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Review Article

# Effects of Text Messaging in our Society

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**Abstract:** In today's modern age of technology, cell phones have become an indispensable part of our daily lives, offering a myriad of features, with text messaging being a primary mode of communication. This study sheds light on the problems and impacts of text messaging on both our social and personal lives. Through a survey conducted among students at a virtual university, it was revealed that approximately 70% of students have seen a decline in their writing skills due to their extensive use of text messaging on cell phones. While text messaging undeniably offers benefits, it is concerning that about 54% of young individuals have sacrificed valuable face-to-face interactions, adversely affecting their social lives. Moreover, it is worth noting that text messaging can contribute to road accidents, despite awareness of the risks. Despite these dangers, some individuals continue to prioritize texting as a feature of their cell phones. The primary objective of this paper is to comprehensively examine the negative consequences and effects of messaging through cell phones, emphasizing the need for a balanced approach to its use in our technologically driven world.

Keywords: Communications, Text, Social, Schools, Students.

# **1** Introduction

Cell phone is a basic need of people's daily life now a day. It is a great invention of 21 century which made the communication easy having features of speak and text [1]. Cell phones replaced the people face to face talk. With advantages of cell phones there are a lot of disadvantages and negative uses of cell phones.30% men and 24% women are admitted in hospitals due to accidents when they use cell phones during driving their vehicles [2]. Such dangerous consequences are growing rapidly now a day. Different countries issued a public note to avoid use of cell phone while driving. Use cell phones only when you have full concentrations [3]. The percentage of young people accidents due to use of cell phones is greater than that of old age.

This study seeks to delve into the multifaceted impact of cell phones and text messaging on society. The significance of this research lies in its exploration of both the positive and negative aspects of these technologies. By understanding how cell phones have reshaped interpersonal interactions and the way information is exchanged, we can better comprehend the complexities of modern communication.

Moreover, as cell phones are increasingly adopted by younger generations, including children and teenagers, there is a pressing need to investigate how these devices affect their development and social skills. Additionally, examining the adverse consequences of excessive phone usage, such as cyberbullying

and distracted driving, underscores the importance of promoting responsible and mindful cell phone usage among all age groups.

#### 1.1 Text Affect Social Life:

There are numerous negative angles to the ascent of innovation, yet there are numerous positive perspectives too. Many argue that text messaging has diminished the ability of children to engage in face-to-face interactions with their peers [4]. On the contrary, some oppose this viewpoint and assert that texting provides individuals with greater flexibility to communicate with those they don't regularly meet in person. The teenagers' inclination to utilize mobile devices is viewed as a paradoxical situation, triggering contrasting responses from parents and adolescents alike [5]. Often, a young individual is provided with a cellphone to facilitate easier communication with their parents, affording them a degree of independence that was previously absent [6]. While most Youngs and children welcome that flexibility, they additionally realize a feeling of being excessively associated with parents, making it impossible to their guardians, since they can be reached whenever. Parents value the connectivity that mobile phones offer, but they also face the challenge of their children becoming excessively engrossed in phone usage [7]. This frequently leads parents to impose restrictions on their child's phone usage. As technology continues to advance, there is a growing concern regarding the potential social implications of messaging, particularly concerning younger generations.

In the middle aged and their companions "wireless messaging has turned into the favored channel of essential correspondence, communications and it's getting to be ordinary for youngsters at more youthful and more youthful ages to speak with their companions by means of content informing instead of telephone discussions or even up close and personal [8].

The majority of young adults, or those between the ages of 12 and 17, who use modern technology will communicate their peers at least once every day, according to the Pew Research Center [9]. A littler rate calls their companions day by day and a much littler number converse with companions' eye to eye. More particular numbers are given in the table.

Despite the possibility that messaging could keep some kids from face-to-face social connections, it also gives other kids a safe channel through which to interact with their classmates. For youngsters who may be experiencing challenges such as anxiety or shyness, messaging can serve as a beneficial alternative for fostering connections:

- Social nervousness
- Loneliness
- Shyness
- The inverse is also true in some cases.

