control of interactions and help from counselor (Nesmith, 2018). It is likely that a preference for online services is influenced by perceived anonymity and relative convenience of the technology (Wong et al., 2018). In text or online counseling, students can engage without the fears of being judged by keeping themselves, anonymous (Gatti et al., 2016). Students felt they could be more of themselves during online sessions because the person did not know them, nor about anything beyond the bounds of the current problem they were having (Gibson & Cartwright, 2014). Some youth prefer mobile communication as the medium to begin a conversation about a sensitive topic or initiating a friendship that they would be less comfortable doing face-to-face (Davitt & Roker, 2009). Mobile phone use in these situations can be a route to decreasing anxiety by providing a feeling of control, as opposed to altogether avoiding interpersonal relationship interactions (Hong, Chiu, & Huang, 2012). However, the primary purpose for using text messaging is unclear; a sense of privacy or a way to avoid others (Schroeder & Sims, 2018).

As part of having a mobile phone, the ability to remove barriers of time and location can be an advantage for privacy concerns. The technology behind hand-held devices allows users to store text messages for a later time, when they can be addressed at a time or place of choice (Guillot-Wright et al., 2018). By choosing a setting that is most compatible and text communications can remain private from others, despite people being physically present at the time (Nesmith, 2018). Text counseling can be seen as a safe way of by-passing parental



control by leaving people out of the conversations and engage in texting at times when others are not present, such as late at night (Gibson & Cartwright, 2014). A practical example of this is simply not allowing all users to have access to a person's personal phone number (Aoki & Downes, 2003). While used in a variety of ways, the time and space flexibility of text messaging can assist the feeling of privacy.

A drawback to feeling directly connected can be the unrealistic expectation of a person, engaged in a help-seeking conversation, can seek help with urgency. The literature on this topic is mixed, as some students have shown a preference for a more constant availability for a helper (Bouhnik & Deshen, 2014). This is contrary to others, suggesting that students are aware of the circumstances of life and understand that all people are not available all of the time. Students may be comfortable just being able to get something off their chests at the time when it is happening, all well knowing that the helper will not be responding; time limitations on services did not appear to be a negative factor (Gatti, 2016).

### **Attributes of Text Messaging as a Communication Tool**

#### ***Ease of Use***

Mobile texting technology is designed to be a very user-friendly technology (Bouhnik & Deshen, 2014; Braciszewski et al., 2018; Horwitz & Detsky, 2011). With simple inputs and outputs, it is easily integrated into the lives of almost any individual (Spring et al., 2013) and is described as a comfortable way to connect to the world (Gibson & Cartwright, 2014). Students have a limited amount of time available during their busy lives, and texting appears to work seamlessly into that framework (Aoki & Downes, 2003). Similarly, using text-based technologies, online counseling integrates into daily lives. Users are able to access help at their discretion (Gibson & Cartwright, 2014) and with relative speed (Müssener et al, 2016). The attributes of text messaging make it be described as a simple mode of communication to use, particularly for mental health behavior and coaching (Patrick et al., 2009).

### *Cost Effectiveness*

A common recommendation in the educational literature highlights cost effectiveness as a missing element in many mentoring efforts. Practitioners have not generally taken into account the importance of non-humanistic variables that lead to student success or failures, some of which may not be under direct control of the institution (Bernstein-Yamashiro, 2004). Fundamental logistics begs to first consider the cost-effectiveness of a program (Wilson & Tanner-Smith, 2013), especially considering the pressure schools are under to do more with less time and less money (McCluskey, Noller, Lamoureux & McCluskey, 2004). As traditionally structured, mentoring programs are not an easy, nor low-budget solution, requiring an on-going commitment from institutions to the families and mentors (Barron-McKeagney, Woody & D'Souza, 2001). Considering these factors, and investigation into cost-effective trials in the human health industry, yields plausible options for similar changes to mentoring programs in schools.

Medical and behavioral health industry has used technological advancements to explore options to increase contact while simultaneously reducing time spent and lowering costs. At the intersection of these social behavior changes, is the ability for companies and professionals to maintain, or increase outcomes with a reduced cost. Text messaging may lower the overhead costs of an organization (Sude, 2013). Time and cost burdens on professionals have given rise to text messaging as a low-cost communication tool (Bouhnik & Deshen, 2014; Braciszewski et al., 2018). Within the human health industry, increasing demands on the time of practitioners make it difficult to meet the expectation and individualized service to patients (Wadden et al., 2014). Reducing time restrictions has increased the speed at which support services can operate, by using traditional texting, or mobile applications (Müssener et al., 2016). Cost factors for using a smartphone application or texting should be a consideration for medical interventions, however there is no study that

has explicitly examined the long-term cost-benefit ratio for this type of intervention (Guftafson et al., 2014). Adherence to chronic disease medical treatment and traditional approaches to behavioral change, for example, are not very effective and complex to implement (Thakkar et al., 2016). Text message programs are far more cost effective than traditional methods, with comparable results (Müssener et al., 2016). If transferable, the expectation of similar outcomes in an alternative field, like mentorship in a school-based environment, is promising.

### ***Positive Perceptions from Participants***

Little evidence exists to support the notion that text messaging used in the outreach results in negative side effect for the patients (Chow et al., 2015; Spohr et al., 2015; Thakkar et al., 2016). Messaging to patients was reported to be unobtrusive and was not to disturb the patients (Chow et al., 2015; Spohr et al., 2015; Thakkar et al., 2016). Most patients named text-message contact reminders about their personal health as being appropriate, expressing a high level of acceptance and openness towards receiving them (Chow et al., 2015).

Unsurprisingly, younger people were more responsive to text messages, as they are more likely to have increased familiarity with mobile phone use (Buller et al., 2014). Mobile phone texting fits very well into the practices of young people (Gibson & Cartwright, 2014).

Students found little objection to receiving text messages, in general (Joyce & Weibelzahl, 2011). In contrast, two studies reported that the timing of the text could be a disruption to a daily routine as reported by a minority of participants and that privacy of medical information was a source of concern (Thakkar et al., 2016).

### ***Direct Access to Target Populations***

Text messaging allows the ability to give people personalized and confidential support while being unobtrusive; this is a result of the common nature of mobile use (Braciszewski et al., 2018; Thakkar et al., 2016). Mobile contact has replaced the burden of

time and place restrictions on patients and medical professionals (Burgstahler & Cronheim, 2001; Spring et al., 2013). In particular, text messaging has increased the ability of social service institutions to personalize outreach to vulnerable and urban populations (Burgstahler & Cronheim, 2001; Szilagyi & Adams, 2012; Thakkar et al., 2016). With mobile technology so easily accessible, it has proven to be easily integrated into existing health treatment programs for anything from rehabilitation to prescription medicine adherence (Spring et al., 2013). The technologies to directly reach patients will become a norm in the industry as the thirst of the customer for flexible options and the ability of technologies increase (Burgstahler & Cronheim, 2001; Szilagyi & Adams, 2012). In the online and text counseling sphere, students felt able to access a counselor when needed (Gibson & Cartwright, 2014). However, when a helper was not as equally accessible, it was seen, by some, as a detractor from the experience (Navarro et al., 2020).

### ***Text Messaging's Ability to Connect***

The word "connect" is often used to describe the purpose for using their mobile phones (Walsh, White, & Young, 2009). Social media is oft used in adults for seeking connectedness as opposed to solely avoiding social isolation (Ahn & Shin, 2013). Having a mobile phone at all times is a way to feel connected to others; some may have developed a need for constant connection (Walsh, White, & Young, 2009). Students felt text messaging enabled them to directly text someone for help in instances when they could not locate a face-to-face helper. (Gatti et al., 2016). The ability to connect quickly and instantaneously is valued amongst adolescents (Walsh, White, & Young, 2009). Many more adolescents use texting as a way to connect with others than to escape social interactions (Ersahin & Hanley, 2017). An increased number of people can use text messaging simply because it can be used on multiple handsets; it is not socially prohibitive (Patrick et al., 2009).

To ensure that they did not feel disconnected, adolescents will take preventative

measures, such as constantly charging the phone (Walsh, White, & Young, 2008). A Walsh, White & Young study found that, participants felt disconnected when not able to use their phones, as opposed to feelings of stress or anxiety (2008). Saliency, thinking about their cell phone all of the time, was common amongst participants when the phone was not being used (Walsh, White, & Young, 2008).

### ***Text Messaging Achieving Industry Targeted Goals***

In various studies of different topics, specific positive outcomes were achieved through using mobile text messaging to communicate. Providing low-cost, semi-personalized text messaging to patients has shown significant lowering of medical risk factors in various applications (Chow et al., 2015). Personal coaching by using smart devices, in combination with traditional coaching, has shown effectiveness in meeting short-term outcomes (Spring et al., 2013). For example, in a Spring et al. study, a smart application was used to remind patients to make healthy choices about food intake of food in real time resulting in measurable weight loss for patients (2013). Similar multi-featured applications using in addiction recovery have much promise to support ongoing recovery (Guftafson et al., 2014) and in an intervention to provide information about sun protection to people in an effort to increase skin sun protection behaviors (Buller et al., 2014). In a study of recovering alcoholics, participants were 50 % more likely to express their positive behavioral choices when provided the study's addiction monitor than those without the option (Guftafson et al., 2014). An additional finding was that the participation rates in the recovery program were significantly higher with those who had access to the monitoring application (Guftafson et al., 2014). Similar results were attained in a smoking cessation study, with the mobile communication intervention equaling the outcomes of traditional techniques (Müssener et al., 2016), and a prescription medicine study, comparing text messaging with traditional intensive programs in adherence to medication (Thakkar et al., 2016). Specific to the prescription-

monitoring program, texting with patients was found to double the effect odds of a person adhering to their medical prescriptive plan (Thakkar et al., 2016). In many of the existing studies, text messaging shows an improvement rate that is equal, or close to equal, to other interventions, when text messaging and traditional programs are combined (Spohr et al., 2015). This growing body of evidence appears to support, at minimum, a trial of text messaging as a low risk, communication tool for an institution.

Despite the relatively small number of studies (40-50) conducted in the area of text messaging as a tool in the fields of medicine, the developing body of evidence shows potential. There is an interest in investigating the efficacy of using text messaging as a tool to communicate health reminders for people for a wide range of health concerns, including smoking, weight loss, and diabetes (Chow et al., 2015). Connecting through mobile technology shows promise as a method to mediate circumstances and deliver more patient centered counseling (Wadden et al., 2014). The evidence for text messaging as a method to connect medical professionals to patients and assist in directing treatment outside of traditional face-to-face doctor visits is compelling (Spring et al., 2013). In fact, there is strong evidence, that when scaled, that text messaging can provide an increase in adherence to medications (Thakkar et al., 2016). Despite increasing evidence for text messaging as a tool, the medical industry or medicine as a whole, tends to move cautiously towards new solutions, especially when many complexities exist around the issue (Buller et al., 2014; Szilagyi & Adams, 2012). Since many of the results rely on self-reporting and almost all of the studies are of a relatively short duration, resultant data should be viewed with a degree of caution (Buller et al., 2014; Thakkar et al., 2016).

Text message communication with patients has not been found to be a universal panacea. Additionally, several studies demonstrated that the positive outcomes resulting from text messaging patients did occur, but did not necessarily translate into changing broader

behavioral outcomes. For example, Buller et al. (2014) found participants increasing sun protective behaviors, yet the amount of sunburn individuals received, the broader goal, did not change. Similarly, Guftafson et al. (2014) saw participants reduce the amount of binge drinking days, but associated negative behaviors, such as fighting, arrests, relationship struggles, and diet remained unaffected. Drawing broader conclusions of effectiveness from these studies is speculative, as most are not designed to measure bigger picture implications (Chow et al., 2015). Text messaging in clinical use may not be universally effective for all types of health issues (Chow et al., 2015). Implementing a large-scale intervention on a practice level may be mixed simply because traditional alternatives have shown mixed success as well (Thakkar et al., 2016). Some pairings between text communication and traditional methods may or may not be clinically feasible or appropriate (Thakkar et al., 2016). These are words of caution and consideration, and echo previous sentiments that mobile communication, while having advantages, cannot by itself transcend human behaviors tendencies (Ahn & Shin, 2013).

### **Potential Drawbacks of Text Messaging**

Counselors using online and text-based services run into difficulty in complex situations, like students who were a threat to themselves and others (Navarro et al., 2020; White et al., 2019). Misunderstanding email communications and being unsure if the help-seeker is authentically identifying themselves are common issues when not in a face-to-face counseling situation. (White et al., 2019). This is unsurprising given the absences of visual clues from facial expressions and body language (Gatti et al., 2016; Mallen et al., 2017; Richards & Vigano, 2013; Wilczenski & Coomey, 2006). Because conversation can become muddled, helpers must constantly clarify what is occurring to prevent misunderstandings (Mallen et al., 2017). Once a person is identified as needing more advanced services, it is a challenge to move them to face-to-face counseling or maintain a degree of confidentiality

when the conversations had begun under conditions of anonymity (Navarro et al., 2020; White et al., 2019). There needs to be a back-up if texting is not able to be used (Guillot-Wright et al., 2018). Establishing a text-messaging service may open a new avenue of service that needs to be maintained and become prohibitive over time (Ersahin & Hanley, 2017).

### **Associated Topics for Further Study**

Several studies referenced suggested research that is relevant to the topic of study. Text-based and online counseling were suggested to be part of further investigating as there is a limited database for literature about the benefits and limitations of its use (Ersahin & Hanley, 2017; Gibson & Cartwright, 2014; Navarro et al., 2020). Research should be developed quantitatively so the participants voices can directly share their experiences and knowledge (Braciszewski et al., 2018). Lastly, more online counseling research should be performed in the field of education (Bouhnik & Deshen, 2014).

## **Chapter 3: Research Design/Methodology**

### **Chapter Introduction**

This methodology derived its framework from the qualitative tradition as an exploratory case study (Creswell, 2007). The research took place in Suburban High School, who faced the challenges of meeting graduation rate achievement requirements and continued school drop-outs. As a former building and district administrator, I had both a personal interest and intimate knowledge of these challenges. The topic and research lens were influenced by these experiences. It is of note that I conducted the research from Europe with participants in the United States; special communication decisions and protocols reflect this circumstance.

Counselor participants were invited from a high school guidance pool, in the hopes to engage as many participants as possible. Student participants were invited who meet the



description: students with whom counselors would like to have had an improved relationship. The potential of using mobile texting as a method to bridge relationships with students was discussed with counselors as well as some research-based practices for forming a mentoring relationship. Counselors were provided the intervention parameters for communicating and allowed to make their own attempts to establish a mentoring relationship with participating students over a period of three months.

In brief, data was collected through transcripts of twenty-one semi-structured individual interviews with students and counselors, transcripts of text-messages between counselors and students, researcher notes from a telephone conversation, and students' school-related data (student demographics, attendance record, academic record, and discipline record). Further clarification and detail can be found in the Implementation and Data Collection section of this paper, and visually in Table 2: Data Sources. Data was recursively analyzed using qualitative traditions after each series of three interviews to establish themes and outcomes that speak to the efficacy of this practice from a student and counselor perspective. Final interviews questions were tailored to clarify or confirm themes and conclusions from the previous two data collection series. Guided by the research questions in this study, the resulting conclusions inform counseling practice and the education field about the potential benefits and drawbacks of using text messaging to bridge mentoring relationship outcomes with students.

### **Research Questions**

The research questions guiding this study are as follows:

1. Does the use of mobile phone outreach impact the mentoring relationship between students and counselors?
  - a. If so, in what manner? If not, for what reasons?

2. What are students' and counselors' perceptions of using text messaging when exploring a mentoring relationship?
  - a. In what ways did participants use text messaging?

### **Research Type and Perspective**

The intention of the researcher was to investigate an intervention for high school students to bridge access to counseling services and mentoring relationships with their counselors. The findings encourage additional experimental attempts within other school systems and research institutions. Text messaging has shown potential to address some communication needs for students, and with local modifications or new techniques, address the need to establish school-based adult mentorships with students.

This study identified as an exploratory case study (Creswell, 2007). Best defined, not by methodology, but by the choice of topic, case studies are bound by time and space (Creswell, 2007). The specific program, group, or circumstances are used to investigate a larger phenomenon through the worldview of the researcher and participants (Marshall & Rossman, 2011; Willis 2007). The case in question was seen as both unique and common (Stake, 2010). Specifically, the embodiment of a case study is choosing both an issue to investigate and a specific case that embodies the larger issue (Creswell, 2007). It is naturalistic in its collection of data, using real people in real environments, speaking freely about their experiences (Willis, 2007).

The historical origins of case study research have roots in anthropology and sociology (Creswell, 2007; Willis, 2007). Examples of the research that emerged into modern times are presented in the fields of psychology, political science, medicine, and law (Creswell, 2007). Case study research methods cover a broad range of techniques and share many similarities with modern ethnographies (Willis, 2007). Researchers seek to know about a topic in-depth,

constructing knowledge from the data they collect and asking deeper questions from what was implied (Stake, 2010).

Case study research is conducted parallel to qualitative traditions, but with a few specificities. It is important that evidence and data are gathered with clarity and not a necessity that a new theory or high-level conclusions are drawn (Willis, 2007). Case study research is marked by detailed description of events and circumstances, using all available data sources possible to their maximum extent (Creswell, 2007). The more accurate the descriptive analysis in a case study, the more confidently a researcher can paint a picture of events (Creswell, 2007). In applying an intervention (text messaging between students and counselors) for a time period (three months) in a specific school with a specific population of students (students with whom counselors wish to improve a relationship). The resulting data drawn from the study forms an explicit picture of the case using multiple sources within this particular bound context.

Qualitative research findings are unique due to the complex interrelations that occur between participants and researchers (Marshall & Rossman, 2011). Qualitative analysis recognizes that multiple interpretations and understandings can be obtained from a single piece of knowledge. Continued research contributes by investigating those interpretations further to find the truest body of existing knowledge to-date (Marshall & Rossman, 2011), and apply findings to their local context (Cresswell, 2007). Reflective models of research assume that social circumstances cannot be consolidated into neat and tidy issues to be solved with neat and tidy solutions (Willis, 2007). Non-linear designs for research studies permit representation of complex and interwoven relationships (Greene, 2007). A case study allows for complex interconnections within a bound set of circumstances to be explored with both breadth and depth (Creswell, 2007; Willis, 2007).

“Qualitative research is recursive and fuzzy,” where the processes of data collection and interpretation can evolve as the perspective of the researcher widens (Willis, 2007, p. 203). The widely accepted steps of observing, as summarized by Kemmis & McTaggart (1988), are: reflecting, planning, and acting (Greene, 2007). Qualitative study involves a cycle of research, reflection, and reaction throughout the length of study (Marshall & Rossman, 2011). Researchers use cycles of data collection, interpretation, and reflection to construct a greater knowledge from its pieces (Dick, 1996). Cycles of participation in the study can occur with participants as contributors as clarity demands (Greene, 2007).

As appropriate, the structure here is clear and distinguishable, making apparent the close adherence to qualitative theory and established practices for research. This was executed through the following general process: participant selection and consent, recursive interview and text-message data collection and analysis, final interviews, final analysis, and conclusions. Meaning-making was performed using overlapping phases of data gathering and analysis from multiple data sources so evidence supporting final conclusions has thickness (Creswell, 2007). The primary tools for data collection were: transcripts from twenty-one individual interviews with participants, transcripts of the text message communication between counselors and students, general demographic information (specifically: age, grade, gender, ethnicity), grade 9-12 attendance report, grade 9-12 academic transcript, grade 9-12 behavioral record, and researcher note of a phone call.

### **Context of Study**

Suburban High School was invited to participate in this study because its student needs, cultural dynamics, and leadership vision closely matched the research objectives. Henceforth, the participating high school will be referred to through a given pseudo name: Suburban High School. Suburban High School has made increased attempts over the past years to improve graduation rates by targeting at-risk student groups in grades 9-12. This has

been done by counselors reaching out to these students and families while creating unique academic opportunities and support for students. Some of these attempts have involved increasing formal guidance counselor meetings with students, home visits to families in coordination with school resource personnel, placing students in more academic classroom settings, and meeting regularly with designated staff. Some of these methods experienced success in bridging students towards academic and social support structures while others fell short of engaging students. Attempts to hurdle barriers and establish a mentor relationship by using text messaging was not one of the methods attempted by the high school previously.

Suburban High School is part of a school district located in a suburban county neighboring a major mid-Atlantic city in the United States; locally it includes a borough surrounded by four townships. The school district consists of four elementary buildings, a middle school, and Suburban High School, enrolls approximately 5,500 students in kindergarten through twelfth grade. The community represents a diversity of social classes. The district can be described as an emerging, high-achieving school district in an economically recovering community setting. The school district is active using technology in the classroom and established a one to one computer program at some levels. Students regularly used district provided laptops for their academic learning.

### **Background and Role of Researcher**

My lens as a researcher was influenced by my personal experiences. The brief description explains how the questions guiding this research were influenced by experiences, and personal values. I have been a teacher at both a public middle and high school, coupled with years serving as an administrator at the building and district levels. My experience in a diverse set of roles provided the opportunity to engage in deep theoretical discussions, build a vision for a school or district, and meet the everyday needs of teachers. I have witnessed the difficulties attempting to engage 100% of a student population in academic learning.

Additionally, I have spent the past five years living in two countries outside of the United States, learning other languages, cultures, values, and the function of their educational systems.

As an individual, I hold a steadfast belief that establishing relationships is the most important task in life, let alone for an educator. My personal life falls in line with this value, despite the many tempting situations where another choice appears attractive. Ultimately, believing in the importance of relationships has served me well and carried over to my professional life, where I lead with dignity and respect for all students and employees.

It is hard to passively accept an existing condition that may have caused a student to struggle, without a spirited personal attempt to better those circumstances. Thankfully, I have found educators to share my thinking and attempt to serve students to the highest degree possible. My outlook has influenced my attempts and successes to specifically remove barriers that hamper students and families from experiencing educational opportunities from equal footing. It is for these reasons that my passion manifested itself in the form here; having studied new bridges to services and relationships.

### **Ethical and Professional Considerations**

Throughout the design, review and execution process I encountered skepticism and pushback about applying a text message program in schools with counselors and students. In a public school setting these concerns are valid and deserve appropriate consideration. As a result, I set in motion a process addressing each concern with factual information and educating those who were skeptical about the intervention. The source of these concerns was not isolated to a single group or person, but spread amongst school counselors, university professors, university review board members, and school administrators. The primary concerns fell into the following categories: perception of text messaging as an overly personal communication means, separating the professional and personal being of the

counselor, potentially inappropriate communication, counselors being accessible to students 24 hours a day, handling emergencies during off- work hours, questions of liability when receiving information during off-work hours, and inaccurate perceptions of intent from the community. The design of this research intentionally addressed social perceptions and ethical concerns and is a solid foundation to consult for future study. However, despite having addressed the concerns specific to this research, the design cannot be simply copied and pasted into other contexts, as complexities and preferences differ amongst local communities.

While many documents have guided my ethical and privacy consideration, the following highlight the most pertinent and recent iterations. The American School Counselors Association (ASCA) is one body that guides the ethical standards for counselors and has published two position papers that are specific to communication technologies in counseling as recent as 2017: 1) The School Counselor and Student Safety and the Use of Technology, and 2) The School Counselor and Virtual School Counseling. Both specifically state the responsibility of school counselors to maintain the current ethics of the profession in a new environment, use school-approved communication means, and maintain professional boundaries; neither document, or any ethics document consulted, addressed text messaging specifically (American School Counselor Association, 2017). Prior to publication the recent COVID-19 pandemic has thrust online learning and communication to the forefront. As a result, the U.S Department of Education has released guidance for adhering to the Family Educational Rights and Privacy Act (FERPA) during a time when traditional document accessibility and communication methods have been re-normed. The take-aways can be summarized by as a series of questions to be applied to local conditions: 1) what communication means were we using and how does the new environment mandate a change to that?; 2) what technological communications provide the best encryption, data storage, and

privacy considerations?; 3) am I continually communicating clearly and honestly about what I am doing to all parties (Surprenant, 2020, March 30)? All of the mentioned interpretations rely heavily on the spirit of existing law and ethical positions while avoiding definitive statements about a specific technology. However, it is noteworthy that traditional models of face-to-face school counseling and online counseling are viewed largely as separate and distinct. In this way the ethical guidelines fail to speak to cross-over communication methods, such as using text messaging in a school counseling model.

### **Participant Selection**

The recruitment process began with a letter of interest sent via email to the superintendent of Suburban School District. We then discussed the study in further depth on a phone call and I was referred to the principal at Suburban High School. The principal and I spoke about the study and several documents were sent to him for consideration and review. The superintendent sent a letter of preliminary consent to me via email, pending IRB approval. After obtaining approval, I then submitted a copy of the approved IRB documentation to the school principal; this included the overall study outline and the assent/consent agreements for participants. After review, the principal and I conferred via telephone about the participants selection process, the discretions that he may choose to exercise, and clarification of office personal who would assist in the logistics of the process moving forward. The superintendent then sent an official letter via email confirming approval for the study to take place in his school district. The principal was determined to be responsible for assisting with the local logistics of the study. The principal then designated a high school secretary who collected names of potential participants, sent emails to parents, and collected consent and assent documents from participants. He also was responsible for securing a location for students to use for interviews in case they did not have the technology available at home.



The text below is divided into three sections: counselor pool, student pool, and student selection. The first two sections outline a description of each participant pool, inclusion/exclusion criteria, and the first few steps of recruitment. The remaining section outlines further steps taken for recruitment and participant selection; consent is contained in the Participant Consent section of the chapter. Below detail the separate and associated processes for counselor and student selection and participation.

The selection process of students and teachers was dependent upon each other. It was desired for students to follow the caseload of their current counselor and therefore if a counselor had no students from their case volunteer, they may have not become a selected participant. However, as is explained in detail later, difficulty in student recruitment led to less counselor participants than desired.

### ***Counselor Pool***

Counselor participants were invited from a pool of six certified school counselors at Suburban High School. Five counselors were responsible for an alphabetical range of students in grades nine through twelve. Each of the five counselors had approximately 375 students in their caseload. One counselor worked specifically with college and career planning for junior and senior students, in conjunction with the alphabetical range counselors.

The maximum number of counselor participants in the study was determined, in part, by the researcher's anticipated ability to conduct, transcribe, and process data, as well as the total costs that the researcher was willing to incur. The criteria were as follows: Minimum of 3 counselor participants and a maximum of 6.

Participants were chosen to participate in the study that met the following criteria:

1. those who were employed and worked in Suburban High School with students in grades 9-12

2. those teachers or guidance counselors who signed a consent agreement to participate in the study

The following groups were excluded from this study:

1. school administrators
2. behavioral specialists
3. school psychologists
4. school administrative assistants, aids, or additional support personnel

Teachers were not excluded from the pool of adult participants. However, at the request of the school principal, high school counselors were the only group of people in the initial invitation. Initial invitations were returned with 5 or the 6 counselors having signed the consent agreement to participate. Having reached the appropriate number of participants in the pool as outlined in the research protocol, further invitations were not sent to the pool of teachers. As a result, counselors were the only groups of school adults that participated in the research study.

### ***Student Pool***

The maximum number of student participants in the study was determined, in part, by the researcher's ability to conduct, transcribe, and process data and the total costs that the researcher was willing to incur personally. The criteria were as follows:

1. Minimum of two students per counselor and a maximum of 3 students were assigned at the inception of the study. Once begun, attrition was to be considered and the guidelines established for continuance were: each counselor must remain paired with, at minimum, one student. Having three student participants per counselor (fifteen overall student participants) was a maximum number that attempted to balance the study's need for a diverse population, adding thickness to

the results and conclusions, (Marshall & Rossman, 2011; Willis, 2007), and the individual counselors' need to devote time to this study within their job scope

2. The maximum of students was determinant by the maximum number of counselors committed. Total students were (discounting attrition) from between 6 (3 teachers with 2 students per) and 18 (6 Teachers with 3 students per). In the case of attrition, the minimum student participants would have been three (one per counsel)

Students were invited to participate using the following criteria:

1. those who were on the counselor's current caseload
2. those who, the counselors believed, the relationship between themselves and the students could have been better.
3. those students who were grades 9 -12 enrolled at Suburban High School
4. those students who had been given signed assent to participate
5. those students whose parents/ guardians had been given signed consent for the student's participation
6. students who owned and used a mobile device capable of receiving text messages.

The following criteria was not used as consideration when identifying potential students:

1. ethnicity
2. socio-economic status (as noted by the free and reduced lunch list or other ancillary information)

### ***Student Selection***

I consulted with the principal and reviewed the timeline and selection process for students. After this, I sent an email to those counselors who were consenting, with instructions for next steps. Counselors were sent a private secure link to sync.com data base, so that they would have access to any materials needed during the study, an updated timeline

of anticipated events, and instructions for creating the student pool using their own caseload.

The instructions to create the student pools were as follows:

1. The counselors reviewed their caseload of students and created a list that met the criteria - who, they believe, the relationship between themselves and the students could be better.
2. The counselor refined their initial list into a smaller one of 10 potential students identifying those who were most in need as priority invitees. This list of 10 students was to become the initial student pool associated with that specific teacher.
3. Counselors were instructed to email their list of students to a designee of the principal, who was an office secretary, and no other person.

The designated secretary was sent an email by the researcher that contained instructions for next steps and a copy of the approved email invitation. The secretary then created an email list of all the parents/guardians of the students on the counselors' lists and blind-copy emailed the parents the invitation letter on my behalf. This step was taken to ensure that I did not have any knowledge of the students who were invited and ensure their privacy; the only people whom I would have knowledge, were those who contacted me directly with interest. A copy of the letter is contained in Appendix M. The parents/guardians were asked to email me directly if they had interest in the study. Some parents who received the email contacted the school principal to check the validity of the email, while others emailed only me directly.

After the first email invitations were sent, only one potential participant contacted me with interest. As a result, approval was requested for an amendment to the protocol to the Arcadia IRB. Approval was granted to resend the initial email to the same pool of parents using the same blind copy method. This email invitation was sent by the designated

secretary. As a result, three more participants were recruited. After consultation with my dissertation chair and the principal, it was agreed to offer a last invitation in an effort to gain interest in the study. An email was sent to all 10<sup>th</sup> grade students, blind copied by the designated secretary in the school, using the same invitation as prior. This email invitation yielded one new participant in the study. As a result, five students, who were part of the original pool, after families signed consent and assent agreements, were included as official participants. The process of consent and assent is clarified later in this chapter.

At the time when student recruiting was completed, 4 of the 5 students fell on the caseload of Mr. Kevin, one of two participating counselors. The other student was on the caseload of the only counselor who chose not to participate. After consulting with my dissertation chair, we decided to move forward with the five total students, despite being under the prescribed number by the initial protocol. I then made attempts to find another counselor to pair the remaining single student. The original intention was to pair the student with the college and career counselor, with whom she had no prior relationship. After speaking with the student, she wished to continue participation with another counselor. She also indicated a preference to a particular counselor she had, on one occasion, spoken with about a problem when her case counselor was unavailable. I then spoke with both the college and career counselor and Ms. Beth, the counselor preferred by the student. At this juncture, the college and career counselor expressed concerns about available time to spend with the study in the Spring of the year, and the subsequent decision was made to pair Ms. Beth with the student. At this point one counselor, Mr. Kevin, was paired with four students who were on his caseload and Ms. Beth was paired with one student who was not on her caseload.

I then crafted an email to all three non-participating counselors, thanking them for their interest and informing them that they will not be participating because of the lack of

interest from the student pool. I also sent an email to all consenting students and their parents officially welcoming them to be part of the study and provided a general timeline for next steps. Lastly, I sent an email to the two participating counselors, Mr. Kevin and Ms. Beth, officially inviting them to the study, providing a timeline of the study and carbon copied the principal as per our verbal agreement. In line with IRB approved protocol, the principal sent a letter via email stating that all of the employees are appropriately trained and were compliant as mandatory reporters required by Child Protective Services Law.

### **Participant Compensation**

Communicating with the counselors may have caused an increase in mobile data that exceeded the current mobile plan of a student. To mitigate this, I compensated each student \$30 in the form of a post office cashier's check. This check was sent during the 2<sup>nd</sup> half of the study, although it was intended to be sent in the first month. The delay was caused by complication from my location in Europe and foreign bank regulations. After negotiating with banks, the easiest proposition was executed with the help of a family member. A family member picked up five \$30 post office cashier's checks, placed them in separate unmarked envelopes, and brought them to the school, care of the designated school secretary. I then texted the participants about the presence of the checks and the students walked to the office to retrieve them at leisure.

During the study, the researcher had agreed to pay for a lunch at the counseling office on two occasions. Mr. Kevin arranged for the counselors to receive their compensation on a particular date and time. Through a local restaurant, I ordered a large lunch delivered to the main office of the school. This lunch was purchased with enough food for the counseling and main office staff, counselors, and administrators. I offered an additional occasion for another lunch, however the counselors declined.

### **Overview of Study Communication**

It is important to disclose that this research was conducted while I was living overseas in Europe while my participants were in the United States. As a result, I was bound to rely heavily on multiple forms of communication to execute the attention required (see Table 1: General Study Overview). I had to design effective and secure data sharing and communication methods. Each of the selected platforms were chosen for ease of use, encryption and privacy, and ability to execute the needed task. The below paragraphs briefly describe each platform utilized and the rationale for having being chosen.

General communication was conducted using the SMS gateway called Clicksend. This technology allowed a person to use email to send a text message to a mobile phone and have that text returned in the same manner. This communication technology was for the counselors, who used email to text the mobile phones of students. I, as the researcher, used Clicksend to communicate with students as well. Clicksend was particularly useful from a data security point of view. The technology was able to be routed through the school email servers to preserve the communication privately in the school and Clicksend, the company, permanently removes all files from their systems after a six-month time period regardless of user.

Sync.com was used as a cloud data housing location and file sharing tool. It was a secure encrypted database, but also allowed multiple individual users to have file-sharing access to designated folders. This made the tool advantageous for information to be shared between the counselors and myself and maintained privacy between participants.

Join.me was a virtual meeting software that was widely used in corporations. While many other virtual meeting software existed with similar advantages, Join.me was chosen because I was already familiar with its use. Additionally, it allowed single access codes for each individual user for each meeting; no other parties could have been involved in virtual interviews except those receiving the code.

During the study I also used my Arcadia email address and my personal mobile phone for voice conversations. Email was appropriate to have been used with counselors because school email was the most professional method of communicating and I had no reasons to have their personal phone number as part of the study. I used the telephone at times to speak with parents/ guardians during consent/assent conversations, directly with participants during interviews, or to follow up with concerns if their asked me to call. This method made it easier to solve small technological issues as they arose.

The above-mentioned correspondence was enhanced by an opportunity for me to have met with counselors meet face-to-face during recruitment. This only occurred once and only with counselors by happenstance; I had vacationed in the United States at a time when participant recruiting was occurring and was able to make last minute arrangements with the principal. True face-to-face meetings were not used in the design, as they were viewed as opportunistic events that may add inconsistency if an interview was had with one participant face-to-face and the others virtually. Additionally, travel to the United States could have proved cost prohibitive for me to make multiple trips.

### **Intervention Definition**

The intervention for this study was informed and clarified by the research body and expertise of the researcher (Greene, 2007; Marshall & Roseman, 2011). The intervention for this study was defined as a series of text messages sent from school counselors to participating students, governed by parameters. The parameters that further defined the intervention were as follows:

1. The study data collection took place over three months of time beginning with the first text messages sent by teachers/counselors to students.
2. Counselors attempted weekly contact with students via email to text message that was to be continued throughout the three-month duration of the



study

3. Text messages were sent using an SMS Gateway called ClickSend. This was a method, employed by thousands of schools world-wide, that allowed a school person to email a message that was is received by another person in text message form. Additional information about its use can be found in Appendix N: ClickSend Instructions for Counselors.
  - a. In a practical sense, the following occurred on both user ends.
    - i. Counselors wrote an email to a student.
    - ii. In the address bar, the counselors wrote the telephone number of the student with @sms.clicksend.com at the end (Example: 12156679876@sms.clicksend.com).
    - iii. The email was sent to the Clicksend server where the format was changed from email to SMS.
    - iv. The SMS version of the email was sent to the student's phone.
    - v. The student was able to respond to the text in a normal fashion.
    - vi. The text was sent back to the Clicksend server, where the format was changed from SMS format into email.
    - vii. The email was then sent to the teacher who originated the message and received it in his or her email box.
    - viii. \*\*\* This process was tested using a handheld mobile phone using email from Europe, sent through the Clicksend gateway, and another mobile phone using text in the United States. The process of exchanging the email format and resending the message was found to take under three (3) seconds, ie. in line with the speed of a normal text message.

- b. All messages sent and received in this format were to be saved on the school servers as any other normal email would have been saved.
4. Students/counselors initiated personalized messages to each student that fell within the context of their relationship with the student, circumstances that surrounded the student, and school and life events. Additionally, counselors were given Appendix I: Concept List for Teacher/counselors as things to have considered when having texted with students. An example of personalization was as follows:
  - a. Non-personalized example: “The guidance office will be open during mid-terms for students who wish to see a guidance counselor to review quarter 1 and 2 grades”
  - b. Personalized example: “Troy, I know that you and I had spoken about your history grades in the hall, and I wanted to remind you that I will be available during mid-terms for us to talk about that class grade, and others if you wish. Just let me know and I will be sure to find time for you.”

The parameters of the text message intervention described above did not prohibit counselors from engaging in additional text messaging communication or any other method of communication with student participants. A mutual and natural communication pattern between students and counselors may have emerged during the study through their own experiences and personalities (Marshall & Roseman, 2011). This message was reinforced with counselors so that they did not feel overly bound or to have confined any communication to a minimum.

### **Table 1**

*General Study Overview*

General Study Information	Description	Additional Clarifications
Student participants	5 students	
Teacher/counselor participants	2 counselors	1 with 4 student pairs 1 with 1 student pair
Study duration	Data collection over three (3) months having begun with the first counselor text messages sent	
Study Intervention	Teachers/counselor initiated weekly text messages to students as best possible Teachers/counselor's used their school email to send messages to and from students having used a SMS Gateway  Students used their mobile phone text messaging to have sent and receives messages	SendClick is the SMS Gateway was used as the technological bridge for this process.  Transcripts of these messages were available to the researcher through his master Clicksend account
SMS Gateway	ClickSend was as the SMS Gateway for this intervention.  SMS Gateway allowed a user (counselor) to use an email to have sent a text message to another user's (student) mobile device via text messaging. The gateway changed the original format of a message so that it can be received in another format.	ClickSend did not require any technological changes to either the school email system, nor any other system of the school district.  Any cost for this system was incurred by the researcher.
Virtual Meeting software used by researcher for interviews and contact when appropriate	Join.me	Free, encrypted, video, mobile and web-based virtual meeting software used to interview and communicate with participants and researcher during the course of the study.  Participants were sent a webaddress link and passcode for each individual interview
Cloud-based document Dropbox/ Database	Sync.com	Sync.com was a secure, encrypted cloud dropbox/ database that placed a premium on security. The researcher and teachers/counselors used this to safely and securely have exchanged study information during the study
Teacher/counselor and student interview data capture	Interviews were held via Join.me Virtual Meeting software.  Sessions were audio recorded using a recording device and transferred to the sync.com database for later analysis and transcription	Audio data will be stored on sync.com database until transcribed, at which time they were destroyed/ erased

<p><u>Optional</u> mechanism to have captured significant formal and informal counselor-student communications</p>	<p>Any number of additional informal or formal communications between counselor and students may have also occurred impromptu as want, need, incident, or relationship desired. Teachers or counselors may have wanted to capture this data as it occurred, instead of waiting for an interview to have taken place. This served as an option for them.</p>	<p>The Ongoing Counselor-Student Interaction Data Collection Sheet (Appendix F) was available for counselors to use.</p> <p><u>No data was collected using this method</u></p>
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## Data Collection

This section chronologically and narratively outlines how the data for the study was collected from several sources. These included: transcripts from twenty-one individual interviews with participants, transcripts of the text message communications between counselors and students, general demographic information (specifically: age, grade, gender, ethnicity), grade 9-12 attendance report, grade 9-12 academic transcript, grade 9-12 behavioral record, and a researcher note of a phone call. References to analysis and data management were interwoven in the descriptions of data collection because I believed the recursive nature is best explained in chronological narrative form; the two were difficult to completely separate from each other without losing cohesion. However, this section emphasizes and details data collection; the data analysis and data management sections of Chapter 4 go into more depth in these topics individually.

When considering this research, it is a worthy reminder that I conducted data collection from overseas, and as a result was forced to rely heavily on technology resources. In summary, this process worked well and did not deter from gathering quality data, however research is not often conducted in this manner. Therefore, the ins and outs of the process may be of interest to the reader and are described in detail.

## Figure 1

*Study Design Overview*

Counselor Consent Confirming participants

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☐

Student Pool Creation

☐

Student and Parent Assent/consent confirms Student participants

### Study Intervention

A series of weekly text messages sent from counselors to students

**Data Source**  
Initial Student and Counselor Interviews

**Data Source**  
Ongoing transcripts of text message conversations between counselors and students  
Updated every two weeks

**Data Source**  
Transcripts of final student and counselor interviews at end of month

**Data Source**  
Counselors have the option to use the Ongoing Teacher/counselor-Student Interaction Data Collection Sheet (Appendix F) to capture information about relationship significant formal or informal communications

**Data Source**  
Student academic, attendance, and behavioral and other permissible student data

**Data Source**  
Transcript of interviews with student participants and counselors at the mid-point of the study

#### Coding pass one

Code data, create themes, draw sub conclusions using coding framework assigned to each research question

#### Coding pass two

Code data, create themes, draw sub conclusions using coding framework assigned to each research question

#### Coding pass three

Code data, create themes, draw sub conclusions using coding framework assigned to each research question

I assigned pseudo names for each participant and shared them with counselors via sync.com drop box beginning with the first week of the study. The documents were available to each counselor for only the students with whom they were partnered. This document was available for two weeks in the drop-box until counselors committed the pseudo names to memory. After two weeks of time, I removed the documents from the counselor access

dropbox and moved it into a separate location on the sync.com server where only the researcher had access. Counselors were instructed to have used only pseudo names on all documents related to the participants throughout the duration of the study. In case a pseudo name was forgotten, the counselor had the opportunity to have contacted me and I would have made the document available for one day in the counselor accessible drop box before it would have been subsequently removed. This option was not used during the study.

I then created and incurred the cost for individual Clicksend accounts for all counselors by having used their school email and their name. The cost for this service totaled approximately \$25 over the three months. I remained the owner of the accounts and these accounts were closed immediately following the conclusion of the study. Additionally, I constructed access to a secure sync.com database and created individual access accounts for each teacher. I securely saved all contact information from participants in the sync.com cloud database. The access rights and passwords for each student-counselor pair were designed so that confidentiality was maintained. In each teacher's individual account, I placed the following documents:

- 1) instructions for making a text messages to students via school email using Clicksend. This included a trial having used the researcher so that the teachers were able to practice using the tool and became comfortable. This document can be referenced in Appendix N: ClickSend Instructions for Counselors. In brief, this procedure was absolutely no different than having sent an email to any other person, except that the specific email address was used for each student in the address line (Ex: 6108887777@sms.clicksend.com).
- 2) a chart that showed the mobile phone number associated with the student
- 3) a chart of the pseudo-names used in place of actual student names throughout study communication

- 4) a copy of the Concept List for Counselors used for reference, as needed, that described researched theory of mobile communication as it pertained to students (Appendix I).
- 5) a copy of the optional Ongoing Counselor – Students Interaction Data Collection Sheet used by participants during the study to have captured significant interactions that were otherwise not captured or communicated during interviews. (Appendix F)

I then sent an email to the counselors to provide their sync.com login information and password via email and informed them of the documents in the folder. I asked the counselors to have made a trial using Clicksend to my phone number so they became familiar with the tool. Both counselors made this trial without issue. I then confirmed my communication with students using the Clicksend account to thank them again for having participated and inform them that text is the primary method that I would have used for communication during the study.

**Table 2**

*Data Sources*

Study Phase of Collection	Data Sources	Research Question Data Source is Designed to Inform	Additional Details	Who is Performing the Task and Where?
Initial Interviews	Transcript of initial student and counselor interviews	1) Question 1: Does the use of mobile phone outreach impact the mentoring relationship between students and counselors or teachers? - If so, in what manner? If not, for what reasons? 2) Question 2: What are students' and counselors' or teachers'	- Total of one (1) interview per participant with researcher: 7 Total (5-students, 2 - counselors) - Using semi-scripted interview questions (Appendices G and H) - The interview was approx. 30 minutes for students and 35 minutes for counselors -Student Interviews took place after school hours at a time of student convenience	Researcher conducting and recording interviews from Europe

		perceptions of using text messaging when exploring a mentoring relationship? - In what ways did participants use text messaging?		
Ongoing Text Conversation Collection	Transcripts of the text message communication between counselors and students	Question 1	Text Message Transcripts collected from the master Clicksend account	Researcher collecting data from Europe
Mid-Study Interviews	Transcript of student and counselor interviews at the mid-point of the study	Question 1 and 2	- Total of one (1) interview per participant with researcher: 7 Total (5-students, 2 - counselors) - Using semi-scripted interview questions (Appendices G and H) - The interview was approx. 30 minutes for students and counselors -Student Interviews took place after school hours at a time of student convenience -	Researcher conducting and recording interviews from Europe
Final Interviews	Transcript of student and counselor final interviews at the end of the study	Question 1 and 2	Total of one (1) interview per participant with researcher: 7 Total (5-students, 2 - counselors) - Using semi-scripted interview questions (Appendices G and H) - The interview was approx. 30 minutes for students and counselors -Student Interviews took place after school hours at a time of student convenience	Researcher conducting and recording interviews from Europe
School-Related Student Data Collection	1) General demographic information (Specifically: Age, Grade, Gender, Ethnicity) 2) Grade 9-12 attendance report 3) Grade 9-12 academic	Question 1	1) General demographic information (Specifically: Age, Grade, Gender, Ethnicity) 2) Grade 9-12 attendance report 3) Grade 9-12 academic	School secretary designee sending documents as agreed upon at school site



transcript 4) Grade 9-12 behavioral record Provided by the principal as permission was granted by consent/assent
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transcript 4)Grade 9-12 behavioral record (permission granted by consent and assent agreements) was sent via mail at the principal's convenience
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### *Initial Semi-Structured Interviews*

Counselors were invited to join the initial interviews via email and students by Clicksend with the following message:

“Hello [insert student name], this is Nick Gilly researcher from Arcadia University. I am writing to schedule a time for our next ½ hour interview over the next few weeks as part of the mobile text study. These interviews will take place outside of school hours. Below are the windows of time when I have availability for us to hold the interview. [insert student name]. Please return this text with a ½ hour date and time that works well for you. If you are unable to meet in any of these times, please let me know when you are available. I am sure to be flexible to meet your schedule. I appreciate your efforts in being a part of the study. As a reminder, if you wish, you may end your participation in the study at any time by speaking to your principal, your teacher, your guidance counselor, or me. Thank you [insert student name]”

After finding mutually agreeable times and dates outside of school hours I sent an individual passcode for each meeting that allowed only the participant access to the interview and the clickable weblink address. The passcode changed for every interview and every participant. A reminder was sent 2 days prior to the interview as follows:

“Hello [insert student name], this is Nick Gilly, researcher from Arcadia University. I am writing to remind you of our next ½ hour interview as part of the mobile text study. We have the interview scheduled for [insert time and date]. If your schedule has changed and you are unable to meet at this time, please let me know when you

will be now available and we make the change. I am sure to be flexible to meet your schedule. I look forward to speaking on [insert time and date] and appreciate your efforts in being a part of the study. Thank you [insert student name]”

For interviews, each student used the join.me virtual meeting software with either their personal mobile device, their tablet, or personal computer. All of the participants spoke with me face-to-face, except for one participant. Ernesto preferred to be able to see me, but declined to have his picture available. No students used the school-provided location for interviews during the study. During the counseling interviews, a firewall issue prevented Mr. Kevin from using the software on his work computer, and he instead chose to use his personal mobile phone for the interview. Ms. Wright was also unable to have used the join.me software for the same issue, and instead conducted the interview over the telephone. The interview approximated 30 minutes of time. The interviews were conducted were semi-scripted that used the questions outlined in Appendices G and H. As per protocol, this interview, and each following interview began with a scripted message. The message thanked the student, reminded them that the interview was recorded, the option they had to stop their participation in the study, and asked if they wished to continue with the interview. See below:

Each interview began as follows: “Hi [insert student name]. I wish to thank you again for taking the time to hold and interview with me and talk about your experiences with the study. Before I begin I wanted to remind you that participation in the study, and this interview is completely voluntary. If you wish, you may end your participation in the study at any time by speaking to your principal, your teacher, your guidance counselor, or me. Are you still, at this time, willing to participate in the study and this interview? ..... Good. Before we begin the formal interview questions, I wish to remind you that this interview is being recorded so that your

answers can be written down accurately. Are you willing and ready to begin the interview?.....”

At the conclusion of each interview, I thanked the participants for their time and engagement with the study. The interview, and each following ended with the following message:

“That ends the formal interview for today. We have [insert number] interviews left as part of the study. The next interview will occur in and around [insert date], so you can expect another invitation text from me around [insert date]. Thank you again for your participation in the study. Your insights on this topic are very valuable. I look forward to our next interview. As always, if you have any difficulties, questions, concerns, or wish to end your participation in the study, you may contact me directly at any time. You may also end your participation in the study at any time by speaking to your principal, your teacher, your guidance counselor, or me. Thank you again for your time.”

After the initial interview, an email was crafted to the counselors that informed them that all interviews were completed and they could begin texting messaging to their partner students. I monitored the messages from my Clicksend owner account as they were exchanged.

Interviews were saved on a recording device and files transferred to the sync.com database for storage. All files on the recording device were erased immediately after the transfer of data. No video recordings were made during any interviews. Prior to professional transcription, the company Rev.com signed the IRB approved transcription agreement for privacy and data security (Appendix L). Interview data was then uploaded to my personal account on Rev.com. Transcriptions were preformed and copies of the audio recordings and transcriptions were saved in this account. An email was sent to me notifying when the

transcription was completed. This process took approximately one week to complete after interviews took place.

After receiving the transcribed interviews, the data was analyzed using the protocol outlined in Data Analysis section of Chapter 4. From data analysis, additional questions were added to the original interview questions that explored emerging themes from the participant's responses.

Every two weeks, the researcher sent a message to counselors that reminded them to upload any notes they may have taken onto the optional Ongoing Teacher/counselor – Students Interaction Data Collection Sheets and to check in on the progress of the study. After an initial check in, I received a follow up contact from Mr. Kevin requesting a phone conversation. During this phone conversation two concerns were raised: 1) He inquired if he should be meeting with students face-to-face instead of only texting with them, and 2) he had received a message from a community member indicating that Mr. Kevin's messages to one student had been sent to him in error. I then checked the phone number of the student and realized that Mr. Kevin had been using the incorrect phone number to text the student, Opie, in the study. This error was corrected and the study continued without further issue. No personalized information was shared with the community member because of this error.

### ***Second Semi-Structured Interviews***

Two weeks prior to second interviews, I sent invitation texts to students and emails to counselors, that requested a convenient time for the next interview to occur. As outlined in the IRB approved protocol, I used the language referenced in the above section to have contacted the participants. After having found mutually agreeable times and dates outside of school hours I sent an individual passcode for each meeting that allowed only the participant access to the interview and the clickable weblink address. As prior, the students chose to use face-to-face virtual meeting join.me software, Ernesto continued to have only the researcher

visible for him to see. Mr. Kevin used his iPhone and the join.me software and Ms. Wright the telephone as prior. The interviews approximated 30 minutes of time. As per protocol, the interviews began with the scripted message thanking the participants, reminded all that the interview will be recorded, that they have the option to stop their participation in the study, and asked if they wished to continue with the interview. Interviews were conducted in a semi-scripted format having used the original questions (Appendices G and H) and additional questions developed from analysis. At the conclusion of each interview, I thanked the participants for their time and engagement having used the scripted statement as prior. Interviews were saved on a recording device and the files transferred to the sync.com database for storage. All files on the recording device were erased immediately after the transfer of data. No video recordings were made during any interviews. Interview data was uploaded to my personal account on Rev.com. Transcriptions were performed and copies of the audio recordings and transcriptions were saved in this account. An email was sent to me notifying when the transcriptions were completed. This process took approximately one week to have been completed after interviews took place.

After receiving the transcribed interviews from Rev.com, the data was analyzed using the emerging themes, initial interviews transcriptions, second interview transcription, and the protocol outlined in the Data Analysis section of Chapter 4. From data analysis, additional questions were added to the original interview questions that investigated emerging themes from the participants' responses. These final questions were used to confirm and disconfirm final theories.

During the last half of the study, approximately every two weeks, the researcher sent a message to counselors that reminded them to upload any notes they may have taken onto the optional Ongoing Teacher/counselor – Students Interaction Data Collection Sheets and to check-in on the progress of the study. Additionally, I sent a message to students outlining

how and where they were able to pick up their compensation checks and worked with the secretary of the school to verify that student had the opportunity to retrieve them. I also made contact with Mr. Kevin and arranged the counselors to have received their compensation, in the form of a larger lunch delivered from a local restaurant during a day of the counselors' choosing. This lunch was purchased with enough food for the entire counseling and main office staff, counselors, and administrators.

### *Final Semi-Structured Interviews*

Two weeks prior to the final interviews, I sent invitation texts to students and emails to counselors that requested a convenient time for the interviews to take place. As outlined in the IRB approved protocol, I used the language referenced above to contact the participants. After finding mutually agreeable times and dates outside of school hours, I sent an individual passcode for each meeting that allowed only the participant access to the interview and the clickable weblink address. All of the final interviews were conducted using the telephone because a weak internet signal prevented the interviews from sending visual data through the computers. All of the interviews were able to be conducted in the week following the end of the study except for Ernesto. I was unable to receive a return contact from him after several attempts until three months after the end of the study. At that time, he agreed to speak with me and conduct the final interview using the telephone as the others had done.

These final interviews approximated 35-40 minutes of time. As per protocol, the interview began with the scripted message that thanked the student, reminded them that the interview was to be recorded, that they had the option to stop their participation in the study, and asked if they wish to continue with the interview. Interviews were conducted in a semi-scripted format using the original questions (Appendices G and H) and the additional questions developed from analysis. At the conclusion of each interview, I thanked the participants for their time and insights having used the scripted statement used prior.

Interviews were saved on a recording device and transferred the files transferred to the sync.com database for storage. All files on the recording device were erased immediately after the transfer of data. No video recordings were made during any interviews. Interview data was uploaded to my personal account on Rev.com. Transcriptions were preformed and copies of the audio recordings and transcriptions were saved in this account. An email was sent to me having notified when the transcription was completed. This process took approximately one week to be completed after interviews took place. Ernesto's data followed the same protocol, only occurring at the later time of the actual interview.

### ***Student Document Collection***

At the conclusion of the study timeline, the designated secretary collected only the documents permitted by each student in the consent/assent permission: 1) general demographic information (specifically: age, grade, gender, ethnicity) 2) grade 9-12 attendance report 3) grade 9-12 academic transcript 4) grade 9-12 behavioral record. The data was scanned and sent to me by the designated secretary. The file was downloaded to the sync.com database and the emails deleted from the email account.

### **Consent and Assent**

Informed consent and assent for participants was necessary to have protected their privacy and safety and supported the integrity of the study (Butin, 2010). While voluntary, informed consent/ assent was a minimal requirement for protection of individuals and no less important and critical for me to have followed than the ethical responsibilities of research (Marshall & Roseman, 2011). The design of this study took into account these circumstances without having compromised the integrity of the study and potential findings. Embedded in the description of participant selection below are detailed explanations of consent considerations and how they were specifically addressed in this study. Precautions,

protections, and rights for participant safety and privacy were clearly explained in the consent and assent forms reviewed with students, counselors, and parents (Appendices C and D)

### *Protections for Counselors*

The following was put in place to have protected the privacy and safety of counselors, especially when communicating:

1. The superintendent and principal signed a permission that made clear the difference between the contractual and professional responsibilities of the counselors when they were actively engaging in the study.
  - a. Teachers/counselors were:
    - i. Held responsible by the school district for appropriate and professional communication between themselves and students that may have occurred within the bounds of the study
  - b. Teachers/counselors were not:
    - i. Asked by the school district to have performed additional duties with students or in relation to the study outside of contractual hours
    - ii. Compensated by the school for voluntarily having spent time participating in this study outside of the contractual day
2. Measures were taken to avoid instances of inappropriate communication from the student during the study.
  - a. Both the student and parent permissions contained a highlighted section informing them that the school discipline and behavioral code was still in place during all communications of this study.
  - b. In the rare instance of inappropriate behavior, counselors were responsible to inform the school administration. The school principal was aware and in agreement that this would have been enforced.



- c. Counselors may have chosen to end or modify participation in the study if any inappropriate behavior had occurred.
3. All audio recordings were destroyed after transcription. Any identifying information was changed so that their identity remained confidential during the final study paper and any publications thereafter.
4. Any and all paper copies collected from the research will be kept for one (1) year in a secure place in my home. After this time, all copies will be scanned into a secure computer database and the files kept for five (5) years - to be used in further data analysis or publication. After five (5) years, files will be permanently destroyed.
5. The professional transcription company Rev.com was required to sign a confidentiality and privacy agreement requiring all data saved on their servers to be erased

### ***School Site Permissions***

Permissions to access the participants for the study was performed by having followed the formal procedures as designated by the school district and as per protocol approved by the Arcadia IRB. Formal:

1. The recruitment process began with a letter of interest sent via email to the superintendent of Suburban School District. We discussed the study in further depth on a phone call and I was referred to the principal at Suburban High School. The principal and I spoke about the study and several documents were sent for him to consider.
2. The superintendent sent a letter of preliminary consent to me via email, pending IRB approval. This letter was included in my IRB application
3. I received final approval to conduct the study by the Arcadia IRB

4. I reviewed any changes that resulted from the IRB process with the principal and Superintendent in an effort to receive final approval for proceeding.
5. I received a final approved letter to have conducted the study from the Superintendent of Suburban School District.
6. I requested and received a confirmation letter from the school stating that all of the employees were appropriately trained and currently compliant as mandatory reporters as was required by PA Child Protective Services Law.
7. I reviewed with the principal responsibilities and actions that were agreed upon.

These included the following:

- a. provided a time to recruit willing counselors
- b. provided a designated secretary to send invitation emails to parents/guardians on my behalf
- c. provided a secure, internet accessible computer area that students or counselors could use for interviews during the study
- d. when requested, provided the following four (4) documents: 1) general demographic information (specifically: age, grade, gender, ethnicity) 2) grade 9-12 attendance report 3) grade 9-12 academic transcript 4) grade 9-12 behavioral record allowed by permission granted in consent/assent documents

### ***Counselor Selection and Consent***

By happenstance, I was in the United States at the approximate time of an in-service at Suburban High School. In conjunction with the principal, I arranged to introduce myself and the study personally with the counseling department and principal. During this meeting I explained the following:

1. the background of the researcher

2. overall study design
3. the role of the counselor
4. ethical and privacy considerations
5. reviewed the consent agreement (See Appendices C and D), including an outline of expected responsibilities, time requirements, and actions to be taken by the counselor throughout the study
6. answered any questions by counselors

After the meeting, five of the six counselors committed to the study having signed a consent agreement, returned a copy to a designated office secretary and notified the researcher directly. The signed consent agreements were kept in a secure location in the main office of the school until later mailed to the researcher. Counselors were sent an email acknowledging the receipt of the signed consent documents that also contained an approximate timeline for student recruitment and the next steps that they must perform as participants.

It should be noted that two counselors ultimately participated in the study; this did not meet the minimum criteria. There was difficulty reaching the minimum number of students for the study, even after several attempts and an expansion of the pool. Ultimately 5 students consented to participate. Four of the five students were on Mr. Kevin's caseload, not spread amongst the other counselors as anticipated. After consultation with my dissertation chair, it was decided that the total number of students for the exploratory study were sufficient. As a result, the study contained only two counselors. I then crafted an email to all three non-participating counselors, thanking them for their interests and informing them that they will not be participating because of the size of the student volunteer pool.

### ***Student Assent and Parent Consent***

Initial invitations were sent to parents/guardians via email from the designated secretary on my behalf. If there was further interest in joining the study, parents/guardians

were instructed to email me, as the researcher, directly. When this occurred, I replied by attaching a copy of the consent and assent agreements for the family to review and inquired about favored times to schedule a meeting. After confirming dates and times, I offered the families the option of platforms to continue conversations; a telephone conversation or face-to-face virtual meeting software. Some meetings were conducted using the telephone, others virtual meeting technology.

During the meetings I explained the study, reviewed the consent/ assent documents line by line, and answered questions that the family may have had. (See Appendices C and D). The intervention was clarified with parents/guardians and students, emphasizing participant rights, privacy, and the option to leave the study at any time for any reason. Specifically, I outlined the optional permission signature granting me access to the following documents: 1) general demographic information (specifically: age, grade, gender, ethnicity) 2) grade 9-12 attendance report 3) grade 9-12 academic transcript 4) grade 9-12 behavioral record that would not otherwise be permissible for the school to release. Participation in the study and release of each specific document was allowed only if both students and parent/guardian agreed.

The next series of events occurred when the student and parent/guardian both wished to proceed with the study. Students were instructed to bring the signed assent and consent documents to the designated secretary at Suburban High School in a sealed envelope and send an email to me signifying their intent. The secretary created pdf copies of the agreements and emailed them to me. I then saved the files to the sync.com cloud database and deleted the files in the email. Original copies of the signed papers were kept in a secure location in the principal's offices. I was able to pick these documents up personally after the study was concluded.

I also crafted an email to all consenting students and their parents, officially welcomed them to the study, and provided a general timeline for next steps. Lastly, I crafted an email to the two participating counselors and the principal, officially inviting them to the study and providing a timeline for next steps. In line with IRB approved protocol, the principal sent a letter via email stating that all of the employees were appropriately trained and currently compliant as mandatory reporters required by Child Protective Services Law.

### **Data Management and Confidentiality**

Throughout this study, information was gathered from multiple sources in many forms such as: private phone numbers and emails, interview recordings, interview transcripts, researcher notes, student demographic, academic, behaviors, and attendance information. Specific steps were taken to protect the confidentiality, privacy of the participants and security of the information received and maintained throughout the study (Creswell,2010; Marshall & Roseman, 2011). Below is the list of steps taken to maintain confidentiality and data security:

1. All handwritten notes, or hard copies of any kind were kept secure in the offices of the counselors and designated high school secretary. At the conclusion of the study, any paper notes were sent via registered mail or picked by the researcher for final storage in a secure location in the researcher's home. All hard, or paper, copies associated with the research will be kept for a maximum of one year in a secure place in the researcher's home after the study's completion to aid data analysis and conclusions. After this time, all hard/paper copies will be scanned as pdf documents and saved in the sync.com database. All pdf copies of research material will be kept for five years in the secure sync.com data-base; they may be used in subsequent data analysis or publication. After this time, all copies will be permanently erased or destroyed as applicable.

2. All interviews were conducted using join.me virtual meeting software as able and by telephone when the join.me was not able to work. Join.me allowed for each meeting to have had an individualized invitation passcode that was sent to each participant via text message. Traditional telephone provided the same level of individualization. This ensured, as best possible, that the participant and the researcher were able to create a secure and private interview atmosphere.
3. The principal was asked to secure a private location in the school with Internet and computer access, in the case that students wished to use this location for interviews. This location was not used during the study, but made available.
4. The researcher established a sync.com secured dropbox location to share documents directly with counselors and was housed and monitored in a central secure location (Creswell, 2007). All folders within the sync.com dropbox were only accessible by me unless specifically designated permissions were given to counselors. In this way, counselors were only able to add and view documents for their partner students. All documents exchanged in these accounts were in pdf form and preserved the original document data.
5. I used a professional transcription service that expediated the transcription process. As per IRB protocol, I secured a Transcription Confidentiality and Privacy Agreement (Appendix L) signed by the company that included a provision for all data saved on company servers to be completely erased after the researcher is in possession of the transcription data.
6. During the study, pseudo names were used in place of students in all documents, dropboxes, and communications as an added protection for privacy for the students (Creswell, 2007). Each pseudo name for each participant assigned was shared with counselors via sync.com drop box beginning with the first week of the

study. The documents were available to each counselor only for the students they serve and for two weeks in the drop-box until counselors committed the pseudo names to memory. After two weeks of time, I removed the documents from the counselor access dropbox and moved it into a separate location on the sync.com server where only I had access. Counselors were instructed to use only pseudo names on all documents, recordings, or notes relating to the participants throughout the duration of the study. In the case a pseudo name was forgotten, I would have made the document available for one day in the counselor accessible drop box before it would have been subsequently **removed**. At the end of the study, I reviewed all documents to ensure that all of the original names have been thoroughly removed before all data is permanently secured at the end of the study.

7. At the conclusion of the study, all hard/paper, copies associated with the research will be kept for a maximum of one year in a secure place in the researcher's home after the study's completion to aid data analysis and conclusions. After this time, all hard, or paper, copies will be scanned as pdf documents and saved in the sync.com database. All hard/ paper copies will be destroyed by me. All copies of research material will be kept for of five years to be used in subsequent data analysis or publication. After this time, any data remaining on my computer, sync.com database, or Whatsapp chat will be permanently erased (Marshall & Roseman, 2011).
8. I closed and deleted all Clicksend accounts that were opened and accessible for teacher/ counselor participants used during this study. I have incurred all associated costs for this service.

9. Although this circumstance did not occur, a special protection for minors was built into the study. Privacy and confidentiality would not have been maintained if the following circumstance would have occurred:
  - a. Teachers, counselors, and the researcher were required to report abusive, potentially dangerous, or physical or mentally harmful behaviors appropriately as Mandatory Abuse Reporters. This is the same standard that existed in the school and would have been applied to the text messaging in this study.
  - b. During this study, as a student within the Suburban High School, the messages that were sent had been routed through and stored on the school email servers. In the unlikely event that the principal had deemed it necessary, the administrative staff at the school may have read the contents of the text messages that occurred during the study.

### **Data Analysis and Meaning Making**

This section describes the general analysis process, specific coding matrices, and specific precautionary actions taken to ensure the trustworthiness of outcomes. In line with qualitative tradition, a recursive and continuous data and meaning making cycle was used. Prior to any coding taking place, I created an initial coding structure based upon the research and predictive areas of interest to the research outcomes (Saldana, 2009). I reviewed the transcripts of the data and, during the first reading, pre-coded any data that appeared to be significant or interesting (Saldana, 2009). The coding structure, already developed from the research body, informed the first coding pass of the researcher; successive passes built upon the structure and morphed as meaning clusters emerged organically from the data (Saldana, 2009). I engaged in three successive coding passes with the purposes of conceptualizing and categorizing evidence into meaning clusters. A coding pass occurred after initial



interview transcription, mid-study second interview transcription, and final interview transcription. Meaning clusters were created from each cycle of information gathered and were solidified with each recursive pass (Creswell, 2007). After each successive coding and meaning making pass, I made alterations to the subsequent interview questions with the purpose of exploring emerging data more deeply with participants or in an attempt to confirm or disconfirm what I believed.

Coding for this research began by assigning categories to each data statement or piece. A specific, research-backed coding framework was used to answer and inform each of the two research questions in this study. Outlined below are the specific coding procedures that were associated with each question.

### ***Initial Inductive Coding Frameworks for Research Question 1***

RQ 1 -Does the use of mobile phone outreach impact the mentoring relationship between students and counselors? If so, in what manner? If not, for what reasons?

The first research question was mostly focused on the actions and happenings that occurred in and around the intervention. For this reason, the coding framework was adapted from Black, Suarez, & Medina, (2004) who built a list of actionable psychosocial and vocational functions of mentors. The Black, Suarez, & Medina, (2004) study identified broad categories of mentor action strategies as: encouraging, teaching, sponsorship, counseling, coaching, and befriending. These initial categories have each been further defined by having used the research contained elsewhere in this study to form the Initial Mentoring Quality Coding Matrix – Research Question 1 (Appendix J). This outline of categories and sub-categories was used initially to organize, quantify, and quality the interview statements, transcripts, and text message conversation transcripts. The goal was to observe happenings of frequency, category, and use over time. Final interviews provided an opportunity to confirm,

or disconfirm the potential theories that have been drawn from the recursive data analysis performed throughout the study.

During coding, this framework proved to be most applicable to the data that was emerging from the participants and text conversations. As themes emerged and new data provided, the data was again compared to this framework. It can best be described as an anchor to the study's analysis.

### ***Initial Inductive Coding Framework for Research Question 2***

RQ 2 - What are students and counselors' perceptions of using text messaging when exploring a mentoring relationship? In what ways did participants use text messaging?

The second research question was an attempt to capture the thoughts, feelings, emotions, and opinions of the participants, as they pertain to the study and its intervention. The initial categories for inductive coding were taken from a collective of outcomes that have been consistently found in previous research to be related to positive youth development (Sabettelli, Anderson, & LaMotte, 2005). Some of these categories, denoted with an asterisk (\*) in Appendix K, were directly referred to in the semi-scripted interview questions with participants. The initial categories are contained in the Initial Mentoring Quality Coding Matrix- Research Question 2 (Appendix K). The data was additionally divided into two additional categories sub headings: 1) positive/ encouraging/ promising and 2) negative/ concerns/ uncertainty.

During coding, it was attempted to use this framework with the data in the manner anticipated. I originally projected double or triple the amount of interview data, thus choosing a framework with broad categories. Unfortunately, this coding set, although based in research, was not practically useful for this data set. This was for four reasons: 1) the counselors and students had not engaged in as substantive communication as was expected 2) the number of participants was much lower than expected, influencing the total amount of

data available 3) the participants spent more time voicing their thoughts about topics, such as barriers and control than mentoring relationships, and 4) it became difficult to organize and interpret while having a small amount of data falling into any given category. For these reasons the coding was completed, but was not substantially effective in organizing meaning from the data. In a future iteration, a more specific coding framework would have been more useful.

### ***Emerging Coding***

The emerging coding strategy followed a prescribed series of steps after initial coding occurred. Temporary broad themes were assigned to clusters of outlying statements. As these broad themes thickened, or additional new statements warranted, these categories merged or morphed to most closely represent the essence of the data cluster. As new clusters deepened, I introduced probing questions in the next interview phase and explored these areas further. Text messages were clustered into conversations and organized by number and counselor/student pairs. Additionally, the rate of time lapse between responses was calculated as a comparison after the participants referenced speed. Additionally, I returned to the research body to find existing supporting evidence that addressed the themes as potential answers to the research questions.

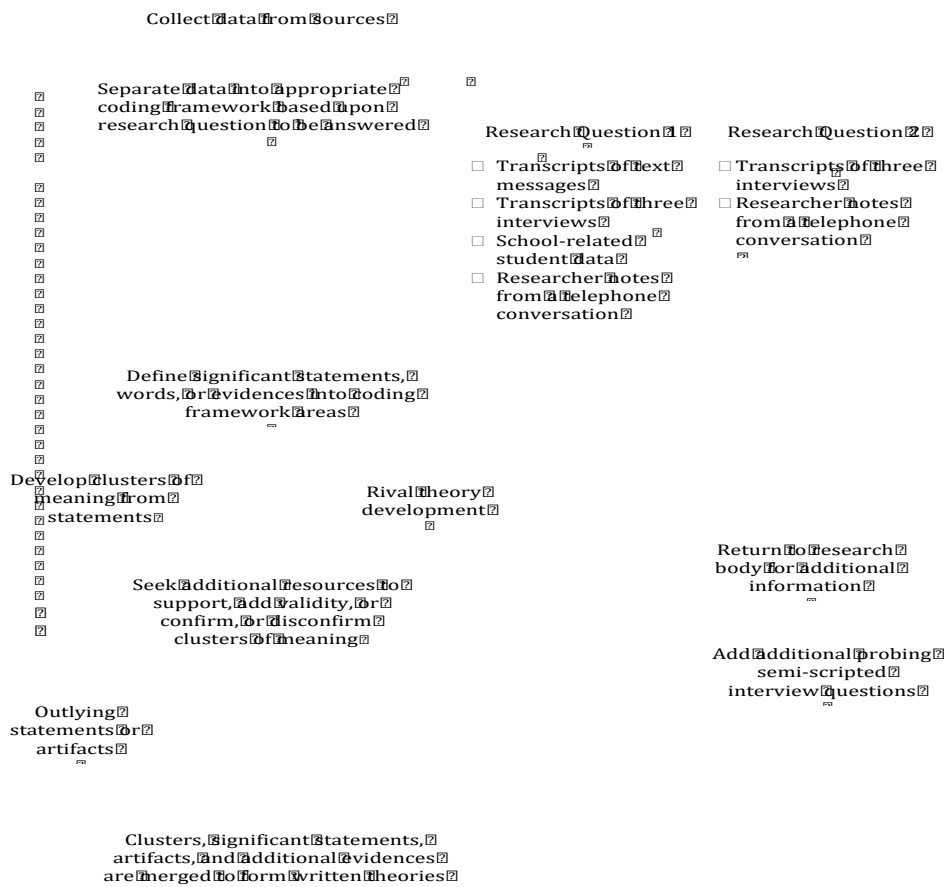
Each review of the interview and text message conversations refined and reworked the categories, placed them into larger concepts, and derived clusters of meaning (Creswell, 2007; Willis, 2007). Additional questions were developed to test alternative theories and new stems of thinking. To ensure clarity or statement meaning, additional clarifying questions became more pointed and purposeful during interviews. Any additional data gathered during this time was coded and the statements joined with existing meaning clusters that thickened, reinforced, and solidified meaning statements from interviews and transcripts into themes (Creswell, 2007; Saldana, 2009). Any remaining data or evidence, additionally provided by

the counselors or students, was then coded under the existing clusters; expanding or refining them as needed.

The themes and meaning clusters were paired with the research question, as appropriate, to ensure that the research aim was achieved (Willis, 2007). Paired with the research questions and supported by existing research evidence, theory of explanation and description was developed to answer the specific aims of this research. Verbatim testimony, participants, specific data pieces, and research was used to triangulate and thicken the theories emerging from the data. Remaining significant statements were used to support discussion points during the final research conclusions.

**Figure 2**

*Data Analysis Overview*



### **Issues of Validity: Trustworthiness**

Issues of trustworthiness were mitigated in several ways. My perspective, bias, and experiences were articulated in a clear and honest manner. By doing so, I took the first step in building trust with readers and other researchers in the field (Cresswell, 2007). The experiences and interpretations I had are apparent and acknowledged in the construct of the study (Cresswell, 2007).

The data in this study was triangulated from four areas: 1) student demographic and school student data, 2) transcriptions audio recordings of three individual semi-scripted student and two counselor interviews (Total of 21 Interviews), 3) text message content transcriptions, and 4) my notes regarding a phone call with a counselor. The multiple data sets, gathered at different times, and from multiple perspectives provided a 360-degree picture of the intervention efficacy (Stake, 2010). The conclusions from this data set were additionally supported with findings from other credible research as outlined in the Chapter 5 discussion. In addition, the entire data set was coded using the same research-based frameworks. The data had then been compared across the mediums of text, face-to-face communication and interviews adding additional supporting evidence to a theme or explanation

The study methodology, keeping with qualitative traditions, utilized consistent research-based criteria during interviews conducted with both students and counselors. Using a recursive analysis, the data from sources was collected longitudinally throughout the study so that emerging theories could be continually tested and clarified by the participants themselves. This process distilled commonalities from multiple perspectives and added to the thickness of evidence for conclusions (Marshall & Rossman, 2011; Willis, 2007). Throughout the study the researcher journaled about the findings, codified and compared current data to previous data to evidence changes over time (Willis, 2007). This recursive

approach layered evidence and provide an opportunity for the researcher to seek clarity during the next interview sequence (Marshall & Rossman, 2011). The use of final interviews, after the majority of the data from the study is coded, also provided final opportunity to directly question the participants and confirm or disconfirm the themes, conclusions, and outcomes derived (Marshall & Rossman, 2011).

To increase trustworthiness, specific steps were taken to both capture the active thoughts of the researcher during the recursive analysis and distinguish these from formal process of forming evidenced themes and building upon collected data.

1. The researcher kept a running reflective journal throughout the data gathering and analysis process. The journal was color coded and kept constant so that the researchers could review the data without misjudging a prior written statement.

This journal contained three separate sections:

- a. a portion dedicated an audit trail that tracked the evidenced data analysis process, emerging themes, needs for alterations to the process, or additional content areas to probe during interviews
  - b. a portion designed for the researcher to capture general thoughts, feelings, content areas to think about, or questions to themselves that, although related to the research, may or may not have a direct representation or support by the current evidence
  - c. a portion devoted to capturing alternative theories supported by evidence that represents a different interpretation of themes or data. This separates data supported conclusions from private thoughts as the recursive process continued throughout the study.
2. During initial reading of transcription, and reviews I acknowledged personal thoughts, questions, or feelings about the data by denoting it as a note in the text

using both italicized and specifically colored text. This was a secondary that allowed me to capture thinking, but keep it separated from the data during a recursive process.

### **Timeline**

**June 2017 – January 2017** – Wrote and revised chapters 1,2, and 3;

**January 2018** – Successful defense of chapter 1, 2, and 3 of research proposal with committee;

**January 2018 – April 2018** – Submitted, revised, and gained preliminary approval (pending site) from Arcadia’s IRB;

**August 2018 - September 2018** – Successfully recruited and received permission to conduct the research in Suburban High School, pending IRB approval;

**October 2018** – Final IRB approval is granted with new study site as Suburban High School, final approved protocols were reviewed with Suburban High School principal, and final letter of approval was received from the school superintendent;

**November 2018** – Initial recruitment invitations are sent to parents of student pool;

**December 2018** – Permission granted from IRB to change protocol for recruitment, second recruitment invitations are sent to parents of the student pool, recruitment conversations are held with parents and students, consent and assent agreements begin to be collected;

**January 2019** – Third recruitment invitations are sent to parents of student pool, recruitment conversations are held with parents and students, consent and assent agreements begin to be collected;

**February 2019** – Study organization and logistical set-up is completed with counselors, initial study interviews are completed;

**March 2019** – Counselors begin to text students marking the beginning of the three-month study;

**March 2019 – April 2019** - Completed first recursive coding and data analysis, developed emerging themes and mid-study interview questions;

**April 2019 - May 2019** – Completed mid-study 2<sup>nd</sup> interviews with all seven participants and completed second recursive coding and data analysis, finalized themes and final interview questions;

**June 2019** – Completed final interviews with six of the seven participants and collected copies of student school-related data files;

**July 2019 - August 2019** - Completed coding, data analysis and meaning making;

**August 2019 - April 2020** - Completed last remaining final interview, wrote, edited, and completed Chapters 4 and 5;

**April 2020** - Revised chapter 1,2,3,4, and 5 and held the final dissertation defense with committee;

**May 2020** – Completion of required final dissertation defense revisions and submit the final copy to my dissertation chair;

#### **Chapter 4 - Findings**

This exploratory investigation examined the use of text-messaging as a tool to explore mentoring relationships between high school students and guidance counselors. The literature points to the potential of text messaging communication to bridge between students and school counselors when perusing mentoring relationships. This begs the question, does the use of mobile phone outreach (text messaging) impact the mentoring relationships between students and counselors? If so, in what manner? If not, for what reasons? Although many interpretations of terminology exist, herein a mentoring relationship occurs between a mentee (student) who demonstrates a willingness to consider or accept guidance from an adult (high school guidance counselor). In practicum, this clarification helps to frame and give context to the research, as well as offers insight to the theoretical lens of the researcher.



This research uses a qualitative research single instrumental case study approach. This choice embodies a case study by investigating a unique and specific circumstance, text messaging between school counselors and students while exploring a mentoring relationship, within the natural setting of a high school during the normal course of a school year (Stake, 2010; Creswell, 2007). The study was inclusive of two groups of participants- five high school students in grade 9-12 of similar academic profiles and two high school guidance counselors. Using qualitative techniques, data was collected from the participants over three months via: 21 separate semi-scripted interviews; five text message conversation transcripts, volunteered discipline, attendance, and academic records from the high school and one antidotal notation from an impromptu conversation taken by the researcher. Analysis revealed how participants used text messaging and impacts that its use had on their feelings about mentor-mentee relationships.

Data analysis consisted of on-going inductive coding after initial and midpoint interviews of all participants, as well as at the conclusion of all data collection. The on-going coding served as a means of developing areas for deeper questioning during successive interviews, supporting participant perspectives in final analysis, and triangulation with other data sources. Additionally, deductive analysis, specifically relating to mentoring relationship qualities, was applied to the data using an existing framework adapted from Black, Suarez, and Medina (2004) and Sabetteli, Anderson, and LaMotte (2005) in the hopes of identifying additional meaningful themes (Fereday & Muir-Cochrane, 2006). Text messages between the counselors and students were similarly coded into categories of mentoring qualities using the above framework, as well as for response time, number of texts, open vs. closed conversation prompts, and student vs. counselor initiation of a text conversation. Available attendance, discipline, and academic data from participants was clustered to determine any significant commonalities that would contribute to meaningful discussion from the data.

Several significant themes emerge that enable a rich discussion about text messaging between students and counselors as it relates to relationships and practical use in schools. The following themes provide additional, insight, context, and a more nuanced analysis of the perspectives and happenings as text messaging was introduced as a communication tool between students and counselors using the voice of participants: 1) overcoming barriers to seeking guidance services: 2) access to get what you need 3) the nature and perceptions of the physical act of texting with your school counselor 4) text as a guidance tool 5) characteristics of face-to-face communication.

In particular, possessing a novel, direct, and instant access to their guidance counselor was perceived as a comfort, even if never utilized. When seen as a series of inputs and outputs, the text exchanges between the students and counselors provided support for this general positive feeling and in and amongst the data revealed more specifics, like open-ended messages from counselors eliciting more student responses, counselor preferences towards certain conversations topics, and alternately negative emotions around an absence of expected communication. The emotional responses by participants lead to practical arguments about the ideal target audience for text messaging, implementation strategies, and the ethical hesitations expressed by counselors for using text messaging in a public school setting. Ultimately, text messaging between some students and counselors did lead to face-to-face conversations, addressing academic and social needs for students. These encounters, in addition to text message communications, were reported by some to have impacted their perceptions of having a mentoring relationship.

### **Emergent Themes**

#### **Overcoming Barriers to Seeking Guidance Services**

High school guidance counselors offer a unique blend of mental-health service, academic advising, and programmatic gatekeeping. In practice, guidance offices make efforts

to avail themselves to the greatest extent to ensure equal access for each student. The students and counselors made significant reference to perceived and real logistical and emotional barriers that may inhibit some students from accessing services.

Both counselors presented the guidance office and the plethora of accompanying services as being an openly welcoming and accessible place for students. Participants described the variety of services offered, such as mental health services, working with students with high anxiety, feeling over-whelmed, or struggling with a teacher or peer, difficulties with parents, general advice seeking, on-going mental health concerns, and general academic support. Examples of academic supports include; credit checks (yearly academic check-ins), guiding pathways to academic assistance, addressing teachers' grade concerns, course advisement, and gatekeeping, such as making schedule changes and enrollment into special programs.

Counselors described their personalities through the approach taken to their professional roles. Ms. Beth used the words and phrases "humanistic," "work together," "client-centered," "easy to talk to," "very caring attitude," laid back," "and patient." She cited examples of times when she has worked with students and their parents to better describe her way of "guiding," giving suggestions," and "working through issues" as well as proactive steps she took to engage with students outside of her role, such as chaperoning and attending dances. Mr. Kevin was limited in his self-description and summarized only using the phrase, "open to whatever the kids want." Preferring to describe the interactions between himself and students through stories, he drew a contrast between times when he is engaged in relationships with students and those when he is not. He finds himself most engaged when students are "seeking advice," "having some sort of trouble," "come down on their own," or when "the teachers have some complaints that grades are low." He "hits pretty strongly" [has a special affinity] for students who, "struggle with life, and have a personality," or those that play sports. Students

he has very little relationships with include, those who he sees infrequently or those lacking overt “personalities.” The words chosen to self-describe and the examples shared provide some insights into the counselors approach their professional roles.

### ***Barriers to Help-Seeking***

On face, counselors mutually dismissed the notion that students would have difficulties accessing guidance or that barriers existed; describing the steps they have taken to maintain one counselor always on call for emergencies, the extensive time that they spend in their offices, and the open-door policy they maintain with students. Mr. Kevin believes that students participating in the study itself had no advantage than other students when it came to accessing him. When asked if it were easy for students to access guidance services, Ms. Beth echoes that sentiment:

Yes they do. Absolutely. We always try to be very accessible to students, especially, like, we’re in the classroom sometimes. It’s easier now because everything’s online. They have access to send us messages. If they were at home and didn’t have the internet, then I don’t know how they would send us a message. It would have wait they came to school. (personal communication, April 17, 2019)

The frequency of students initiating contact by “coming down,” asking questions via email, efforts made to conduct guidance lessons in classrooms, and the ‘never-ending’ list of students who are waiting to be seen at the guidance office were referenced as evidence that the openness of the office was present and effective.

In further conversations, both counselors acknowledge circumstances that are created or perceptions they know exist amongst students that may complicate accessing help from guidance. For example, logistically, the guidance office is a busy place, making it difficult to always reach each student. Mr. Kevin similarly explains his sense of reality, with 360 students on his caseload, and how that effects his reach in two separate interviews:

We all have too many students on our caseload so we're pulled in too many directions. Yeah, that's definitely a barrier [or students] ... Some of the situations that I had come up during the year were very intense and required a lot of time with the students, those students directly. You add that in with monitoring tests and whatever else I had crossing my plate, I think that it came down to what can I get done and not being able to get 100% of everything done, which fire is the largest. (personal communication, April 16, 2019 and June 11, 2019)

Ms. Beth concurs that the large caseload and limited resources makes having time to see students challenging, noting the inability to address all of the mental health problems that students present. As a result of these time pressures, meetings with students have been scheduled and rescheduled, and those who attempt to stop by or "come down" to see their counselor cannot always be accommodated. In contrast to the counselors' perspective of minimal barriers, students highlighted logistical barriers and several emotional circumstances that would limit their ability or desire to get help from guidance. Some students speculated that guidance counselors probably were unaware of their reluctance to go to see them for help.

In keeping with the description of a busy office offered by the counselors, students offered their perspective. They oft cited and described guidance counselors as busy and unavailable when the student needed them; "Guidance counselors are busy and a lot of the time you have to schedule a meeting and then they cancel, then you have to reschedule it, and a lot of the time it's just simple little questions" (Bailey, personal communication, June 7, 2019). Some expressed a sense of despair in reference to "going down" and not being to reach the counselor as in, "I thought that they wouldn't talk to me because they were so busy" (Bailey, personal communication, June 7, 2019), and "I didn't feel as though I could go down and see anyone in guidance" (Bell, personal communication, April 18, 2019). Additionally, the feeling of walking to guidance to gain access was twice-referred to as a waste of time by separate

students. Almost singularly the comments directed at the business of the guidance office were in reference to making in person impromptu inquiries; this technique is complicated by the perceived complexities of students' own class schedules. A few students cited lunch or free periods as available times for them, but didn't coordinate with the availability of the counselor. Another described his preference for using free periods for homework only and would consider seeing a counselor during these times an interference. Bell explains how the combination of both guidance business and her schedule can cause her frustration:

I would have to spend time walking down to the office, to the guidance office, and wait until they could figure out if she was available or not and then go back to class and spend ten minutes out of the class just trying to figure out when right away I can go this time of day. (personal communication, April 18, 2019)

Only once during interviews, did a student make reference to using other forms of communication to access guidance, such as a telephone, emailing the counselors using their school-issued personal computers, or contacting through the school's Schoology learning management system. In this instance, in spite of having other access mechanisms, he still felt the need to walk to guidance to receive a counselor's email address prior to sending a message.

Despite the feeling that the guidance office is, at times, too busy to access, the students expressed sympathy and a great deal of understanding towards the counselors as people trying to perform a demanding job. To an extent, this was perceived by at least one student as an emotional barrier to help seeking. This barrier took the form of over-respecting the responsibilities and boundaries of the busy counselor. It can best be captured by Opie in the second interview when asked if he planned to reach out to his counselor, "I was thinking about doing that this week or next week, maybe the week after. I'll do it maybe sometimes, but not all the time, because I don't want to pester him too much" (April 16, 2019). This student described the same feeling towards his mentor outside of school as well, wishing not to bother

the person with his problems or questions. Opie never initiated a text message conversation nor contact in any other form with his counselor, and expressed that this similar feeling prevented him from reaching out to his other mentor as well.

Although to an extent individualized, some barriers centered around emotional rationales that kept students from seeking help. The fear or nervousness of the unknown is a common theme. These include reservations about using the school ID scanning system, a ‘certain way’ to go into guidance, speaking to secretaries, unknown topics of conversation, talking face-to-face with adults, or feeling watched as they wait in the office. Bailey summarizes this feeling best when reflecting in her final interview:

I wouldn't say anything was [physically] preventing me from accessing it [guidance], but I felt like all the scanning in, the scheduling, it made me nervous, and kind of put me off from it. So I think there was just kind of that nervous, scared kind of thing. And so it wasn't necessarily a physical barrier, but it just kind of put me off from it and I never really wanted to deal with it. (June 7, 2019)

Maggie described the feeling more directly by stating, “I don't like going down there,” but declined to explain further (personal communication, April 16, 2019). Social exposure concerns were also present. These were expressed as the desire not to be seen by peers going to guidance for help or with the assumption that they are ‘in trouble.’ This does not go unrecognized by adults, with Ms. Beth commenting on the unfair reputation of guidance amongst students as a place where students go who are ‘in trouble’ or have an issue. Bell observed that some students want to, “act tough” even though it is evident that they need help with issues, avoiding guidance altogether. Contrarily, one student merely self-described as, “not the type [of person] to go to others about a problem.”

### ***Potential to Mitigate Barriers***

Barriers, by nature, can be mitigated or removed. In general, participants felt that the addition of text-messaging as a tool to communicate with the guidance counselor would be a benefit in this way. Overwhelmingly, and continuously over the three months of data collection, students refer to logistical barriers being removed by using text messaging, in particular scheduling concerns. By substituting text messaging, regarded as more immediate than existing means, students perceived that they would be able to schedule with a counselor faster and more accurately. Maggie explains her rationale in choosing communication tools as follows:

I would be more comfortable emailing him instead of actually going down to the guidance office and asking for him. I just don't have any free time during the day, so I feel like emailing him would be such a more convenient thing. I think texting is more convenient, just because I have my phone on me all the time, so email, it probably wouldn't show up. (personal communication, April 16, 2019)

Other students supported the specific feeling of using text-messaging as a method to avoid using study halls, lunch, or class time to contact a counselor. They report actively spending time thinking about how and when to contact guidance—having the text messaging option is seen as removing this concern. Two students describe potential of texting to answer small questions that might otherwise require a time lag and avoid the “chaotic mess” of scheduling an appointment. “Maybe with me just texting him, he could tell me what I needed to know just right over the phone” (Ernesto, personal communication, August 6, 2019). In these ways, text messaging seemed to help mitigate logistical issues expressed about the guidance office.

This perception played out in actuality for scheduling face-to-face meetings. After a brief banter back and forth over a series of minutes, sharing when each is or is not available, participants were able to pin-point a mutually agreeable time. Students described this process



as, “easy,” “convenient,” “quick and go,” and “comfortable.” Opie describes his experience with scheduling a meeting:

Texting just feels a lot easier, instead of just walking through those doors, not knowing what they’re going to say about when you can meet....We would text about, like, dates when we planned on meeting, and it helped a lot because it made me set the calendar. Okay, we are going to meet at this day at this time. So it really did help. (Opie, personal communication, April 16, 2019)

According to text message transcripts taken, all of the student participants, at some point, scheduled a meeting with their counselors using this method. It was additionally used to send a message to cancel an appointment. Two students spoke of being on their way to their scheduled appointment and receiving a text explaining it had been canceled. “The one time that I went down, I was already walking down when I got a text from Ms. Beth that she couldn’t see me. By that time, I was already in and the guidance office so the woman’s [secretary] like, Ok you can go and talk to Ms. Hooper [other available counselor], so I did for like five minutes” (Bell, personal communication, April 18, 2019).

The perception that emotional help-seeking barriers were mitigated, were again, subject to the individual, but none-the-less prevalent across each student. Two students in particular felt that the texting helped address concerns about privacy; appointments via text could be made “secretly,” “privately,” and that information would remain “confidential.” Several students spoke of their personal preference to use text messaging rather than speaking face-to-face with adults. Others felt a sense of comfort when they approached the guidance office for an appointment, representing a change from prior feelings. They describe the feeling as a sense of freeing or relief, familiarity, and “comfort.” Bailey offers this reflection: “I may feel kind of silly for feeling that way [scared or fearful to contacting my counselor], because it is not a scary place. It’s [guidance] really not that intimidating. So I think it’s kind of like, I don’t

understand why I felt that way to begin with, but I just did” (personal communication, June 7, 2019).

### **Access to Get What You Need**

Modern technological advances have connected people around the world, making people feel only a letter, a phone call, a cell phone call, an email, a text away, and literally a moment away from each other. Both counselors concurred with the summation by Ms. Beth that, “The way things are in society, like, technology is so prevalent. It’s just an easier way for use to keep in contact with the student” (personal communication, March 13, 2019).

The sensation that the text-messaging tool brought guidance services to feel only a moment away was not lost on participants. With almost one voice, participants perceived text as increasing the speed and access to guidance services and their counselor. Students were satisfied with the response time of counselors and counselors the same. Mr. Kevin describes the counselor perspective:

When the students were also responding, I found it to be very quick. There were times that, near the end of the year, I needed to see Ernesto for a couple things. I sent him messages, and we were able, and he would respond very, very rapidly. We were able to meet up and talk about the things that we needed to. (personal communication, June 11, 2019)

Ms. Beth adds that the messaging was perceived as, “almost instantaneous as if I was doing it right on my phone” (personal communication, June 11, 2019). Students would concur with this characterization, using the descriptive words, “normal,” “pleased,” “pleasantly surprised,” “doesn’t take an hour,” and “pretty quick.” Bailey captures the communication as follows,

Just texting with my friends and everything, that’s faster that he did with me, so, I don’t see anything that could be super, super urgent that my counselor would have to respond in seconds. Yeah, it was pretty normal. (personal communication, April 17, 2019)

Text messages were found to have a response rate averaging 3.6 minutes between texts during the school day, with two outliers taking 60 min and over 24 hours. Of the eight times a meeting was scheduled or rescheduled, the time taken from start to completion was as follows, 4 min, 5 min, 5 min, 7 min, 22 min, 2 hours, 1 day, and 4 days.

Response time may have been aided by the attitude participants had towards checking mail. Students describe always knowing when they received a message from the vibration of the phone in their pockets, and then taking the first opportunity to check that message depending upon the social context. Ernesto explains: “At home I check my phone pretty often. In school I can feel it vibrate and I will check it when I can. But if I am with a friend, I can go hours without checking, depending who I am with” (personal communication, August 6, 2019). The amount of checking an individual does varied, but the frequency is described in their own words as, “a lot, 1-5 times per day,” “all the time,” “every second,” and “every other class in school.” Likewise, counselors appear to have a heightened awareness of checking student messages. Text messages received from students by counselors came into their school email box in the form of identifiable telephone numbers. “I would be actively checking when I opened my email to see if students have responded,” describes Mr. Kevin (personal communication, June 11, 2019). Both counselors additionally described their daily habits as spending a great deal of their day either at their desk or checking emails.

With having the addition of a text-message connection, students perceived counselors as “right there,” “a good connection,” “accessible,” “always available,” “at my fingertips,” and there “when I need it.” This perception held from the initial interviews through the final, regardless if students choose to or not to utilize the newfound access. Counselors describe access in one of two ways; 1) as a way to either stay connected and make appointments or 2) for students to reach out to them. Ms. Beth spoke about the emotional benefit of a check-in as

a tool to provide reassurance to a student about her presence and willingness to listen (personal communication, March 13, 2019).

Students spoke of access more specifically to address needs than did counselors. There was a comfort in having access in the case they needed to schedule an appointment, needed to talk, have an question answered about a program, needed to plan a follow-up meeting, when “there is something going on,” to get what I need, to make sure I am ok, to help with a problem, handle a bullying issue, or get a yes or no question answered. The range of responses are in line with the services generally described by counselors and offered through the guidance office.

Outreach by students, whether using text-messaging or via a face-to-face meeting fell into one of two categories: 1) access services to fulfill a specific need or 2) not having initiated any contact to access services. Two students initiated contact with their partner counselor, one via text and the other by physically going to the guidance office for help. Each had specific needs such as emotional support with a school issues, a death in the family, anxiety about family issues, college applications, and specialized program enrollment. Each time the need became pressing enough, the student would make a contact. In both cases the text and face-to-face contact occurred at fairly regular intervals of about one per week, until dissipating towards the end of the school year.

Those who choose not to initiate a contact were not derelict of thought about what they would discuss or topics that they had desire to learn more about. These topics mostly centered around school-related needs such as, credits, scheduling for the next year, and courses to take. Only one student briefly mentioned the need to speak about some “personal stuff” that he had preference to do in person. Despite speaking of potential topics, in some cases, the desire to meet with the counselor, or have additional contact after a meeting, these three students choose not to initiate access to guidance services. Probing this further resulted in a consistent response

summarized by the phrase- I did not have the need. When asked about their ability to have direct access to his counselors, Ernesto explains, “Yeah I guess I do. I haven’t had a real (pause), too much of a reason to text him, but I like having the option to” (personal communication, August 6, 2019). Maggie, more powerfully described her choice to reach out or not reach out to guidance merely by saying, “I can” (personal communication, April 16, 2019). The choice to not have contacted their guidance counselors by either text messaging or any other form of communication is distinctive.

Participants went a step further and offered their assessment of a hypothetical situation where increasing access to guidance counselors through text messaging expanded to other students beyond the study. The reviews are mixed and individualized, with some students believing in universal access and others promoting smaller, more targeted groups. A rationale for having universal access includes, “avoiding students feeling left out,” “having friends show interest in the study as it progressed,” and “the view that this would be good for the majority of people.” Arguments for a more targeted population include, increased appreciation of the access, risk of losing its novel feel, and drop in response time. Bailey best captures the struggle of students as they made attempts to wrestle with the idea of exclusive or expansive access to counselors in her second interview:

I can see pros and cons of both. I think that the students in it, if it was just a small group, I think the students in it would appreciate it more, but at the same time I know I appreciated being in it and having it being accessible to me. I know if I had it, and I've talked to other kids who, a couple kids, who didn't have it. I wouldn't say I've told them tons about it, but like it would pop up on my phone, they'd ask about it. I just kind of said. They thought it was kind of cool, so I know they, not that they feel left out, but they just thought it was a cool concept, so I can see both being good and bad.  
(April 17, 2019)

Both Ernesto and Ms. Beth concur around students being able to volunteer or opt out as a trial program, while others believe the audience should be targeted to students who are academically or socially struggling.

The perception of a direct line of access to a guidance counselor presents as a significant theme of the data. The speed that text messages were exchanged and the ability to personalize the communication to accomplish goals is evident in the data and words of participants. Although not all students engaged in texting, the sense of empowerment and security in the ability to do so at their own expression is pervasive.

### **The Nature and Perceptions of the Physical Act of Texting with Your School Counselor**

Text messaging between counselors and students is more than a theoretical concept to be applied in schools, but also the manipulation of a computer-mediated communication with inputs and outputs. The sub-sections below demarcate the general themes, statistics, and resultant analysis that emerged from data when looking at the inputs and outputs on either side of the mediated communication. Data associated with this section can be referenced in Table 3 and Table 4.

#### ***Frequency***

The total frequency of text messaging over the three months occurred to varying degrees, and was examined both in totality and with respect to individuals. Tables 3 and 4 show the overall data distribution regarding text frequency in the categories that were examined relative to the data. The beginning of the study marked a steady texting initiation by counselors. During interviews students perceived the frequency of texts fairly accurately, noting that they were arriving at a rate of about one per week. The data demonstrated a decline in text frequency over the middle third of with a brief increase during the final week. Counselors cited the high caseload, state-wide testing, the wrapping up of the school year and unforeseen circumstances that caused this phenomenon. In general, students were

understanding of the text frequency decrease, also citing the end of school and a busy time of year. Opie explains:

It dropped sort of near the end of the year because there wasn't much really to talk about near the end and because it's at the end of the year. It's one of the easiest times to get through. When we were in the middle of the study like back in April? There was a lot of stuff going on. It was so much stuff: phone calls to the guidance counselor, to the parents, if your student is going to graduate or not, blah,blah,blah. It's very busy. They call down a lot of people for grades and classes and all that. (personal communication, June 6, 2019)

Maggie was less tolerant, citing lack of continued contact, very much, as a negative. "it was uncomfortable not getting a lot of texts, because then I would be more comfortable texting back" (personal communication, June 6, 2019).

### ***Topics of Text Messages***

The text messages that were exchanged between students and counselor can be broken down into general topical categories and categories using the Initial Mentoring Quality Coding Index. The number of text messages sent by counselors in each category can be found in Table 3 and 4 below.

### ***Feelings and Circumstances When Receiving a Text Message***

Receiving a text message directly from the school guidance counselor was a new experience for all participants. Students welcomed the messages, perceived them as personal, and with positivity. Students used some of the following words to describe themselves when receiving a text: "like I was on her mind," "feeling glad," "confident he was telling me something important," and as if the counselor had "put thought behind it." Bell described receiving a text from a counselor and family member as generating the same feeling,

explaining, “I can trust my family members, and I can trust her” (personal communication, June 5, 2019).

**Table 3**

*Number of Text Messages falling into the Initial Mentoring Quality Coding Matrix categories as adapted from Black, Suarez, & Medina, 2004.*

	Maggie	Ernesto	Opie	Bailey	Mr. Kevin (Counselor)	Bell	Ms. Beth (Counselor)
Befriending	1	1	2	6	10	19	19
Modeling and Coaching	3	3	3	1	10	0	0
Professional Counseling	5	3	3	7	18	4	4
Encouragement and Sponsorship	1	1	1	4	7	0	0

**Table 4**

*Topic Categories of Messages Sent by Counselors to Students in Text Messages*

	Maggie	Ernesto	Opie	Bailey	Mr. Kevin (Counselor)	Bell	Ms. Beth (Counselor)
Personal Outreach to Student	0	0	1	1	2	6	6
Scheduling a Face-to-Face Meeting	2	1	1	4	8	3	3
General Information	3	3	3	0	9	0	0
General Positive Communication	1	1	1	1	4	0	0
Student Initiated Topic	0	0	0	5	0	0	0

Although students reported receiving texts in a more personal manner, guidance counselors reported less of an emotional response. Although enjoying seeing someone respond to them, both perceived texts in the same way they would email or any other source of communication from students such as phone call, stop-in, or message through Schoology. Counselors received their text messages through their email inboxes and students through their mobile devices.

Some confusion amongst the students was reported regarding two technical circumstances of the text messaging process. The first issue occurred when students received texts from their counselors. The phone numbers associated with the incoming text messages from the counselors were changing with each text conversation. This initially caused the students some confusion, to question the identity of the sender, and the authenticity of the



message. Ernesto reported wondering if the counselor would actually receive the messages, and which number to use if he wished to initiate a text (personal communication, April 16, 2019). The researcher made apologies and clarified this with the students when the concern first was raised during the second interview. The second difficulty was a result of a second unforeseen circumstance. The students reported receiving extremely long text messages (approximately 40-60 lines long) that warned them about confidentiality of the communication. This occurred as a result of the automatic signature function that was associated with a guidance counselor's outgoing email messages. The counselor's name, email, phone number, title, and warning message were unknowingly attached to all of the initial messages from the counselor until the third week of the study, when the researcher noticed the issue upon reviewing messages and worked a solution with the counselor. Students explained that he would place a warning on his text messages that made them very long. Although one student was unsure if she was allowed to delete the message initially, this did not appear to distract from understanding the message or it being perceived as a reflection on the counselor. Students reported knowing where the actual message stopped and that it was error of some sort; out of character from a normal text.

The final issue occurred when a student provided an inaccurate mobile phone number to the researcher. As a result, the first three texts from the counselor to the student were received by an adult member of the public. After the third errand text during week three, the community member used the warning information provided in the text, contacted the counselor, and explained the situation. The researcher was contacted, who clarified the number with the student and corrected the error. After this the counselor sent a welcome text the student. The information contained in these text messages were not personalized generic texts and were coded into the categories of general information and general positive communication. The student did not report any negative feelings or perceptions stemming from this happening.

Participants were repeatedly questioned in interviews about challenges, difficulties, and things that could be improved with the study. Aside from those above-mentioned circumstances, the participants expressed few negative critiques. Ms Beth explains, “No I haven’t had any issues or negative thoughts- nothing to report. I have honestly had no issues or challenges,” (personal communication, June 11, 2019). When directly asked about difficulties and challenges, on nine occasions, the students replied with answers of, “no.” “nothing,” or “not really.” Specific challenges that were raised are above mentioned, or outlined as part of other sections of the data reporting.

### ***Open-Ended Text Messages and General Responses for Students***

Counselors used different strategies during the text messages to students, including varying the topic of outreach, however both the interview and text data speaks to a theme around open-ended texts sent by counselors. From data analysis, text messages fell into two distinct categories open-ended messages (those that beg a response) and closed-ended texts (those which are declarative) (Guillot-Wright et al, 2018). Examples of open-ended questions students were apt to respond to are: “Do you have any available time this week that we could meet to review your credits?” (Mr. Kevin Text Message, March 25, 2019) or “My day is going well. Thanks for asking. Do you have any big plans for the weekend?” (Ms. Beth Text Message, March 21,2019). Across the spectrum of students, the frequency of response to a text from the counselor was 17 for 17, or 100% when the counselors used open-ended questions or statements during their messages. The majority, 10 of 17, or 59%, of the open-ended messages were used while initiating or scheduling an appointment for a face-to-face meeting in the guidance office. The statistics also varied by counselor.

Closed-ended texts were of a different nature, such as “Just a general reminder that we have peer tutors available for assistance with test preparation or general academic support if you are interested” (Mr. Kevin Text Message, March 21, 2019) or “Sorry I missed your visit.

I am available for the rest of the afternoon if you need to talk.” (Ms. Beth Text Message, March 28, 2019). The overall rate response from students resulting from this type was 5 of 27, or 18.5%, but when broken down to the individual, Ms. Beth held a rate of 5 of 6 (or 83%) and Mr. Kevin 0 of 26, or 0%. Mr. Kevin used open-ended questions for scheduling a face-to-face meeting 8 of 9, or 89% of his open-ended text messages and Ms. Beth at 2 of 8, or 25%.

During interviews, participants took the opportunity to offer a deeper description around these statistics. Ms. Beth spoke about purposefully using both open and closed ended questions in her text communication; her closed ended texts were responded to on 5 of 6, or 83% of the time. She would “send messages here and there” to provide a check-in with the students and “see how she [Bell] was doing” (personal communication, April 17, 2019). Mr. Kevin’s description differed, noting the delivering information to students was important and that he tried to send information that would be helpful to students in lieu of not knowing the students personally.

I’ve been trying to send out pieces of information that may be helpful like we have a tutor on the side that they could utilize just saying like we have one market grade left let’s, you know let’s, let’s work hard to do well some, some pieces of advice or information they could have so I feel like I have some sort of purpose in reaching out. I mean, I try to get a theme going and send out similar messages to students. Sometimes I will do a copy and paste so each [of the] students are getting kind of the same message. Bailey has been a bit different because if she contacts me about something we usually get into a different conversation, then I don’t feel like I have to search for something to send. (personal communication, April 16, 2019)

When asked, students explained their lack of response and response to texts through the nature of the texts themselves. Bailey interpreted closed-ended messages to mean that, “He’s waiting for me to introduce the topics, [and] I’m the one that would need [any] help... I

don't need a ton of help [at this time]" (personal communication, April 17, 2019). Speaking about this in both the second and final interview, Ernesto captured the views of others, who took a more practical approach when receiving closed-ended texts:

I'd say it was formal. We have this thing, Schoology, [that] they post what is happening, within school and clubs, and stuff like that. It was almost exactly like that actually. I didn't feel like there was room to respond. [He] was kind of letting me know things. It was more of a one-sided thing. It was [as though] he said something about the school that is going on and it wasn't really a conversation kind of thing. (personal communication, August 6, 2019)

Not receiving response in return was particularly emotive for Maggie and Mr. Kevin. Maggie expressed displeasure with the lack of more direct and face-to-face contact from her counselor. After scheduling a meeting via text messaging, her meeting was, unfortunately canceled for an emergency situation, also via text. With this, Maggie did not express any issue, however the absence of follow-up texts, or any other attempt to reschedule was interpreted negatively.

I'm kind of frustrated we haven't met in person. Because most of the people I have known have talked to their guidance counselor. I haven't. He wanted to meet with me and then he never did after. I was a little confused. I kind of get when you're busy sometimes you can't [text or reschedule and appointment], but then after that I just got done. (Maggie, personal communication, June 6, 2019)

Similarly, Mr. Kevin, on several occasions expressed feelings about not receiving responses from several students after sending, what he thought were engaging messages. The data shows that most messages from this counselor did not generate a response during the first month. While not particularly strong, he described his perspective on several occasions; some words he used in the description were, "mildly uncomfortable," "weird- you expect some type

of response,” “discouraging might be strong, but definitely surprising.” However, as a counselor he remained realistic that one cannot always expect a response and that some students wish not to respond or reach out, of which he is understanding. He explains: “There are some students that I meet with, for the lack of better words, don't seem to have much personality yet. Other students that seem very open to conversation and they bring things up on their own” (personal communication, April 16, 2019).

Text messaging between students and counselors is a novel concept introduced to the participating school. The use of the texting by students was mixed, resulting in students having a spectrum of expressed feelings. Generally, participants received this communication positively and showed the ability to work through technical imperfections with little concern. Preferences for topics of communication, especially demonstrated by counselors, and prompts of conversations emerged from the data, as well as some words of caution that negative feelings can occur when care is not taken to ensure that communication expectations from both parties are fully met.

### **Text as a Guidance Tool**

Counselors used text messaging, not as an additional stand-alone activity they must accomplish, but rather as an integrated part of accomplishing routine outreaches. Equally, both counselors and students openly shared their perceptions and opinions about how text messaging fits into the sphere of guidance services. Taken antidotally the entirety of the data would suggest numerous thoughts for consideration, but themes from the participants solidified in three broad categories: 1) ethical considerations about the perceived casual nature of texting with students; 2) ideas and thinking about the usefulness of text messaging as a guidance tool; and 3) a specific recommendation about the target audience for text messaging. This section offers a consolidation of the participants' voices relating to these topics.

Perspectives about how text messaging could or could not be used as a part of a guidance counselor's toolbox is critical information. When asked directly, neither counselor reported text messaging to have been an interference to their everyday responsibilities. Messages routed through to email were a benefit because it is the central location from where both counselors operate their daily course of work. Ms. Beth and Mr. Kevin both made statements affirming that text messaging was a benefit and contributed to doing their job, although little supporting evidence exists in the data that would substantiate these conclusions as being more than personal perceptions. Mr. Kevin specifically cited the speed and ease for scheduling meetings with students was a benefit as long as specific parameters; the response rates collected in this data provide support for this perspective. Additionally, he made a point to hypothesize a situation where expectations were applied by school administrators, such as daily contact or specific time expectations for sending messages, and suggested that this may reverse or nullify any advantages gained from the speed of text messaging. Participants did not report any general difficulties or negative feelings towards using text messaging as part of their daily job responsibilities that would prevent it from being used in the future.

The counselors expressed a consistent description of text messaging as a tool; it is another form of communication (one of many). With each student at the high school already having one-to-one school-issued laptops, Mr. Kevin felt that text messaging would not be a significant addition to what already exists.

It really changes things where we're one-on-one with computers. I think that if schools are not, I think that text messaging would be a huge leap for schools. My access to students really changed when the students started carrying around laptops, using them all the time. If they didn't have those, I think the text messaging would be the way to go, for sure. (Mr. Kevin, personal communication, June 11, 2019)

Students mentioned the many communication platforms used in the school as each teacher made use of what benefits their classroom. Bailey felt that the plethora of tools (Schoology, Remindme, email, and social media) can sometimes make it difficult to keep track of which is preferred by each teacher. Several of the students explained that while many of those platforms, such as Schoology and email exists, they do not regularly check these tools for messages or information at the same rate as their phones. Ernesto summed his feelings, “I am 100 percent more likely to see something via text [than through email]” (personal communication, April 16, 2019).

### ***Ethical ‘Line’***

From first contact conversations with counselor participants, the topic of maintaining an ethical ‘line’ as professionals was discussed. The ‘line’ was referred in two distinct aspects: personal privacy and negative public perception. During the first interview, the counselors took the opportunity to splice the particular concerns they have about mobile phone numbers. Counselors believed that their personal phone numbers should not be given to students nor should the personal number of students be in their personal phone. That, they felt, was a step too far beyond their professional relationships with a student. This thinking was not only a reflection of how they felt about being participants, but also a method for keeping work and home life from blending. When asked about privacy, students also supported this divide, some citing relations who were teachers with a similar perspective, and the use of social media as a tool in schools. Mr. Kevin was firm on this concern during his second interview, explaining:

Yeah, I think that continues to be true. I think that I like to keep a very distinct difference between [who I am outside of school] and Mr. Kevin [the school counselor]. I've never been a big fan of people calling me Mr. [Kevin] but I can say I guess my work persona is still going to be Mr. Kevin. That's fine, but don't confuse that with [who I am outside of school,] who goes home and has his own life. When I start utilizing my

[personal] things, such as my phone and my phone number to contact people then I just crossed that line of no longer being Mr. Kevin, I'm being [who I am outside of school] and I think there's a distinct difference when you look at a professional level of relationship. I'm a counselor and I have students coming to me. I'm not friends with these people, I don't have any other sort of relationship and I never want to portray that I do. There's a lot of accusations [but] not with me specifically. (April 16, 2019)

The outward perception of keeping strict professional identity as a key point for Mr. Kevin, citing stories on the news that have referenced inappropriate acts between teacher and students. He expressed concerns about “lingering questions”, “accusations”, a “grey area,” or a “stigma” that may arise if people wonder why a professional counselor is texting a student through their own personal device. While generally having some concerns, Mr. Beth expressed less worry harboring the belief that while everyone needs to know that the relationship is professional, inappropriate occurrences will be held up by the ethics of the profession.

Both do agree that the design of the study, where communication between students and themselves is funneled through the school email server, alleviated many of their reservations. During conversations, email, Schoology, face-to-face meetings, and Remindme (messaging app used by coaches) were also referenced as more controlled alternatives that were already in place to communicate with students. Students who have use the Remindme app with coaches, cite its ability to reach a group, but less ability to be personalized. Both counselors reported that their belief in maintaining a professional line of communication remained the same over time. While privacy concerns remained, somewhat alleviated were the original concerns that the text messages would take a turn towards inappropriateness.

### ***Recommendation for Prior Meeting***



During the third week, I received a contact from Mr. Kevin, expressing discomfort with texting students without knowing them very well. He explained the struggle to generate topical conversations without knowing the students.

I mean I think it is a weird position with the current relationship that I have with all of my students. If they were playing sports and involved with activities, I might start conversations based upon that, but I don't know, I don't have knowledge of these guys doing stuff, so, I guess I struggle to take a different angle other than some, light-hearted, 'I hope things are going well for you', 'work hard,' or whatever in combination with 'here's some ways that you can be successful,' without trying to make it look like, 'hey you're a bad student I'm just going to give you this information.' (personal communication, April 16, 2019)

Soon after this conversation he made outreach to several students to schedule face-to-face meetings. This conversation prompted the researcher to investigate if other participants also held similar, unexpressed feelings about the absence of an initial personal contact before beginning text communication. The response from the participants was overwhelmingly in agreement with Mr. Kevin's perspective. Although some students expressed uncertainty whether meeting with a counselor prior would change their actual relationship, the idea of meeting face-to-face was considered to be "definitely beneficial." Both students and counselors spoke about the sense that a "head's up," was needed to explain, "this is what we are doing," explain the intentions of counselors "before jumping into a text conversation." Ernesto perceives that he may have paid more attention to the text messages if he had a prior connection to the person sending them. Four of the five participants reported not knowing their counselor well or not at all prior. Mr. Kevin explains that, in line with the student selection criteria, he has specifically chosen students with whom he did not know well. Bell, who did have a relationship prior explains a relative advantage to this. "I feel like if I didn't [have a

relationship prior], I wouldn't really trust her as much as I told her. I would think of her as a regular guidance counselor, not really open up. But I did have a talk with her before and felt like I could trust her" (personal communication, April 18, 2019).

Practically speaking, the description and evaluation of using text messaging in the context of schools is an important perspective to hear directly from participants. Contributing to the answers to the research questions, this theme begins to take apart the manner that text messaging was used and provide commentary. Developing an accurate portrayal of the process of this communication form is the foundation for future generation experiments.

### **Communication and Impact on Relationships**

Mentoring relationships may or may not be impacted by introducing text messaging as a communication tool. A mentoring relationship is defined here as occurring between a student, who demonstrates a willingness to consider or accept guidance, and a high school guidance counselor, who based upon personal experiences and knowledge, considers the individuality of the mentee (student), responds to the student's emotional needs, provides the student moral guidance, and models and coaches positive behaviors and thoughts. The data of face-to-face occurrences as described by participants was coded to gain insights into the relationships between students and counselors by placing the data into categories of youth and adult mentoring outcomes as Adapted from Sabatelli, Anderson, and LaMotte (2005). In addition, interview data from participants that makes reference to mentorship was compiled to describe their relationships and any changes that they witnessed. In this section three main relationship categories are explored in further detail: characteristics of face-to-face communications, perceptions of mentoring relationships, impact of text messaging on relationship factors. Table 5 below represents a portion of the data in this section.

### **Table 5**

*Number of time participants spoke of face-to-face occurrences as applied to outcomes of adult/youth relationships (Adapted from Sabatelli, Anderson, & LaMotte, 2005)*

	Maggie	Ernesto	Opie	Bailey	Mr. Kevin (Counselor)	Bell	Ms. Beth (Counselor)
Youth/ Personal Adjustment	0	0	0	1	0	1	3
Youth Social Competencies	0	0	1	1	1	4	3
Relationship with Family	0	0	1	0	1	2	5
Positive Youth/Adult Relationships	0	0	0	0	0	1	1
Positive Youth/ School / Academics	0	2	3	4	2	0	0
Positive Youth/Peer Relationship	0	0	0	0	0	0	1
Positive Youth/Community Connections	0	0	0	0	0	0	0
Amount of face-to-face formal meetings with counselor?	None – meeting was canceled but not rescheduled	1 – Took place on last week of the study	1- During week 4 of the study. Student and counselor see each other in hall daily at lunch	3 - During Week 4,7, and 12.	-	Reportedly on frequent if not bi-weekly basis at times. Initiated “drop-in” and, more formal meetings	-
View partner as Mentor/ are you a mentor	No	No	Yes	Yes- Not before, but I can see that now	No- I wouldn't go that far	Yes- Always Have	Yes
Have you seen a change in your relationship with partner?	Yes- It changed for the worse	No, “there is not that much of one there. I would have thought there would’ve been, but no”.	Yes and No. Beginning – He expresses comfortability change, but not mentoring view change	Yes, a better relationship	Yes, with Bailey and Ernesto	No, I don't think so	Yes, we did get a little closer. She has another trusting adult in the school
Did texting have impact on relationship?	No - the lack of reaching out and meeting Face-to-face	No	Cannot find any evidence where he specifically addresses this point, but the surrounding evidence supports no	Yes- If not for texting, none of this would've happened	Yes- With Bailey, but not the other students	No	Yes, text messaging did help

### *Characteristics of Face-to-Face Communications*

The majority of conversations between Mr. Kevin and his paired students (Maggie, Ernesto, Opie, and Bailey) were focused on assistance with academics, excluding Maggie who did not meet with him. Mr. Kevin’s recollections accurately mirrors the students, with conversations touching on course selection and college representatives. Specifically, each of the three students who were able to meet report at least one of their conversations to be a ‘credit check’. A ‘credit check’ is was generally described as a meeting to review current academic

progress, grades, credits towards graduation, test scores, course to be taken in the future, and any other future academic considerations. During their face-to face conversations, students described the counselor providing help with making positive decisions regarding course choices, and scheduling. Although Maggie did not have neither informal, nor formal conversations with her counselor, she heard positive comments about Mr. Kevin's personality and desired to speak about credits and coursework, in line with overheard topics of her peers. Opie briefly mentioned that he was assisted with becoming more comfortable with his family, but did not elaborate further. He added his belief that Mr. Kevin, "Helps you mentally prepare for certain things and how it's the way it's going to be" (personal communication, June 6, 2019), making reference to Mr. Kevin's more academic support focus. Unlike others, Opie engaged in, almost daily, casual contact with Mr. Kevin beginning five months prior to and throughout the study because they shared a common lunch schedule and passed each other in the halls. Opie described these casual encounters turning into some impromptu conversations about grades, plans, and a general, 'How are you?' check-in. Bailey's formal face-to-face conversations were more numerous than others, but were centralized around her decision to take dual enrollment college coursework the following year. In her words she described the help she received as positive and influential:

When it came to college applications and where I wanted to go with my life, he kind of added onto it and he was trying to make me think of steps even further than that, and he just kind of modeled where I should, where my mind should be at for the next four years, and where my like where my thought process should be going. Because with college applications and stuff he always made sure that I was thinking about what my parents were, my parents were at too with all this stuff, because I also saw him at the college fair, and he was definitely making sure I [was] one step ahead, making sure my thought process is there, and he's made sure like my parents are involved, and my

parents definitely know what my intentions of where I'm going. (Bailey, personal communication, June 7, 2019)

In addition to academics, and as the two met more frequently, Bailey reported an increase in casual topics, such as sports and interests, expressing surprise that her counselor was equally open with sharing more about himself personally than she expected.

Ms. Beth focused on family issues and social competencies that were a consistent part of her partner student, Bell's, life. The impetus for the frequent face-to-face meetings between the two were caused by two home issues and one school-related. Bell originally approached her counselor with heightened concerns about the health of a grandparent resulting in his/her passing, a topic that she was having difficulty digesting. The second home issue stemmed from the current family dynamic, where Bell must share time between parents, as well as balance a changing dynamic with her older sibling. Ms. Beth describes the need for their meetings:

She has some anxiety and depression. Her [sibling] is older than her. She confides in me about those kinds of things, that her [sibling] and her other relationship has changed. She really had no problem opening up to me about things. I'm rambling, but I feel that she just wants someone to listen to and kind of just hear her side. Because I feel like, especially when she's with [one parent], she gets kind of uneasy, because she says [they don't] want to listen to her concerns. You can tell which is a weekend with [them], she likes to come in and kind of get it off her chest. (personal communication, April 17, 2019)

The final incident occurred during school where there was a disagreement between herself and a teacher that resulted in disciplinary action. Bell describes her feelings and the reason for wishing to see her counselor:

Well, just recently, I got in trouble with the teacher and I got very upset about it, so I texted [Ms. Beth] to ask her if I could come down, because at that time, I'd just found

out about my grandfather being in the hospital, so I kinda had a lot of emotions built up and I needed to talk to her, so I texted her and asked her a time like when I could come down. (personal communication, April 18, 2019)

Both parties described the face-to-face meetings as having been on-going, having positive results, and continuing to build upon their trusting relationship. Ms. Beth was described as a person who understands and is a good listener during the meetings, who has helped with Bell's decision-making while moving through challenging situations.

Evidence that face-to-face meetings occurring between students and counselors did result from text messaging lean affirmative. Mr. Beth, Bailey and Mr. Kevin, when asked this question directly during the interview process, made the connection between the two clear (See Table 5). Bell asserted that texting did not influence her desire to seek out face-to-face meetings with her counselor, however her firm stance slightly conflicted with numerous references made to text messaging when speaking about her face-to-face interactions with the counselor. Taking the larger body of evidence into consideration, text messaging was a way to trigger face-to-face meetings for some students, resulting in mentoring meetings around family dynamics, school program, college selection, and child-parent communication.

### ***Perceptions of Counselors as Mentors***

It is significant to answering the research questions to know if students expressed any changes in their view of their partner counselor as a mentor. Student participants were probed about their characterization of their partner counselor as a mentor. This section compares participants' prior perceptions of the presence of a mentorship relationship between the students and counselors and as described in the final interviews. Some students describe their relationship at the end to be a mentoring relationship or refer to each other as mentors. It cannot be assumed that references participants make to mentors or mentorship is always directly aligned to the definition as here-defined; the language used by participants is open to their own

personal interpretation, experiences, feelings, and definition. Discussions and conclusions made do not make the assumptions that the use of the term 'mentor' by participants is a one-to-one match for the accepted definition. A condensed description of participants' responses is contained in Table 5, but elaborated upon in the below dialogue.

As a pair, both Ms. Beth and Bell were unique, already having formed a relationship in the traditional counselor and student role while addressing concerns that developed from outside of school. When asked about relationships within the guidance office prior, Bell picked out Ms. Beth, despite her not having been her assigned school counselor.

I talk to her a lot more and stuff and she's always been listening and helping out [with] problem[s]. My guidance counselor wasn't there when I needed to talk so they sent me to another. [Ms. Beth is] very nice and caring when I was talking to her. I can definitely see her mother side come out for all the children that come in. (personal communication, March 4, 2019)

After their initial counseling session, the two had little contact aside from incidentally in the hallway, at which Ms. Beth expressed some surprise that she was remembered by Bell after only one prior face-to-face contact. Although it appeared that Ms. Beth's initial assistance left an impression on Bell, neither described the other as a mentor at this time, although Ms. Beth did believe that she acted as a mentor to students in general.

When directly asked in the final interview, both parties believed their relationship become a mentoring one, although Bell did not believe this was a change from her initial position.

I'm able to talk to her like a trusting adult, and talk to her about things that I wouldn't tell other adults, and have a normal conversation, that we could both release our problems with. I've always viewed her as a mentor, but the study has definitely showed me that she is. (Bell, personal communication, June 5, 2019)

The theme of ‘a trusting adult’ was interwoven in the conversations that both parties shared throughout the interviews culminating with Ms. Beth satisfaction with becoming another ‘trusting adult’ for this student in the building.

The four students who were paired with Mr. Kevin had differing perceptions of their relationships than Ms. Beth and Bell. During the initial interviews, none of the students had described any significant prior contact with their counselor. Mr. Kevin acknowledged knowing very little about the students prior, and purposefully selected them for the participant pool because he wished to have a better relationship. This is captured in his initial interview:

The only one [student] that I could recognize by picture was Opie. I don't know him well. I see him in the hallway and since I know he is on my caseload, I usually say, Hi, how are you? Small talk like that, he's responsive, he's a nice kid. Baily, I know the name but couldn't pick her out by her picture. The other two, I couldn't tell you who they are if they walked into my office. (personal communication, March 6, 2019)

The students spoke of one or two formal face-to-face contacts with Mr. Kevin prior when they were “called down” for “credit checks” or having to seek out a counselor to address a scheduling concern. Although not having any concerns or reservations going to Mr. Kevin, her assigned counselor, she has a preference for seeking another whom she had built a relationship with while on a school sponsored trip abroad. Opie spoke more specifically than the others about his relationship with Mr. Kevin.

We don't meet that often, but I think we're close for a counselor student in that area. Um, the most important thing I think to be with a counselor is to be respectful. And that's what I try to do with him. And he's very respectful when you show that back to him. He's even respectful when you don't, but he's very polite. He's a jokester. (personal communication, Feb 28, 2019)



Maggie had no contact with her counselor and no prior relationship. None of the four students, nor Mr. Kevin, applied the word mentor to describe their relationships during initial interviews.

The relationships between the participants were described as having changed, however, each relationship made movement individually. Bailey described her relationship to having made positive progress since the beginning, describing Mr. Kevin as a mentor to her.

Before this I probably would've said no, but now probably, yeah. He's made things a lot easier. He called, he'd made a phone call to a college the other day for me. So it was definitely someone I could definitely go to for college applications, letter of recommendations kind of things. Before this I probably would have gone to past teachers or other people in my life, but through all of this he's offered to do letters of recommendation, and that kind of stuff for me. So [he's] definitely someone I would go to for that kind of stuff. (Bailey, personal communication, June 7, 2019)

As well, Opie felt that Mr. Kevin was a mentor to him, explaining: "I try to keep it as though it's a relationship of a student and a counselor instead of like friends. That's sort of how I always felt since the beginning. I am just that type of person. Yes, I see him as a mentor" (personal communication, June 6, 2019).

Neither Maggie nor Ernesto described their relationship as being a mentoring one. With the absence of face-to-face contact, Maggie did not see any room for the relationship to have moved forward, in fact she expressed her view that, if anything, the relationship had soured. Ernesto left open the door for the relationship to progress, "I see that he could be [a mentor], but I don't see him as a mentor, no" (personal communication, August 6, 2019). Mr. Kevin's presented a different interpretation of the relationships with students at the conclusion; willing to acknowledge some changes in the relationships, but not using the term mentor. "A mentor? I don't know if I would go that far with it. I think that Bailey and Ernesto, as they get older and

our topics change, I think that I was able to provide them with more information, but I don't know if I would I was quite a mentor” (personal communication, June 11, 2019).

### ***Relationship Changes and Impact of Text Messaging***

**Relationship Changes.** Setting aside any specific changes that the students have directly associated with mentoring relationship mentioned in above sections, students and counselors did experience other changes over the course of the three-months. Mrs. Beth points to a most trusting relationship, feeling that her and Bell became closer causing her to seek more advice. Mr. Kevin reports forming a better relationship with Baily and Ernesto, describing Bailey’s progression as slower but then ‘took off.’ There are both commonalities and differences between those changes. A group of three students, Opie, Bailey, and Bell describe a closer connection and increase in comfort, and friendliness that took place. This sometimes manifested in describing impromptu hallways encounters as, ‘more friendly,’ occurring at greater frequency, and at times including a hand wave that did not previously occur. At other times it is described thought the confidence in speaking more openly with their counselors and seeking advice, an increase in trust, as well as with more diverse topics included in conversation. Conversely, Ernesto and Maggie describe little positive change, if any, and a change for the worse respectively with both attributing that to the overall lack of perceived personal contact.

There's not much of a relationship. It's just more of a school, like if I have school issues like I need to change a schedule or something. It really, I don't know. There's not much of a relationship there. I felt like that there would have been [a change], but it didn't seem like there was. I don't know. It just seemed normal. It didn't seem like anything changed. (Ernesto, personal communication, August 6, 2019)

**Change Attributions.** The participants attributed relationship changes differently, prompting Opie’s accurate summation, “It’s all about your actions toward text messaging and

how you feel towards it, and how you feel towards your guidance counselor” (personal communication, June 6, 2019). Counselors expressed that the impact of texting on their relationships with students was modest for some and a non-factor for others. Mrs. Beth pointed to text messaging conversations ‘helping,’ but as a part of the back and forth communication process that resulted in a face-to-face meeting. However, given an open forum, she mainly spoke of a combination of participating in the study and her counseling approach. “It could just be the way that I approached the relationship with her. To enforce that I’m here to listen, I’m not here to judge. I always tell students that I have an open-door policy- stop in anytime” (Ms. Beth, personal communication, June 11, 2019). Mr. Kevin believed that texting had an impact on his relationship with Bailey, but not the other students, citing numerous and positive text conversations where he was able to get her the information that she needed. However, he held a belief that Bailey was ‘open to a more genuine relationship’ that cause him to also connect more. In general, he cited increased level of conversation and contact between himself and students with needs that arise with age.

I think a lot of the relationships that I have change right around that junior year as students are starting to go, ‘Man, I'm going to graduate high school. What am I going to do with my life?’ That's more where the information that I have for them becomes important and we're able to have some more in-depth conversations regarding what it is, what their options are, how they can look at those options. Some of that might just be just because that's what I enjoy doing the most and some of it, I think, is their internal excitement. (Mr. Kevin, personal communication, June 11, 2019)

Bailey and Opie spoke of texting having an indirect impact on her relationship, through an increase in access.

Before all of this I didn't really talk to him at all. I barely even knew him and during the texting with, during the experiment it was just a lot, like I said before, a lot more

accessible and easier to talk to him, because you don't have to schedule everything and I didn't really desire a much more face-to-face time, because I could just easily ask him a simple question through texting. (Bailey, personal communication, June 7, 2019)

**Negative Impact.** Not all of the participants felt as positively about the impact of texting on their relationships; Bell and Ernesto did not believe that it was impactful at all. Bell attributed her relationship strength to increased face-to-face contact, while Ernesto believed that it may have been impacted had he chosen to respond to his counselor's texts, but he chose not to do so. Going further, when he did finally meet with his counselor, he described it, "as if nothing happened. [Participating in the study] wasn't acknowledged at all" (personal communication, August 6, 2019). Maggie attributed her negative relationship views of her counselor on the reduction of texts to zero after her scheduled meeting was cancelled, commenting, "I guess that he wanted to meet with me" and, "I was expecting to be interacting more" (personal communication, June 6, 2019).

## **Conclusion**

The data collected here informs the discussion about the use of text-messaging as a tool to explore mentoring relationships between high school students and guidance counselors. This research used a qualitative research single instrumental case approach, investigating a unique and specific circumstance, text messaging between school counselors and students while exploring a mentoring relationship, within the natural setting of a high school during the normal course of a school year (Stake, 2010; Creswell, 2007). Data was collected from two school counselors and five students over three months and analysis consisted of on-going inductive coding after initial, midpoint, and final interviews of all participants.

The discussion around these themes furthers the conversation about text messaging's place as a tool to impact mentoring relationships between students and counselors. To summarize, text messaging aided in reducing the perception of barriers for students to access

guidance services. The direct text line of access to the counselor provided a positive sense of comfort to students, knowing that they could access this tool as needed. The text exchanges between the students and counselors were seen as generally positive. Students tended to be more responsive to open-ended prompts from counselors, but also caution to avoid negative perceptions when expected communication is absent. From the use of text messaging, emerged conversations about the ideal target student audience and strategies for subsequent implementation, as well as professional ethical considerations from counselors about public perception. Some students and counselors did report text messaging as having led to face-to-face conversations that contributed to their perceptions of having mentoring relationships with other participants. Knowing more about participants feelings about the use text messaging and how they chose to use it informs those who may consider this research to inform their practice. Schools and researchers looking for innovative approaches to forming relationships with students will benefit from the data collected and conclusions drawn. The discussion of this data in practical context will be explored in the next chapter.

## **Chapter 5 – Summary and Discussion**

### **Introduction**

How we communicate affects how we interact, and how we interact is an important part of how we live, work, and play. Text messaging is the most common form of communication that people use to directly access others with speed (Iribarren, 2017). Today's students have grown up with text-communication in the same manner that past generations have with the telephone, fully integrated into our approach to communicating and interacting with others. In education, school counselors are trained and tasked to communicate with students and bridge barriers that can have academic and social benefits. Some students see barriers to accessing guidance services when they have a need and thus lack relationships

with their counselors. This may include students with social anxieties who avoid face-to-face contact or those who are at-risk of graduating high school (Hazler & Denham, 2002; McCluskey, Noller, Lamoureux & McCluskey, 2004). Text messaging between students and school counselors takes advantage of direct access, removing barriers and creating a safe place for those who wish to avoid face-to-face contact, yet communicate with their counselors. Thus, text messaging may lead to increased access to school counselors and guidance services that may benefit students.

This exploratory research found that text messaging bridged barriers of communication between counselors and students, creating greater access for students. As a result, the broader field of education can be informed about new approaches to school counselor practice and the benefits and limitations of text messaging as an intervention between school counselors and students.

### **Discussion Rationale**

The way we act, talk, write, and express emotion has changed as technological communications become an inseparable part of our daily lives. This is beginning to be described in a variety of fields; counseling (Nesmith, 2018; Wadden et al., 2014), education and learning (Bouhnik & Deshen, 2014), mental health (Iribarren, 2017; Kamalou et al., 2019; Twenge et al), language and grammar (Al-Kadi, 2019; Friedrich, 2019; Waldron et al.), adolescent development (Barth, 2014), and behavior (Schroeder & Sims, 2018). These changes impact the way we initiate, perceive, engage, and end relationships as well as reshape the space in which relationships even exist (Barth, 2014; Sude, 2013). Twenge et al. (2018) took this stance when comparing changes to adolescent's psychological health, happiness, and activities from prior to and after 2012, when Smartphones were first introduced. Continued investigations are necessary to keep pace with changes to

technological applications and the resulting benefits, limitations, and impacts that they are having on our human interactions (Nesmith, 2018).

Within an educational environment, counselors are specifically tasked with offering a variety of guidance services that may benefit a student (Wilson & Tanner-Smith, 2013). These may include gatekeeping admission to programs and specialized services, offering personal and academic advice, and helping students to solve personal problems (Fitch and Marshall, 2004). While students may independently seek access to guidance services by requesting help, school counselors are also trained to identify and seek out students who have been identified as at-risk of not graduating high school, or those who may benefit from services but have an unspoken need or do not seek guidance on their own (White and Kelly, 2010; Wells, Miller & Clanton, 1999). Methods for identifying students may include a review of data profiles that include, attendance, discipline, academic achievement, out of school environment, and mental health information (Bulger & Watson, 2006; Moore, 2006; Kaufman, Bradbury, & Owings, 1992; White and Kelly, 2010) or using professional judgment based upon intimate knowledge or prior relationship with the student (Wells, Miller & Clanton, 1999).

Specific to this research, it is important to the counseling field to find the benefits and limitations of techniques used to bridge access to services for students who do not independently seek them (Barth, 2014; Bouhnik & Deshen, 2014; Fitch and Marshall, 2004; Wilson & Deane, 2001). As students change with the evolution of communication, relationships, and society so must counselors' understanding of the effectiveness of their own practices (Sude, 2013; Twenge et al., 2018). In a 2014 study, Barth advocates for counselors to learn more about how to adjust to adolescents who are experiencing new communication technology that is irreversibly intertwined with normal physical and mental development.

As students move towards computer-based communications, their interaction with the school environment differs. This is especially true for students who keep a social distance from counselors, like those with social anxieties, and can use technology to reduce face-to-face contact (Boase & Kobayashi, 2008; Chung, 2011; Hong, Chiu, & Huang, 2012). Almost paradoxically, the ability to connect to others is a primary purpose of using text messaging (Ahn & Shin, 2013; Walsh, White, & Young, 2009). Text messaging is unique because a person can balance the contradictory nature of connecting to another person to build a relationship, but still maintain a face-to-face social distance that is comfortable for them (Ahn & Shin, 2013; Gibson & Cartwright, 2014; Kim et al., 2009). Incorporating communication technologies into techniques school counselors are using may result in more students, who do not have a regular relationship with their school counselors, bridging access to school counseling services. This rationale outlines the necessity for investigating the efficacy of a particular technology (text messaging) to benefit, limit, or influence the way that students access guidance services and communicate with their school counselor.

Text messaging was chosen for this study because it is currently the most used communicative technology, despite a growing number of applications that may be favored by a group or industry (Schroeder & Sims, 2018). Whatsapp, Facebook messenger, and Remind are a few examples of applications that share similar attributes, with the latter being design specifically for schools (Schroeder & Sims, 2018). Attributes of texting may assist counselors to initiate and schedule meetings with students. These attributes include ease of use, (Horwitz & Detsky, 2011), relative speed of communication (Müssener et al, 2016), ability to be individualized and directly connect two people (Braciszewski et al, 2018; Burgstahler & Cronheim, 2001; Szilagyi & Adams, 2012; Thakkar et al., 2016), not being restricted to a location or time (Bouhnik & Deshen, 2014; Nesmith, 2018; Müssener et al, 2016), and ease of integration into daily routines and job responsibilities (Spring et al., 2013).



This study was informed from a cross-section of fields because of a dearth of relevant study in education. Some topics, like text messaging and help-seeking, are more heavily researched as part of online mental health counseling (Bohns & Flynn, 2010; Braciszewski et al, 2018; Gatti et al.2016; Gibson & Cartwright, 2014), crisis counseling (Wilson et al.,2002), and health care management (Iribarren et al, 2017). Globally, many reviews differentiate between online or text message-based and more traditional face-to-face counseling (Day & Green, 2017; Novotney, 2017; Wong et al, 2018). However, there is little research about how online and face-to-face counseling may be used in combination nor how using one may lead to the other.

This exploratory study used text messaging as a communication tool between counselors and students to learn if text messaging would influence mentoring relationships with students, the manner that texting was used, and the perceptions of participants who used it. In answer to the first research question, the data is unable to support any conclusions about mentoring relationships and text messaging. However, analysis of participants perceptions and use of text messaging support statements about: easing the scheduling of meetings, help-seeking barriers, access to services, and control of the counseling process. The findings have important messages to be shared with the field of education, school counselors in particular. As a practitioner-researcher, the discussions here are intended to stimulate thought about how text messaging can influence access to services and relationships and be considered for implementation in schools.

## **Discussion of Findings**

### ***Lack of Support for Relationship Conclusions***

The findings of this study do not support drawing any conclusions about the primary research aim: impacts that text messaging may have had on mentoring relationships. Three reasons can be cited: 1) data collected from participants in relation to mentoring was limited

in quantity, 2) data drawn from interview and text message transcripts was inconsistent, and 3) the data analysis tools designed to help make impact determinations were not sufficient to the task. As visible in the data section of this paper, participants were prompted to respond to questions about relationships during interviews, but it is noteworthy that little was organically generated from the participants themselves. Under the circumstances described, this investigation cannot make conclusions about the mentoring relationships between participants.

### ***Barriers to Help-Seeking***

Students perceived both logistical and emotional barriers that limited their efforts to explore guidance services. Confidentiality is oft cited in help-seeking literature as a barrier and is applicable to a school environment as well. Concerns of helpers keeping confidentially appears to be a concern about connecting to school counselors, despite strict confidentiality laws. Students worried about their problems potentially ‘getting out’ and it becoming a social stigma amongst peers. In the high visibility of school hallways, students were apprehensive being seen ‘going down’ to guidance on their own, compounding worry about social stigma barriers.

Time and place barriers to seek and attend guidance services may be uniquely influenced by the culture, structure, and rules of a school. To clarify, students must balance their time between expectations; academic and socially. They may feel pressured to choose between the need to seek help or make/attend an appointment with their counselor and competing perceived barriers. These may include getting ‘in trouble’ for not being in the location prescribed for each moment by their school schedule or class attendance expectations of academic teachers. In an attempt to navigate these issues, students may feel judgement or stigma barriers placed by adults who prioritize academic and social

expectations differently. As a result, this may limit their desire to hurdle barriers and seek help.

Counselors, unaware of barriers to help-seeking seen by students, may unintentionally separate services offered from those who do not actively seek help, but may be in need. Having large caseloads, counselors must balance their limited time between students who actively pursue help and seeking out who may need it. This may lead to a passive approach, where counselors are less likely to seek out students most in need and instead choose to address what comes to their immediate attention. Inadvertently, this approach favors assertive and self-advocating students who are more likely to access services and develop further relationships with their counselors through face-to-face conversations than those who do not independently seek help. This result is exemplified through the words of Mr. Kevin when describing students with whom he has developed relationships and the students selected for this study respectively, “I think I build more of a relationship when [students] come down on their own to talk about something” and “I couldn't tell you who they are if they walked in my office right now, I would probably have no idea” (personal communication, March 1, 2019). In cases where a school counselor’s approach is passive, students may act passively in return; incorrectly interpreting the time given to help others as limiting the time available for them. Counselors must make sure to not interpret a lack of active help-seeking as disinterest or lack of care and thus reduce active efforts to reach out to these students.

### ***Enhancing Access to Services***

The commonly held logistical advantages of text messaging were interpreted by participants as able to remove barriers and offer direct access to counselors; the ability to be individualized and directly connected to the target audiences being highly referenced (Braciszewski et al, 2018; Burgstahler & Cronheim, 2001; Szilagy & Adams, 2012; Thakkar et al., 2016). In a direct sense, students can use texting, to initiate the process of addressing

social stressors, like bullying or family situations, that were immediate, on their minds, or impromptu, while maintaining a sense of privacy and avoiding social stigmas (Aoki & Downes, 2003; Kamalou et al., 2019). In most cases of short exchanges about scheduling meetings, the counselors used time during the school day to contact students when both parties were physically present in the building. Students made a choice to quickly respond between classes, during study halls, or in lunch, but some chose to send messages to counselors outside of school hours.

Evidence emerged supporting text messaging easing scheduling of face-to-face meetings between counselors and students. The direct access to students allowed the two parties to compare calendars for availability and schedule commonly acceptable times. Openness from students to schedule face-to-face meetings may have been influenced by interpreting text messages as having positive intentions, such as feeling cared about and demonstrating trustworthiness, or by a feeling of obligation to respond to a request by a school authority figure. It is plausible that some meetings would have naturally taken place over time, but the evidence suggests that the ease of using text messaging may have accelerated the timetable.

Some students chose to send messages outside of school hours and felt comfortable knowing that their message would be answered at earliest convenience. Students here recognized the need for counselors to have a life with their family outside of school and even expressed empathy for counselors who are prioritizing needs of a large student population. In general, although students believed that texting was able to overcome some barriers by having direct access, they understood that the access was still limited. The positive perceptions in the study appear to be related to direct access that resulted in short response times and, greater attention from being a part of a study. I am unsure if such understanding

perspectives would remain constant if more students were given access in subsequent studies and direct access was less responsive.

### ***Control of the Counseling Process to Address Needs***

The on-demand access of text messaging enabled control over how students went about the help-seeking process, perceiving the relationship with their counselor as a series of transactions designed to meet their needs. Example of needs include: help with family situations, advice about school program and college selection, and discussion of improving child-parent communication. Each student chose to engage differently. Some students used text messaging to direct their own help by quickly responding to text requests, clarifying topics of conversation for face-to-face meetings, asking questions to address needs, and following up from face-to-face conversations. Those who were more reluctant to respond exercised and exhibited control associated with protection and safety behaviors. Choosing not to respond to a communication is an advantage of text messaging not afforded within the social expectations of typical face-to-face conversations. Maggie's empowering, "I can," statement, when referring to her ability, but ultimate choice not to text her counselor, exemplifies inaction as a choice more protected by the perceived accepted boundaries of text messaging. Counselors should recognize that the desire to control is as present in computer-mediated as face-to-face environments. As a result, they must be careful to craft communication that displays available services and conveys a feeling of trust (Althoff et al., 2016). In this way students are more likely to self-select the options that fit their current needs and, if the experience is positive, continue to engage in communication.

An aspect of controlling response comes directly from the data. Open-ended text messages appear to be a prominent factor that increases the response rate from students. Open-ended message phrasing (that which begs a response from the receiver) were many times more likely to elicit a response as compared to closed ended (declarative statements not

requiring a response) (Gibson & Cartwright, 2014; Guillot-Wright et al, 2018). An increase in text interactivity may have contributed to behavior changes that further developed during face-to-face conversations (Guillot-Wright et al, 2018). Given the brevity and infrequent messages exchanged, this finding may require a more substantive backing before being practically significant.

### **Text Messaging Limitations**

Several common text-messaging limitations emerged antidotally from the data, but are important considerations for future experimentation. Text messaging users are not all equal, with varying degrees of proficiency, thus school counselors may not have the skills to fully communicate using text to the degree expected by students. To this end, the receiver may misinterpret what is being messaged compared to face-to-face counseling, where body language and verbal cues are present (Nesmith, 2018); Richards & Vigano, 2013; Navarro et al., 2020; Wilczenski & Coomey, 2006). It is possible that these factors may inhibit the ability to tackle complex problems by merely engaging through text messaging as the only modality (Navarro et al., 2020). Time attempting to improve proficiency or mandates to use this tool placed by leadership may result in a new demand on counselors, effectively marginalizing gains in efficiency offered by the technology (Ersahin & Hanley 2017).

### **Implications for Research**

Although an objective of the study, conclusions about the impact of text messaging and mentoring relationships were not able to be drawn. Literature supports longer time frames be given for relationships to develop, potentially leading to evidence of text messaging influencing mentoring relationships or academic gains (Spencer et al., 2017; Wheeler et al., 2010). Further exploration about the influence of text messages on relationships with school counselors is necessary.

It is also necessary to more deeply understand the intersection between text messaging and school counseling roles and responsibilities. To this end further study of the ethics of the counseling field, social perceptions of professional communications, and sensitivities to traditional counselor-student relationships from the perspectives of counselors is required.

Literature is rapidly expanding around online and text-based counseling services sector (Day & Green, 2017; Novotney, 2017; Wong et al, 2018). More study is needed to examine the benefits and limitations of text-based or online counseling used in conjunction with traditional face-to-face counselling to reduce help-seeking barriers amongst adolescents (Bohns & Flynn, 2010).

### **Implications for Practice**

School counselors who consider text messaging in action research experimentation may benefit from an internal school conversation about the social nature of text messaging prior to trial. Care should be taken to become well-versed in the technological complexities, variety of professional uses, benefits, and limitations of text messaging. Existing social perceptions of professional communication and sensitivities within their staff and community to preserving traditional counselor-student relationships may be barriers that need consideration in the local context.

### ***Three Considerations for a Trial Text Messaging Campaign***

First, I invite readers to carefully consider the discussion and data analysis when pursuing a text messaging trial. It is likely that a detailed read and finer points will speak directly to and inform your local context. Secondly, as experimented, text messaging in this manner is not something that schools should be fearful of attempting locally. Evidence from this study and the field suggest text-messaging is positively perceived (Chow et al.,

2015; Spohr et al., 2015; Thakkar et al., 2016), cost effective (Müssener et al., 2016), requires little time commitment from staff, and evidences little general drawbacks (Chow et al., 2015). Lastly, it is important for counselors to consult the most recent professional position statements that provide guidance on navigating text messaging within a high school context. National counselor organizations and educational agencies, aware of technological communication developments and the rise in virtual schooling, have taken a leadership role to educate and provide direction to counselors as the field diversifies.

### **Limitations**

The data collection strategy and three-month timeframe did not support conclusions to be drawn about the influence of text messaging on mentoring relationships. A general timeframe of three months may not have been sufficient for relationship changes attributed to text messaging to have become apparent. Additionally, conducted in the Spring, commitment to the study may have been affected by external factors such as, end of the year preparation and state testing schedules.

### **Generalizability**

This study is designed to be exploratory, teasing out the various themes and circumstances that emerged from the implementation of text-messaging as a communication tool between students and high school counselors. Readers of this research should take note that the findings and discussion of results have been developed in the contextual bounds of this particular case; five students, who had little to no prior relationship with their counselors, and two counselors from one suburban high school setting. As a result, please take head that the learnings may or may not be directly applicable outside these bounds.

### **Conclusion**

This exploratory investigation into the efficacy of text messaging and its ability to influence the mentoring relationship between students and counselors resulted in findings that are



worthy of consideration for further research and practical application. Although a primary research aim, evidence does not support conclusions about the impact of text messaging on mentoring relationships. Attributes of text messaging, such as directly accessing counseling services, were perceived to have mitigated some help-seeking barriers described by participants. Students also used text attributes to assert control over counseling conversations and engage in transactional, professional relationships in an effort to meet their personal needs. Additionally, students displayed a response preference towards open-ended text messages sent by counselors. These findings expand our understanding about text messaging as a potential tool to communicate between high school students and their counselors.

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## Appendix A.1

### Initial Inquiry Letter to Principal of Suburban High School

To: Principal of Suburban High School  
From: Gilly, Nicholas <ngilly@arcadia.edu>  
Date: Feb 21, 2018  
Subject: Doctoral Research Study Permission

Dear Mr. Principal,

I am conducting a doctoral dissertation study about high school teachers/counselors using mobile communication as a tool to reach out to students. I am seeking your approval to conduct my research study within your school district.

I am interested in conducting this research at the Suburban High School and would desire to contact teachers and counselors willing to participate in this study. Additionally, I would desire your approval to access willing participant students who are identified by the teachers/counselors as our student pool. Assurances are in place, and have been approved by Arcadia University's Internal Review Board, that will account for the safety and privacy of student and teacher/counselors participants.

As part of the counselor agreement to participate, they will be doing so without an expectation of additional compensation by the school district. However, the following conditions must be agreed to by the school district in order to protect the safety of participant counselors as per this study:

1. Teachers/counselors will not be asked to perform any additional duties outside of the contracted day by the school district, in relation to the study or student participants. However, as part of the study, a teachers/counselor may voluntarily participate outside of contractual hours.

In addition, highlighted in the consent agreement with students and parents is a reminder that the communication that occurs in this study by students to their counselors remains part of the student/ school counselor relationship. It is therefore still the student's responsibility to maintain appropriate communication that is in line with the expectations of the school and digression from this may result in discipline measures as outlined in the school code of conduct.

In an effort to be transparent, additional specific points of note regarding the technology use during the study. Many of these provisions are necessary for the researcher to conduct this study while currently being overseas, while others are part of the study itself.

1. The researcher and the counselors will use a secure cloud database, sync.com, to share information, notes, files, or audio/ video files during the duration of the study. Only the researcher and counselors will have access to the passwords for this database. Each counselor will have their own access area and code specific to the students they will be working with.
2. An external messaging service, Clicksend, will be used by teacher/counselor participants to send text messages to students by using their school email. This will require no technological alterations to your current system. All records of the communications between the staff members and students during the study will remain accessible on your email server.

3. A face- to face web-link, oft used in industry, called join.me will be used to conduct interviews during this study with students and counselors. These interviews will be recorded and the data saved on the sync.com database to be used during the study.

If further clarification on these points is needed, I am certainly willing to discuss these points personally. The attached consent forms for participants will explain more about the study topic and my role in the study. I am willing to provide any additional documentation, and participate in any formal approval necessary as required.

I am requesting a formal letter of approval to conduct this research study in your school in the form of a written letter. Please be sure to specifically mention the following items as required by the Arcadia Institutional Review Board:

1. Acknowledgment of the student communication expectations.
2. Acknowledgment of the specified used of technology as noted above.

Thank you for your consideration. I look forward to hearing from you with your response.

Nick Gilly

Doctoral Student  
Arcadia University  
ngilly@arcadia.edu

## Appendix A.2

### Initial Inquiry Letter to Superintendent of Suburban High School

To: Dr. Superintendent of Suburban School District  
From: Gilly, Nicholas <ngilly@arcadia.edu>  
Date: Feb 21, 2018  
Subject: Doctoral Research Study Permission

Dear Dr. Superintendent,

I am conducting a doctoral dissertation study about high school teachers/counselors using mobile communication as a tool to reach out to students. I am seeking your approval to conduct my research study within your school district.

I am interested in conducting this research at the Suburban High School and would desire to contact teachers and counselors willing to participate in this study. Additionally, I would desire your approval to access willing participant students who are identified by the teachers/counselors as our student pool. Assurances are in place, and have been approved by Arcadia University's Internal Review Board, that will account for the safety and privacy of student and teacher/counselors participants.

As part of the counselor agreement to participate, they will be doing so without an expectation of additional compensation by the school district. However, the following conditions must be agreed to by the school district in order to protect the safety of participant counselors as per this study:

1. Teachers/counselors will not be asked to perform any additional duties outside of the contracted day by the school district, in relation to the study or student participants. However, as part of the study, a teachers/counselor may voluntarily participate outside of contractual hours.

In addition, highlighted in the consent agreement with students and parents is a reminder that the communication that occurs in this study by students to their counselors remains part of the student/ school counselor relationship. It is therefore still the student's responsibility to maintain appropriate communication that is in line with the expectations of the school and digression from this may result in discipline measures as outlined in the school code of conduct.

In an effort to be transparent, additional specific points of note regarding the technology use during the study. Many of these provisions are necessary for the researcher to conduct this study while currently being overseas, while others are part of the study itself.

1. The researcher and the counselors will use a secure cloud database, sync.com, to share information, notes, files, or audio/ video files during the duration of the study. Only the researcher and counselors will have access to the passwords for this database. Each counselor will have their own access area and code specific to the students they will be working with.
2. An external messaging service, Clicksend, will be used by teacher/counselor participants to send text messages to students by using their school email. This will require no technological alterations to your current system. All records of the communications between the staff members and students during the study will remain accessible on your email server.

3. A face- to face web-link, oft used in industry, called join.me will be used to conduct interviews during this study with students and counselors. These interviews will be recorded and the data saved on the sync.com database to be used during the study.

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1. Acknowledgment of the student communication expectations.
2. Acknowledgment of the specified used of technology as noted above.

Thank you for your consideration. I look forward to hearing from you with your response.

Nick Gilly

Doctoral Student  
Arcadia University  
ngilly@arcadia.edu

## Appendix B Counselor Participation Permission

Dear Teacher/Counselor,

My name is Nicholas Gilly and I am a doctoral student at Arcadia University in Education. I am hoping to conduct a small research study regarding the use of mobile communication by school staff to connect with students. I hope that you will agree to participate, as I believe you have important insight to share on the topic of my research.

As for my person, I am a former assistant principal and district administrator from Pennsylvania. I am completing the final stages of my doctoral degree while living abroad in Dublin, Ireland. Every effort will be made to come to the United States and speak directly with all of the study participants however it is not likely to occur often, if at all. Instead, face-to-face virtual meeting software, email, and text messaging will be used in place of my physical presence. This circumstance will not affect the study, my attention to the needs of participants, and access to communicating with me. As this is a study about mobile messaging, it seems just fitting.

The focus of this exploratory study is to gain a greater understanding of the viability for school staff to use text messaging as a method to reach out to students, potentially leading to a mentoring relationship. This is a topic that is important to the field of education, and by conducting this research I will be able to understand more deeply participants' perspectives on this topic.

Thank you for considering participation in this study. If you agree to participate in the activities described above, please sign below. You will be given a copy of this consent form for your records. As always, if you have any further questions or concerns, I will make myself available to answer them for you.

Sincerely,

Nicholas R. Gilly  
Email: [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)

When will the study take place?

The study will begin in the Spring of 2019 and last a total of three (3) months.

If I volunteer for the study, does that mean that I am automatically in the study?

No. We have a maximum amount of participants for the study. If we have more volunteers than needed, we will choose the teachers at random from those who volunteer. All volunteers will receive an email notification clarifying if you are officially in the study or not.

Will I receive anything for participating in the study?

I will arrange to pay for a nice lunch for all teacher participants after the study two (2) occasions.

If I chose to participate, what will my responsibilities be during the study?

- 1) Assist in creating a student pool of 10 students from your class list at the beginning of the study and give this list to a person named by the principal (**Approximately ½ hour**)
- 2) Speak with me to ask questions and review the study to ensure that you are comfortable before it begins (**15 minutes at or before the 1<sup>st</sup> interview**)
- 3) Use your school email to send weekly text messages to students (**Approximately 2-5 minutes per day or 10-25 minutes per week at maximum**).
- 4) Every two weeks, you will forward all email/text communications with the students to me (**5 min every two weeks or 30 min over the course of the study**)
- 5) Optionally record any significant communications between you and the students during school that may not otherwise be recorded. This is not a mandatory part of the study, just an option if it helps you (**Approximately 5 min per instance, if needed at all**)
- 6) Participate in three (3) interviews with me (One 30 min interview at the beginning of the study, one 30 min interview at the mid-point, and one 45 min interview at the end of the study – **Total of 1 hour 45 min over the course of the three (3) month study**)
- 7) Use the communication methods in the study designed to protect student privacy. These methods include: emailing/texting with me, uploading documents to a dropbox, storing hard copies in a secure location in your room, and using pseudo-names for students)
- 8) After the study's conclusion, meet with your partner students and remind them of the following: The study has ended and that they (students) will no longer be receiving text messages from you in the way they had for the last three months.
- 9) Not discuss your participation, actions, or feelings about the study with other participants or outside individuals, unless necessary for the safety and health of yourself or a student.
- 10) Appropriately report abusive, potentially dangerous, or physical or mentally harmful behaviors as Mandatory Abuse Reporters in the state of Pennsylvania. This is the same standard that exists school now and will be applied to the text messaging in this study.



Are there any risks to participating in the study?

- 1) You may feel an excessive obligation to be attentive to the study students during its duration
- 2) You may not feel comfortable text messaging with students or using text messaging in general

How am I protected as a study participant?

The following will occur to protect your individual privacy and safety, especially when communicating with students:

6. Your superintendent and principal signed a permission that makes clear the difference between the contractual and professional responsibilities of the teachers/counselors when they are actively engaging in the study.
  - a. Teachers/counselors may:
    - i. Be held responsible by the school district for appropriate and professional communication between themselves and students that occurs within the bounds of the study
  - b. Teachers/counselors will not:
    - i. Be asked by the school district to perform additional duties with students or in relation to the study outside of contractual hours
    - ii. Be compensated by the school for voluntarily spending time participating in this study outside of the contractual day
7. Measures have been taken to avoid instances of inappropriate communication from the student during the study.
  - a. Both the student and parent permissions contain a highlighted section that informs them that the school discipline and behavioral code is still in place during all communications of this study.
  - b. In the rare instance of inappropriate behavior, teachers/counselors are responsible to inform the school administration. The school principal is aware and in agreement that this will be enforced.
  - c. Teachers/counselors may choose to end or modify participation in the study if any inappropriate behavior occurs.
8. To protect your privacy, all video will be destroyed after transcription. Your name and any identifying information will be changed so that your identity will remain confidential during the final study paper and any publications thereafter.
9. Any and all paper copies collected from the research will be kept for one (1) year in a secure place in my home. After this time, all copies will be scanned into a secure computer database and the files kept for five (5) years - to be used in further data analysis or publication. After five (5) years, files will be permanently destroyed.
10. I may choose a professional service company to write down word for word what was said during the interviews. The company will be required to sign a Confidentiality and Privacy Agreement requiring all data saved on their servers to be erased
11. \*\*\* During this study, I may consult with my supervising professor, Dr. Marc Brasof at Arcadia University and share any and all information from texts or interviews. As supervising professor he is bound to keep all information shared confidential.

Can I stop participating in the study once I have agreed and the study has started?

Yes. You may choose to not participate, or stop participation at any time during the study, without negatively affecting your relationship with school personnel, your work-related evaluations, Arcadia University, or me. Please contact me at any time if you have questions or if you wish to withdraw your participation by email at [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu).

Contact Information

Nicholas R. Gilly  
email: [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)

Supervising Professor  
Dr. Marc Brasof, Arcadia University  
email: [mbrasof@arcadia.edu](mailto:mbrasof@arcadia.edu)

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I give my consent for participation in the above-mentioned research activities conducted by Nicholas Gilly as part of this doctoral study at Arcadia University. I understand that I will be using technology during the study in multiple ways, including communicating with the researcher who is not living in my immediate area. I understand I can withdraw at any time with no adverse consequences, simply by contacting the researcher. My signature below indicates my willingness to participate.

Name: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

This study has been approved by the Arcadia University Institutional Review Board (IRB). To ensure that this research continues to protect your rights and minimizes your risk, the IRB reserves the right to examine and evaluate the data and research protocols involved in this project. If you wish to know more about your rights, please contact the Office for the Committee for the Protection of Research Subjects at (267) 620-4111.

(Adapted from Campbell and Hickman, 2013)

## **Cover Page**

*This informed assent form is for students in Grades 9-12 who attend Suburban High School and who we are inviting to participate the doctoral study:*

*Text Message Communication Between High School Teachers and Counselors to Students: An Exploratory Study*

**Principle Investigator: Nicholas Gilly, Doctoral Student Arcadia University**  
**Faculty Sponsor: Dr. Marc Brasof**

**Informed Assent Form for**

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**Student Name**

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**Date**

**You will be given a copy of this and all signed forms if you choose to participate for your personal records**

## Welcome Letter

Hello Potential Student Participant,

My name is Nicholas Gilly and my job is to research ways teachers and counselors can gain the best relationships with students as possible. We want to know if using more modern forms of communication will improve these relationships. We think this research could help tell us that.

As for my person, I am a former assistant principal and district administrator from Pennsylvania. I am completing the final stages of my doctoral degree while living abroad in Dublin, Ireland. Every effort will be made to come to the United States and speak directly with all of the study participants however it is not likely to occur often, if at all. Instead, face-to-face virtual meeting software (similar to Facetime), email, and text messaging will be used in place of my physical presence. This circumstance will not affect the study, my attention to the needs of participants, and access to communicating with me. As this is a study about mobile messaging, it seems just fitting.

I am inviting you to be a participant in this research study. We are discussing the research with you and your parent/ guardian; you will both have to give permission to participate. You can decide whether to participate or not after you have talked it over. You do not have to decide immediately.

The pages in this packet have two parts, an information section and a signature section, called the Certificate of Assent. The information section will tell you all of the details of the study, including your responsibilities and rights as a participant, if you choose to join. The Certificate of Assent is the place where you sign your name and state that you wish to participate and give permission to the school to share information about you as a student. You can be a part of the study without giving permission to the school to share your personal information.

You may discuss anything in this form with your parents or friends or anyone else you feel comfortable talking with. Additionally, there may be some things in this document that you do not understand or wish me to explain further because you are interested or concerned. Please ask me at anytime and I will take time to speak with you.

I look forward to reviewing these documents with you and hope that you will decide to participate in the study.

Sincerely,

Nicholas Gilly

## **Part 1: Information Sheet**

### Why is this study happening?

We want to find better ways for teachers and counselors to communicate with students. Not all students feel as though they have good relationships their teachers, or feel comfortable speaking face-to-face with them. This research is being done to see what happens if a teacher or counselor used text messages to communicate with a student.

### Do I have to participate in the study?

No. You don't have to be in this research if you do not want to. It is your choice. If you decide not to be in the research, it's okay. (Nothing changes in school or otherwise. Things will remain as they have before). If you decide to say "yes" now, you can change your mind later and it's still alright. You may choose to stop participation at any time, by contacting your principal, your teacher, or your guidance counselor, or me.

### Why am I being asked to participate in the study?

You are being asked to participate in this study because a teacher or counselor has identified you as a student with whom they wish to have a better relationship.

### When will the study take place?

The study will begin in the Spring of 2019 and last a total of three (3) months.

### Will I receive anything for participating in the study?

During the study, all students will receive \$30 from me. This is meant as both a thank you and to help cover any costs that the extra text messaging during the study has caused. You will receive this money during the first month of the study.

### If I volunteer for the study, does that mean that I am automatically in the study?

No. We have a maximum amount of participants for the study. If we have more students volunteer than the study allows we will inform some students that they cannot participate. If you volunteer, I will be sending an email to you soon explaining if you are officially in the study or not.

### Do I still have to follow school rules during the study?

Yes. The school discipline code of conduct is still in place. This includes the school policy for texting during the school day and proper communication with school adults. Breaking these rules may result in school disciplinary action and/or being asked by me to end participation in the study.

### What will happen if I am a participant in the study?

In this study we are going to be asking a teachers/counselor to send text message to you. We will be gathering information from the experiences of all the study participants. If you decide that you want to participate, there will be five (5) things that will happen:

1. You will be asked to give your mobile phone number information to me, to be then shared with your teacher/counselor. Your number will not be shared with any other person and will be deleted from the research file at the conclusion of the study.
2. Your teacher/counselor will begin to send text messages to your mobile phone. This may occur during or after school hours. You may choose to or choose not to respond to the messages that you receive. You may also choose to text the teacher/counselor yourself during the study.
3. You will be asked to participate in a total of three (3) interviews with me during the study to speak about your experiences and feelings.
  - a. There will be a 30 min. interview at the beginning and middle of the study and a 45 min. interview at the end.
  - b. All of the interviews will take place after school hours at a time convenient to you
  - c. You can ask to skip any question of the interview if you do not wish to answer it.
  - d. I will be using a website called join.me (works similar to Facetime) that allows us to see each other and speak directly. \*\*The school principal will provide a private computer for these interviews if you do not have one available to you.
  - e. The interviews will be recorded
4. With your permission, the high school will share with me information about you to enhance the study's findings. This includes the following four (4) documents: 1) General demographic information (Specifically: Age, Grade, Gender, Ethnicity) 2) Grade 9-12 attendance report 3) Grade 9-12 academic transcript 4) Grade 9-12 behavioral record. \*\*\* You do not have to agree to this to be part of the study. You can say no to one or all of the documents and it is ok.
5. At the conclusion of the study, your teacher/counselor will meet with you and remind you that the study has ended and that you will no longer be receiving text messages from them.

### What are my rights during the study?

1. You have the right to end your participation in this study at any time for any reason. Ending participation WILL NOT affect your teachers/counselors, your principal, your school, or me. You may choose to stop participation at any time, by speaking to your principal, your teacher, your guidance counselor, or me.
2. You have the right to respond or not to respond to the texts from your teacher/counselor.
3. You have the right to speak with teachers/counselors as you had prior to the study.
4. You have the right to exclude specific things that you have shared or written from the final published study or other publications about the research. If you wish to do this, all you have to do is inform your teacher/counselor or me about what you do not wish to be shared and it will not be included.

Are there any risks to participating in the study?

As a researcher, I must list any reasonable risks, discomforts, or inconveniences that you may experience as a participant. I have designed the study to minimize the chances of these happening.

- 1) Your phone bill may have charges if you use more than your monthly text limit
- 2) You may react negatively to the intervention, causing your behavior, attitude, and results in school to become negative
- 3) You may reveal information in the texts with teachers/counselors that you do not wish to be a part of the final study publication
- 4) You may feel uncomfortable about sharing your private phone numbers with teachers/counselors

What are the potential benefits of participating in the study?

- 1) You may develop a better relationship with your school teacher or guidance counselor
- 2) You may develop a mentoring relationship with your teacher/counselor and experience social or emotional benefits
- 3) You may feel that the school is more supportive of you now than before
- 4) You may help to discover a useful way for school adults to communicate with students that may be used in the future
- 5) You may find another personal benefit from this study that is not listed here

How is my Privacy protected during the study?

1. To protect your real identity, I will use a fake name, in place of your real name, on everything related to the research.
2. I will use a secure data storage location to make sure what you share is kept safe.
3. All interview recordings will be permanently destroyed after having been written down word for word. The written copies of them will be kept in a secure database.
4. Any and all paper copies collected from the research will be kept for one (1) year in a secure place in my home. After this time, all copies will be scanned into a secure computer database and the files kept for five (5) years - to be used in further data analysis or publication. After five (5) years, files will be permanently erased or destroyed.
5. I may choose a professional service company to write down word for word what was said during the interviews. The company will be required to sign a Confidentiality and Privacy Agreement requiring all data saved on their servers to be erased
6. \*\*\* During this study, I may consult with my supervising professor, Dr. Marc Brasof at Arcadia University and share any and all information from texts or interviews. As supervising professor he is bound to keep all information shared confidential.

Are there times when information I share may NOT BE PRIVATE?

Yes. There are two events when this may happen.

1. Your teachers, counselors, and I are required to report abusive, potentially dangerous, or physical or mentally harmful behaviors appropriately as Mandatory Abuse Reporters in the state of Pennsylvania. This is the same standard that exists in school now and will be applied to the text messaging in this study.

2. During this study, as a student within the Northampton High School, the messages that you send will be routed through and stored on the school email servers. In the unlikely event that the principal deems it necessary, the administrative staff at the school may read the contents of your text messages that occurred during the study.

If my mobile phone bill increases because of the text messaging during the study, will I be compensated?

Yes. During the study, if your mobile phone bill charges from text messages only are more than the \$30 originally given at the beginning of the study, your parents must do the following:

1. Email a copy of the bill to me that show charges associated only with text messages have gone above the current data plan.
2. I will pay you for these added charges and send a receipt to your parents for this amount (This may take the form of a bank transfer or certified check)

Will I get to see the findings of the research when it is completed?

Yes. When we are finished the research, both you and your parent will have the option to meet with me or have your own copy of the report. Afterwards, I also may be going to meetings and sharing what we have learned with other researchers and educators.

Can get help if anyone thinks the study is having a negative effect on me? Or just stop participating in the study if I don't want to do it anymore?

Yes. If you are having trouble, we will have a meeting to make things better for you if we can.

You do not have to be a part of this research and can stop for any reason at any time. No one will feel angry, or upset with you if you choose not to participate. It is your choice. You can say "yes" now and change your mind later. You may contact your principal, your teacher, your guidance counselor, or me via email, phone, text, or even during an interview.

Can I contact someone during the study if I have a question or comment?

Yes. If you have questions, concerns, or wish to end participation in the study you may contact:

Your school Principal

Your school counselor

Your teacher for the study

The researcher, Nicholas Gilly – by email [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)

The supervising professor, Dr. Marc Brasof –by email [mbrasof@arcadia.edu](mailto:mbrasof@arcadia.edu)

This study has been approved by the Arcadia University Institutional Review Board (IRB). To ensure that this research continues to protect your rights and minimizes your risk, the IRB reserves the right to examine and evaluate the data and research protocols involved in this project. If you wish to know more about your rights, please contact the Office for the Committee for the Protection of Research Subjects at (267) 620-4111.



## Part 2: Certificate of Assent

### Part 2 A: General Participation

I have read the information about participating in this study. I have had my questions answered and know that I can ask questions later if I have them. I understand that this research study is trying to find better ways to communicate with students in schools. I understand that I will be giving my teacher/counselor my mobile contact information and they will be using that to communicate with me during the study. I understand that I will be participating in interviews during the study with the researcher using virtual meeting software as the researcher is not living in my immediate area. I understand the rules responsibilities as a student at my school.

\_\_\_\_\_ I agree to take part in the research and I own/use a mobile device capable of receiving text messages.

**Only if child assents:**

Print name of student: \_\_\_\_\_

Signature of student: \_\_\_\_\_

Date (month/day/ year): \_\_\_\_\_

### Part 2 B: Demographic and Academic Information Sharing Consent

Please check the following boxes to indicate if you wish to share general demographic, attendance, behavioral, and academic information with the researcher for the purposes of this study.

**\*\*You can still participate in the study if you decide not to share this information.**

I agree to share

I DO NOT agree to share



General demographic information  
(Age, Grade, Gender, Ethnicity)



Grade 9-12 attendance report



Grade 9-12 academic transcript



Grade 9-12 behavioral record

**Only if child assents:**

Print name of student: \_\_\_\_\_

Signature of student: \_\_\_\_\_

Date (month/day/ year): \_\_\_\_\_

## Appendix D: Parental Consent Form

## Welcome Letter

Hello Parent(s)/ Gaurdians(s),

My name is Nicholas Gilly and my job is to research ways teachers and counselors can gain the best relationships with students as possible. We want to know if using more modern forms of communication will improve these relationships. We think this research could help tell us that.

As for my person, I am a former assistant principal and district administrator from Pennsylvania. I am completing the final stages of my doctoral degree while living abroad in Dublin, Ireland. Every effort will be made to come to the United States and speak directly with all of the study participants however it is not likely to occur often, if at all. Instead, face-to-face virtual meeting software (similar to Facetime), email, and text messaging will be used in place of my physical presence. This circumstance will not affect the study, my attention to the needs of participants, and access to communicating with me. As this is a study about mobile messaging, it seems just fitting.

I am inviting your child to be a participant in this research study. We are discussing the research with you and your child; you will both have to give permission to participate. You can decide whether to participate or not after you have talked it over. You do not have to decide immediately.

The pages in this packet have two parts, an information section and a signature section, called the Certificate of Consent. The information section will tell you all of the details of the study, including your child's responsibilities and rights as a participant, if they choose to join. The Certificate of Consent is the place where you sign your name and state that you wish your child to participate and give permission to the school to share information about your child as a student. Your child can be a part of the study without giving permission to the school to share your personal information.

You may discuss anything in this form with your child or friends or anyone else you feel comfortable talking with. Additionally, there may be some things in this document that you do not understand or wish me to explain further because you are interested or concerned. Please ask me at anytime and I will take time to speak with you.

I look forward to reviewing these documents with you and hope that you will decide to participate in the study.

Sincerely,

Nicholas Gilly

## **Part 1: Information Sheet**

### Why is this study happening?

We want to find better ways for teachers and counselors to communicate with students. Not all students feel as though they have good relationships their teachers, or feel comfortable speaking face-to-face with them. This research is being done to see what happens if a teacher or counselor used text messages to communicate with a student.

### Does my child have to participate in the study?

No. They don't have to be in this research if you or they do not want to be. It is your choice. If they decide not to be in the research, it's okay. (Nothing changes in school or otherwise. Things will remain as they have before). If you or they decide to say "yes" now, you can change your mind later and its still alright. Your child may choose to stop participation at any time, by contacting their principal, their teacher, their guidance counselor, or me.

### Why is my child being asked to participate in the study?

Your child is being asked to participate in this study because a teacher or counselor has identified them as a student with whom they wish to have a better relationship.

### When will the study take place?

The study will begin in the Spring of 2019 and last a total of three (3) months.

### Will my child receive anything for participating in the study?

During the study, all students will receive \$30 from me. This is meant as both a thank you and to help cover any costs that the extra text messaging during the study has caused. You will receive this money during the first month of the study.

### If my child volunteers for the study, does that mean that they are automatically in the study?

No. We have a maximum amount of participants for the study. If we have more students volunteer than the study allows we will inform some students that they cannot participate. If your child volunteers, I will be sending an email to you soon explaining if they are officially in the study or not.

### Does my child still have to follow school rules during the study?

Yes. The school discipline code of conduct is still in place. This includes the school policy for texting during the school day and proper communication with school adults. Breaking these rules may result in school disciplinary action and/or being asked by me to end participation in the study.

### What will happen if my child is a participant in the study?

In this study we are going to be asking a teachers/counselor to send text message to your child. We will be gathering information from the experiences of all the study participants. If your child decides to participate, there will be five (5) things that will happen:

1. Your child will be asked to give their mobile phone number information to me, to be then shared with their teacher/counselor. Their number will not be shared with any other person and will be deleted from the research file at the conclusion of the study.
2. Your child's teacher/counselor will begin to send text messages to their mobile phone. This may occur during or after school hours. Your child may choose to or choose not to respond to the messages that they receive. They may also choose to text the teacher/counselor themselves during the study.
3. Your child will be asked to participate in a total of three (3) interviews with me during the study to speak about their experiences and feelings.
  - a. There will be a 30 min. interview at the beginning and middle of the study and a 45 min. interview at the end.
  - b. All of the interviews will take place after school hours at a time convenient to your child
  - c. Your child can ask to skip any question of the interview if they do not wish to answer it.
  - d. I will be using a website called join.me (works similar to Facetime) that allows your child and me to see each other and speak directly. \*\*The school principal will provide a private computer for these interviews if your child does not have one available to them.
  - e. The interviews will be recorded
4. With your permission, the high school will share with me information about your child to enhance the study's findings. This includes the following four (4) documents: 1) General demographic information (Specifically: Age, Grade, Gender, Ethnicity) 2) Grade 9-12 attendance report 3) Grade 9-12 academic transcript 4) Grade 9-12 behavioral record. \*\*\* You do not have to agree to this for your child to be part of the study. You can say no to one or all of the documents and it is ok.
5. At the conclusion of the study, your child's teacher/counselor will meet with them and remind them that the study has ended and that they will no longer be receiving text messages from the teacher/counselor.

### What are my child's rights during the study?

1. Your child has the right to end your participation in this study at any time for any reason. Ending participation WILL NOT affect their teachers/counselors, their principal, their school, or me. They may choose to stop participation at any time, by speaking to their principal, their teacher, their guidance counselor, or me.
2. Your child has the right to respond or not to respond to the texts from their teacher/counselor.
3. Your child has the right to speak with teachers/counselors as they had prior to the study.
4. Your child has the right to exclude specific things that they have shared or written from the final published study or other publications about the research. If they wish to do this, all they have to do is inform their teacher/counselor or me about what they do not wish to be shared and it will not be included.

Are there any risks to participating in the study?

As a researcher, I must list any reasonable risks, discomforts, or inconveniences that your child may experience as a participant. I have designed the study to minimize the chances of these happening.

- 1) Your child's phone bill may have charges if they use more than their monthly text limit
- 2) Your child may react negatively to the intervention, causing their behavior, attitude, and results in school to become negative
- 3) Your child may reveal information in the texts with teachers/counselors that they do not wish to be a part of the final study publication
- 4) Your child may feel uncomfortable about sharing their private phone numbers with teachers/counselors

What are the potential benefits of participating in the study?

- 1) Your child may develop a better relationship with their school teacher or guidance counselor
- 2) Your child may develop a mentoring relationship with their teacher/counselor and experience social or emotional benefits
- 3) Your child may feel that the school is more supportive of them now than before
- 4) Your child may help to discover a useful way for school adults to communicate with students that may be used in the future
- 5) Your child may find another personal benefit from this study that is not listed here

How is my child's Privacy protected during the study?

1. To protect your child's real identity, I will use a fake name, in place of their real name, on everything related to the research.
2. I will use a secure data storage location to make sure what your child shares is kept safe.
3. All interview recordings will be permanently destroyed after having been written down word for word. The written copies of them will be kept in a secure database.
4. Any and all paper copies collected from the research will be kept for one (1) year in a secure place in my home. After this time, all copies will be scanned into a secure computer database and the files kept for five (5) years - to be used in further data analysis or publication. After five (5) years, files will be permanently erased or destroyed.
5. I may choose a professional service company to write down word for word what was said during the interviews. The company will be required to sign a Confidentiality and Privacy Agreement requiring all data saved on their servers to be erased
6. \*\*\* During this study, I may consult with my supervising professor, Dr. Marc Brasof at Arcadia University and share any and all information from texts or interviews. As supervising professor he is bound to keep all information shared confidential.

Are there times when information my child shares may NOT BE PRIVATE?

Yes. There are two events when this may happen.

1. Your child's teachers, counselors, and I are required to report abusive, potentially dangerous, or physical or mentally harmful behaviors appropriately as Mandatory Abuse Reporters in the state of Pennsylvania. This is the same standard that exists in school now and will be applied to the text messaging in this study.

2. During this study, as a student within the Northampton High School, the messages that your child sends will be routed through and stored on the school email servers. In the unlikely event that the principal deems it necessary, the administrative staff at the school may read the contents of your child's text messages that occurred during the study.

If my mobile phone bill increases because of the text messaging during the study, will I be compensated?

Yes. During the study, if your mobile phone bill charges from text messages only are more than the \$30 originally given at the beginning of the study, you must do the following:

1. Email a copy of the bill to me that show charges associated only with text messages have gone above the current data plan.
2. I will pay you for these added charges and send a receipt to you for this amount (This may take the form of a bank transfer or certified check)

Will I get to see the findings of the research when it is completed?

Yes. When we are finished the research, both you and your child will have the option to meet with me or have your own copy of the report. Afterwards, I also may be going to meetings and sharing what we have learned with other researchers and educators.

Can get help if anyone thinks the study is having a negative effect on my child? Or can my child just stop participating in the study if they don't want to do it anymore?

Yes. If your child is having trouble, we will have a meeting to make things better for them if we can.

Your child does not have to be a part of this research and can stop for any reason at any time. No one will feel angry, or upset with him or her if they choose not to participate. It is their choice. They or you can say "yes" now and change your mind later. They or you may contact your principal, your teacher, your guidance counselor, or me via email, phone, text, or even during an interview.

Can I contact someone during the study if I have a question or comment?

Yes. If you have questions, concerns, or wish to end participation in the study you may contact:

The school Principal

Your child's school counselor

Your child's teacher for the study

The researcher, Nicholas Gilly – by email [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)

The supervising professor, Dr. Marc Brasof –by email [mbrasof@arcadia.edu](mailto:mbrasof@arcadia.edu)

This study has been approved by the Arcadia University Institutional Review Board (IRB). To ensure that this research continues to protect your rights and minimizes your risk, the IRB reserves the right to examine and evaluate the data and research protocols involved in this project. If you wish to know more about your rights, please contact the Office for the Committee for the Protection of Research Subjects at (267) 620-4111.

## Part 2: Certificate of Consent

### Part 2 A: General Participation Consent

I have read the information about participating in this study. I have had my questions answered and know that I can ask questions later if I have them. I understand that this research study is trying to find better ways to communicate with students in schools. I understand that my child will be giving his or her teacher/counselor their mobile contact information and they will be using that to communicate with them during the study. I understand that my child will be participating in interviews during the study with the researcher using virtual meeting software as the researcher is not living in my immediate area. I understand the rules responsibilities or my child as a student at my school.

\_\_\_\_\_ I agree for my child to take part in the research and they own/use a mobile device capable of receiving text messages.

**Only if parent consents:**

Print name of student: \_\_\_\_\_

Signature of student: \_\_\_\_\_

Date (month/day/ year): \_\_\_\_\_

### Part 2 B: Demographic and Academic Information Sharing Consent

Please check the following boxes to indicate if you wish to share general demographic, attendance, behavioral, and academic information with the researcher for the purposes of this study.

**\*\*Your child can still participate in the study if you decide not to share this information.**

I agree to share

I DO NOT agree to share



General demographic information  
(Age, Grade, Gender, Ethnicity)



Grade 9-12 attendance report



Grade 9-12 academic transcript



Grade 9-12 behavioral record

**Only if parent consents:**

Print name of student: \_\_\_\_\_

Signature of student: \_\_\_\_\_

Date (month/day/ year): \_\_\_\_\_

Appendix E  
Initial Student and Counselor Interview Data Collection Sheet

Student: \_\_\_\_\_

Time: \_\_\_\_\_ Date \_\_\_\_\_

Counselor Name \_\_\_\_\_

Semi-Structured Interview Question	Response
<p>How would you characterize your relationship with the student/ teacher/ counselor from your personal perspective? (Examples: Positive: empathetic, warm, genuine, directive, encouraging, satisfying, emotional or Negative: intrusive, bothersome, annoying, probing, sterile)?? (Cornelius-White, 2007)</p>	
<p>How often do you speak with your teacher/counselor/ Student? (Counselor Initiated, Student Initiated, Incident Initiated) What have you or do you generally talk about? (Cornelius-White, 2007; Roorda et al., 2011).</p>	
<p>How would you describe the way you/ your counselor</p> <ol style="list-style-type: none"> <li>1) cares</li> <li>2) engages</li> <li>3) motivates you?</li> </ol> <p>(Sabatelli, Anderson, &amp; LaMotte, 2005)</p>	
<p>Do you feel as though you/ your counselor provide(s) support with any of the following? If so, how, If not, why not?</p> <ol style="list-style-type: none"> <li>1) Problems with adults</li> <li>2) Problems with peers</li> <li>3) Modeling behavior/ thinking</li> <li>4) Helping to navigate challenging situations</li> <li>5) Making positive decisions</li> <li>6) Communicating with family</li> </ol> <p>(Sabatelli, Anderson, &amp; LaMotte, 2005)</p>	
<p>What is your perception of the student's/ your perception of school, school success, after high school? (Sabatelli, Anderson, &amp; LaMotte, 2005)</p>	
<p>What are your feelings/ outlook about being contacted via text message from the student/counselor?</p>	
<p>Do you have anyone in your life that you consider a mentor or role model?</p>	
<p>Additional Comments/ Questions</p>	



Appendix F  
Ongoing Counselor- Student Interaction Data Collection Sheet

Student: \_\_\_\_\_  
\_\_\_\_\_

Date (Date Range):

Counselor Name \_\_\_\_\_

Interaction type (circle one):

Counselor Initiated (TCI):	Professional	CI Casual	CI Mobile	
Student Initiated (SI):	Formal	SI Casual	SI Mobile	Other

Additional Comments:

What type of topics were discussed?

How would the emotional/ personal connection between you and the student characterized (empathetic, warm, genuine, directive, encouraging, satisfying, emotional, ect)?

Were any successive contacts created from the initial?

Additional Comments:

Appendix G  
Ongoing Counselor Semi-Scripted Interview Questions

Counselor Name: \_\_\_\_\_

Date: \_\_\_\_\_

Semi-Structured Interview Question	Response
How would you now characterize your relationship with the participant students from your personal perspective? Have you noted any changes in the relationships?	
How often has been the frequency and type of contact with these students? What do you talk about?	
Do you notice any changes in the way that you care, engage, or motivate the students?	
Do you feel as though you are providing support with any of the following? If so, how, If not, why not? 1) Problems with adults 2) Problems with peers 3) Modeling behavior/ thinking 4) Helping to navigate challenging situations 5) Making positive decisions 6) Communicating with family (Sabatelli, Anderson, & LaMotte, 2005)	
What is your perception of the students' outlook about school, school success, after high school? (Have you noticed any changes)	
How would you describe the process of reaching out to the student via mobile device? What is your approach? What has gone well? What is a challenge?	
Do you detect, either personally or from the students, any emotional/ personal changes that you would attribute to the intervention (text messaging)?	
<b>About how much time do you feel you spend texting as part of this study?</b> <b>Do you find the time you spend texting interfering with your professional duties in or outside of school?</b> <b>Do you find the time you spend texting interfering with your personal life/ responsibilities in or outside of school?</b>	
Additional Comments/ Questions	

Appendix H  
Student Semi-Scripted Interview Questions

Student Name: \_\_\_\_\_

Date: \_\_\_\_\_

Semi-Structured Interview Question	Response
How would you now characterize your relationship with the teacher/counselor from your personal perspective? Have you noted any changes in the relationships?	
How often have you been in contact with your counselor? In what way? What do you talk/ communicate about?	
Do you notice any changes in the way you/ they care, engage with, or are motivated by the counselors?	
Do you feel as though your counselor is supporting you with any of the following? If so, how, If not, why not? 1) Problems with adults 2) Problems with peers 3) Modeling behavior/ thinking 4) Helping to navigate challenging situations 5) Making positive decisions 6) Communicating with family	
What is your outlook about school, school success, after high school? Has you noticed that it has changed?	
How What do you think or feel about the way that counselors have gone about text messaging you? How does it happen? What has gone well? What had not?	
Do you think you have changed, or your counselor has changed because of the intervention (text messaging)?	
If reaching out via mobile device was used again by a counselor with another student, would you have any suggestions to share with them?	
Additional Comments/ Questions	

Appendix I:  
Concept List for Counselors

List concepts are representative of the research about improving mentoring relationships and adolescent text preferences

- 1) Initiation of contact and relationship building toward mentorship begins with common experiences or contexts (Black, Suarez, & Medina, 2004)
- 2) Goals for at-risk students are not always rooted in traditional academic learning. However assistance with those goals will demonstrate respect for the student's individual autonomy (Alivernini & Lucidi, 2011)
- 3) Denial of an attempt to connect, can have damaging effects on future attempts to establish a relationship (Black, Suarez, & Medina, 2004)
- 4) It is of greater importance for mentees to be guided than taught or instructed (Black, Suarez, & Medina, 2004).
- 5) Modeling desired behavior, positive affirmations about relationships, individual goal-setting behavior in one's own life can be transferred to mentors (Collier, 2005; Johnson, 2003; Brown, 2004)
- 6) In order for caring acts to have effect, they must be mutually accepted by both parties (Collier, 2005)
- 7) Academic performance in the classroom does not mean that students have low self-efficacy or motivation (Ohrman & Preston, 2013)
- 8) Individual goal statements are only effective if they have meaning to the student (Ohrman & Preston, 2013)
- 9) When individuals can immediately integrate what they have learned from a relationship, the potential for increasing the relationship strength is multiplied (Welsh & Dixon, 2016; Anda, 2001)
- 10) Demonstrating the virtues of care, integrity, courage, and prudence, are core to strong mentoring relationships (Wilson & Johnson, 2001; Johnson, 2003; Wilson & Deane, 2001; De Anda, 2001)
- 11) Failure over many years can dull a student's general enthusiasm towards school, and academic motivators may not appeal to them (Ohrman & Preston, 2013)
- 12) Senior students were found to have more motivation towards academics over underclassman (Ohrman & Preston, 2013)
- 13) Personalized messages appear to be well-accepted by recipients (Buller et al., 2014).

- 14) The initial approach to the student is important, and should be performed in a manner in line with trust and relationship building theories (Wilson & Deane, 2001, Bernstein-Yamashiro, 2004, Hazler & Denham, 2002, & Phillip & Hendry, 2000)
- 15) - It is acceptable to use a student's natural network of friends to help establish an initial relationship (Ahrens, DuBois, Lozano & Richardson, 2010, Fritzberg & Alemayehu, 2005, & Southwick, Morgan, Vythilinggam & Charney, 2005).
- 16) Since students are more likely to seek help after a previous episode that was positive, help givers should focus on those positive experiences. Students tend to seek help from those people where they have had a previous and open relationship (Wilson & Deane, 2001).
- 17) Nonjudgmental manner was a factor listed by some youth as being an important part of the mentor-mentee relationship (De Anda, 2001).
- 18) The use of emoticons through texting helps a user to express emotion that is less easily construed through alpha type (Igarashi, Motoyoshi, Takai, & Yoshida, 2008).
- 19) Students look to teachers to confirm that they are normal and can learn if taught well (Bernstein-Yamashiro, 2004).
- 20) Mentors were likely to talk about success and failures from their own experiences in life (Sanchez, Esparza & Colon, 2008).
- 21) Adult relationships with students are an important to validate and enable reflection amongst students (Collier, 2005; Bernstein-Yamashiro, 2004).
- 22) Students did not report seeking help from any teachers that appeared to them as threatening or who discourage them to take intellectual risks (Bernstein-Yamashiro, 2004).
- 23) In the daily life, not all youths view the problems they are facing as great enough to seek help from others (Wilson & Deane, 2001).
- 24) Starting with everyday conversations that do not focus on "potential problems" makes students feel more comfortable (Wilson & Deane, 2001).
- 25) There is a strong value in listening to these students to understand why they may not be interested in learning in school (Ohrman & Preston, 2013; Bernstein-Yamashiro, 2004).
- 26) Although youth may be talented in an area, this can be obscured by boredom, feeling alienated, or discouraged, ultimately resulting in dropping out of school (McCluskey, Noller, Lamoureux & McCluskey, 2004).

Appendix J:  
Initial Mentoring Quality Coding Matrix – Research Question 1

**1. Befriending**

**a. Demonstration of Person as Individual**

- i. Discussion of everyday, general life – not directly engaging only in problems or concerns (Wilson & Deane, 2001).
- ii. Personalization of communication (Buller et al., 2014)
- iii. 2004) Invite participation in mutual interest activities (Black, Suarez, & Medina, 2004)
- iv. Take genuine interest in thoughts and questions" (Black, Suarez, & Medina, 2004)
- v. Demonstrate respect for individual autonomy (Alivernini & Lucidi, 2011)

**b. Demonstration of Emotional Response**

- i. Expression of emotion through emoticons (Igarashi, Motoyoshi, Takai, & Yoshida, 2008)
- ii. Share his or her personal beliefs (Black, Suarez, & Medina, 2004)
- iii. Demonstrate empathy regarding concerns (Black, Suarez, & Medina, 2004)
- iv. Discuss personal relationships (Collier, 2005; Johnson, 2003; Brown, 2004)
- v. Discuss personal concerns and problems (Black, Suarez, & Medina, 2004)

**c. Demonstration of Virtues**

- i. Conversation that demonstrate trust (Wilson & Deane, 2001, Bernstein-Yamashiro, 2004, Hazler & Denham, 2002, & Phillip & Hendry, 2000)
- ii. Mutual acceptance (give and receive) of caring gestures (Collier, 2005)
- iii. Be authentic, natural, genuine, and honest (Black, Suarez, & Medina, 2004)
- iv. Demonstrate trustworthiness (Black, Suarez, & Medina, 2004)
- v. Discussions of topics of Courage and Integrity (Wilson & Johnson, 2001; Johnson, 2003)

**2. Modeling and Coaching**

**b. Modeling**

- i. Evidence that communication resulted in student action (Welsh & Dixon, 2016; Anda, 2001)
- ii. Offer advice without demanding action (Black, Suarez, & Medina, 2004)
- iii. Model ethical behavior (Black, Suarez, & Medina, 2004)
- iv. Brainstorm a variety of ways to conceptualize a problem (Black, Suarez, & Medina, 2004)
- v. Brainstorm examples of ways to handle concerns or problems (Black, Suarez, & Medina, 2004)
- vi. Sharing personal experiences or success and failure (Black, Suarez, & Medina, 2004; Sanchez, Esparza & Colon, 2008).

**c. Coaching**

- i. Show of enthusiasm towards academics (Ohrtman & Preston, 2013)

- ii. Encouragement and conversation involving reflection (Collier, 2005; Bernstein-Yamashiro, 2004)
- iii. Discuss common situations and contexts of life (Black, Suarez, & Medina, 2004)
- iv. Challenge each other to be your best (Black, Suarez, & Medina, 2004)
- v. Demonstrate good listening skills (Black, Suarez, & Medina, 2004)
- vi. Provide feedback on behaviors and conversations (Black, Suarez, & Medina, 2004)

### **3. Professional Counseling**

#### **d. Professional Ethics**

- i. Discussion of professional and personal boundaries (Prudence) (Wilson & Johnson, 2001)
- ii. Discuss professional concerns and problems (Black, Suarez, & Medina, 2004)
- iii. Model appropriate supervision behaviors (Black, Suarez, & Medina, 2004)
- iv. Model appropriate counseling behaviors (Black, Suarez, & Medina, 2004)

#### **e. Professional Responsibilities**

- i. Exchanges about personal and academic goal setting (Alivernini & Lucidi, 2011)
- ii. Discuss professional competence and training (Black, Suarez, & Medina, 2004)
- iii. Demonstrate value of the mentor/ mentee relationship (Black, Suarez, & Medina, 2004)
- iv. Directly identify as a mentee/ mentor (Black, Suarez, & Medina, 2004)
- v. Discussion of socio-emotional or psycho-social concerns (McCluskey, Noller, Lamoureux & McCluskey, 2004).

### **4. Encouraging and Sponsorship**

#### **a. Encouragement**

- i. Problems are approached non-judgmentally and with a sense of normalcy (De Anda, 2001).
- ii. Discuss or utilize a students peer social network (Ahrens, DuBois, Lozano & Richardson, 2010, Fritzberg & Alemayehu, 2005, & Southwick, Morgan, Vythilinggam & Charney, 2005).
- iii. Discussion of self-efficacy, academic self-efficacy, and personal motivation (Ohrman & Preston, 2013)
- iv. Provide answers to questions posed (Black, Suarez, & Medina, 2004)

#### **b. Sponsorship**

- i. Recommend or provide options for participation in activities (Black, Suarez, & Medina, 2004)
- ii. Offer opportunities for assistance (Black, Suarez, & Medina, 2004)
- iii. Support communication with other peers (Black, Suarez, & Medina, 2004)
- iv. Introduce you to other peers or connections (Black, Suarez, & Medina, 2004)

Appendix K:  
Initial Mentoring Quality Coding Matrix – Research Question 2

1. Outcome 1: Youth personal adjustment
  - a. Personal power/self efficacy
  - b. Self-esteem
  - c. Sense of purpose
  - d. Positive view of the future \*
2. Outcome 2: Youth social competencies
  - a. Empathy
  - b. Cultural competence
  - c. Resistance skills (Resisting Negative Choices) \*
  - d. Conflict resolution skills \*
3. Outcome 3: Relationships with family
  - a. Family support
  - b. Positive family communication \*
  - c. Family cohesion
  - d. Parental involvement and monitoring
4. Outcome 4: Positive adult/youth relationships
  - a. Perceived social support (from teachers, coaches, mentors, ministers, or others) \*
  - b. Adult role model \*
5. Outcome 5: Positive youth/school connection
  - a. Caring school climate \*
  - b. School engagement \*
  - c. Achievement
6. Outcome 6: Positive youth/peer connections
  - a. Peer support
7. Outcome 7: Positive youth/community connections
  - a. Perceived community support
  - b. Community service
  - c. Involvement in youth programs

(Adapted from Sabatelli, Anderson, & LaMotte, 2005)



## Appendix L Confidentiality and Privacy Agreement for Use with Transcription Services

This Document serves to ensure the confidentiality of information and privacy of individuals during the contracted transcription service agreement between researcher Nicholas Gilly and \_\_\_\_\_ *insert name of transcription service* \_\_\_\_\_ during any services rendered for the research information pertaining to the study Using Mobile Devices to Bridge Face-to-Face Communication Between At-Risk Students and School Counselors: An Exploratory Study. The below bulleted points outline the confidentiality and privacy terms related to the information shared as services are provided.

1. I, \_\_\_\_\_ *insert transcription company name* \_\_\_\_\_ agree to maintain full confidentiality of all research data received from the research team related to this research study.
2. I will hold in strictest confidence the identity of any individual that may be revealed during the transcription of interviews or in any associated documents.
3. I will not make copies of any audio-recordings, video-recordings, or other research data, unless specifically requested to do so by the researcher.
4. I will not provide the research data to any third parties without the client's consent.
5. I will store all study-related data in a safe, secure location as long as they are in my possession. All video and audio recordings will be stored in an encrypted format.
6. All data provided or created for purposes of this agreement, including any back-up records, will be returned to the research team or permanently deleted. When I have received confirmation that the transcription work I performed has been satisfactorily completed, any of the research data that remains with me will be returned to the research team or destroyed, pursuant to the instructions of the research team.
7. Upon request, all data associated with this research saved on \_\_\_\_\_ *insert company name* \_\_\_\_\_ data storage will be completely and permanently erased.
8. I understand that the researcher, or associated university has the right to take legal action against any breach of confidentiality that occurs in my handling of the research data.

Transcription Company Authorized Representative Name

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Transcription Company Authorized Representative Signature

Date

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(Adapted from Social and Behavioral Sciences Institutional Review Board, University of Chicago, 2017)

## Appendix M: Initial Study Recruitment Letter to Parents

This email is being sent on behalf of Nicholas Gilly, researcher, Arcadia University.

Dear Parent/ Guardian,

My name is Nicholas Gilly. I am a researcher from Arcadia University and I am doing a study here at Suburban High School. You are receiving this email because your child was selected as a person who may be interested in participating and benefiting from the study. This email describes, in general, what I will be studying and to see if you have some interest in hearing further information, and maybe even having your child participating. After reading this email if you have interest, you and your child will have a meeting with me, via virtual meeting software (like using Facetime) over the computer or over the telephone, and I will explain the study much more deeply. After meeting with me, if you and your child decide that you would like to participate, I will provide you the official permission paperwork to sign.

Contacting me after reading this email, and hearing more about the study does not, in any way, commit your child to participating in the study. It just means that you have interest and wish to learn all of the details. You can choose not to participate. If you do not wish to hear more information, or wish not to participate, don't respond to this email.

Study in general terms explained:

1. We want to find better ways for teachers and counselors to communicate with students. Not all students feel as though they have good relationships their teachers, or feel comfortable speaking face-to-face with them. This research is being done to see what happens if a teacher or counselor used text messages to communicate with a student.
2. Your child was chosen as a potential participant because a teacher or counselor has identified you as a student with whom they wish to have a better relationship.
3. In short, if you decide for your child to become part of the study, the following things will happen:
  - *Your child will be asked to give their mobile phone number information to me, to be then shared with their teacher/counselor. Their number will not be shared with any other person and will be deleted from the research file at the conclusion of the study.*
  - *Your child's teacher/counselor will begin to send text messages to their mobile phone. This may occur during or after school hours. Your child may choose to or choose not to respond to the messages that they receive. They may also choose to text the teacher/counselor themselves during the study.*
  - *Your child will be asked to participate in a total of three (3) interviews with me during the study to speak about their experiences and feelings. One at the beginning, one during the middle, and one at the end of the study. All of the interviews will be ½ hour long, except the final interview, which may be a maximum of 45 minutes.*

4. Participation is voluntary. Your child does not have to be in this research if you or they do not want to be. It is your choice. If they decide not to be in the research, it's okay. (Nothing changes in school or otherwise. Things will remain as they have before). If you or they decide to say "yes" now, you can change your mind later and its still alright. You or your child may choose to stop participation at any time, by contacting their principal, their teacher, their guidance counselor, or me.
  5. If you have further interest in participating, I will explain the extensive steps taken to make sure the rights and privacy of the students participating is protected.
- 

If you and your child have interest in participating at this point (you can change your mind later) or you have further questions you wish to ask me:

- 1) Forward this email to my email address - [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)
- 2) Please indicate in the email
  - a. Your preferred email address of contact
  - b. Phone number where you may be reached
  - c. The full name of yourself
  - d. The full name of your child
  - e. Your preference for a video chat or telephone conversation for the follow-up introductory meeting
  - f. Some dates and times that you may be available to have a follow-up meeting with me to explain the study further
- 3) I will return you email right away and make great effort to accommodate your desired meeting times with you and your child to explain the study much further.

Please forward all questions or inquiries directly to Mr. Gilly at [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)

Thank you very much for your consideration to this study.

Mr. Nicholas Gilly

Researcher  
Arcadia University  
Email: [ngilly@arcadia.edu](mailto:ngilly@arcadia.edu)

## Appendix N: Clicksend Instructions for Counselors

## How to use Clicksend to email a text message to students

This document includes instruction about using Clicksend for this research study intervention to send your weekly messages to students. This is a method, currently employed by thousands of schools world-wide, that allows a school person to email a message that is received by another person in text message form.

### Important Notes about using Clicksend

1. Unfortunately, modern emoticons or pictures cannot be used with this system. Therefore it will be advantageous that you inform the students that your device cannot receive emoticons. If they attempt to use them, they will simply not come through the message at all. This clarification will help with communication between the two of you
2. \*\*\* This process has been tested using handheld mobile phones using email to another mobile phone using text messages on multiple occasions. The process of exchanging the email format and resending the message was found to take under three (3) seconds, ie. in line with the speed of a normal text message. Therefore, if you wish to do so, you can use your email on your mobile phone or laptop computer as if in a normal text conversation with normal speeds.
3. All messages sent and received in this format are thusly saved on the school servers as any other normal email would be saved. Therefore they are an added protection in case any messages are not appropriate and will be readable by school administration.

## Instructions

You have received a copy of the mobile phone number of the students you will be paired with during this study. It is in the format commonly used as below:

1-444-555-6666

For using Clicksend, we will refer to the number using the number without dashes (all numbers)

14445556666

So, this is how it works for you...

1. Open up a blank email message for sending
2. In the address bar, write the telephone number of the student@sms.clicksend.com. (No spaces between numbers)
  - a. Example: 14445556666@sms.clicksend.com
3. In the subject line you can write anything that you wish to write that may help you organize your emails for this study. The subject line is not sent, nor can be seen in the SMS message.
  - a. Example: Study Student #1
4. In the body of the email, write what you wish to communicate
  - a. Example: Hi #1,  
You sure are # 1. Hope your day is well. Don't worry be happy and all that Jazz.  
Ms. Jones
5. Then click send like you would any other email. The message is now sent to the student. The student will receive the message in about 2-3 seconds, generally speaking depending upon your school server speeds at the time.
6. When the student replies back, you will receive a message with the subject line entitled:
  - a. Subject: SMS reply from 14445556666@sms.clicksend.com.
7. You can then open the email, replay as you would to a normal email at the top of the written page. Everything that you type, will become a part of the new message to the student. Again- the subject line will not be included in the message in any way.

And that is it- it is that simple.

In a more technical sense, for those who are interested, this is what is occurring on both user ends:

1. Teacher/ Counselor writes and email to a student.
2. In the address bar, the teachers writes the telephone number of the student@sms.clicksend.com. (12156679876@sms.clicksend.com)
3. The email is send to the Clicksend server where the format is changed from email to SMS.
4. The SMS version of the email is sent to the student's phone.
5. The student can respond to the text in a normal fashion.
6. The text will be sent back to Clicksend, where the format is changed from SMS format into email.
7. The email is then sent to the teacher who originated the message and will be received in his or her email box.
8. They can reply as with a normal email and repeat the process as a conversation if they so choose