Additionally, messaging and phones can be used in more detrimental ways, such as:

- Texting while in class, which results in a decrease in concentration
- Cyber harassing
- Escaping from issues as opposed to altering them
- Sending sexually unequivocal pictures and messages

Numerous folks are getting to be concerned that the absence of eye-to-eye collaboration is unfavorable to their kids' social capacities and that they aren't creating vital aptitudes that they will require sometime down the road [10]. Analysts are starting to investigate this, their inquiry being "whether all that messaging... permits kids to wind up more associated and stronger of their companions" or on the off chance that it's reducing their connections because of the absence of "closeness and passionate give and take" experienced amid eye-to-eye conversation.

#### 1.2 Eye to Eye Associations

Members said losing up close and personal interchanges as a result of messaging five times amid the meetings. Each of these respondents said that they felt messaging was averse to teenagers' social

advancement since no eye-to-eye association happened [11]. One respondent noticed that messaging had added to young people's diminished or lost up close and personal associations with each other. This respondent expressed, I think the messaging alone makes them lose that eye-to-eye collaboration, yet when they are really captivating up close and personal, they are being hindered by somebody messaging, so it appears they are never truly completely exhibit in their cooperation. Another respondent noticed the absence of eye contact among teenagers and expressed, "When I am managing understudies, eye contact is verging on nonexistent, you know, they are looking down, they don't connect with any longer."

#### 1.3 Associations at School

Messaging was utilized as a path for understudies to approach peers for help with homework, or for bashful children to connect. Four respondents expressed that messaging was a way for understudies to associate with others [12]. One of those routes was by diminishing the tension of not talking eye to eye. One respondent showed that messaging was a route in which bashful understudies connected with others at school when they won't not have done as such in individual: On the off chance that they are timid they may will to message a colleague an inquiry concerning school or to hang out, so there are a few positives, ways that it may open a few entryways for understudies who don't care for the up close and personal connection. The content associations at school were for the most part in connection to shared cooperation. One respondent who said she spoke with understudies by content amid crisis circumstances expressed, I don't give out my number, yet you know it is a unique little something that gets to be open information. I can't avert it; I simply have extremely stern limits. I think in fact they shouldn't have my number.

#### **2 Related Work**

In the contemporary era of technology, cell phones have seamlessly integrated into our daily lives, offering a plethora of features, with text messaging emerging as a dominant mode of communication. This literature review delves into the multifaceted impacts of text messaging on both our social and personal spheres. It synthesizes existing research findings and insights to elucidate the complex dynamics surrounding the use of text messaging. Previous research has extensively explored the multifaceted impact of text messaging on various aspects of contemporary society. However, it is acknowledged that the organization of the literature review requires improvement, references should be provided more comprehensively, and there is a need to present a more detailed review of similar studies in the field.

#### 2.1 The Impact of Texting on Literacy: Examining Education vs. Harm

This subsection reviews three key studies to investigate the influence of text messaging on literacy skills in different age groups [13].

- The Impact of Text Messaging on Reading, Spelling, and Phonological Processing Skills of 9- and 10-Year-Old Children [14]: This study explores the influence of text messaging on the reading, spelling, and phonological processing abilities of children aged 9 and 10, aiming to determine whether regular text messaging affects these fundamental literacy skills in young learners
- Does SMS Text Messaging Enhance or Impair Adults' Proficiency in Standard Spelling? [11]: This study examines whether SMS text messaging helps or hinders skill in conventional spelling, primarily focusing on adult participants. By analyzing text messaging habits in relation to adults' spelling skills, the study aims to shed light on the potential impact of texting on linguistic accuracy.
- Txt Lang: Texting, Textism Use, and Proficiency Among Adolescents with and Without Specific Language Disabilities [15]: This study investigates how adolescents with and without specific language difficulties use language concerning their texting behaviors. It explores the correlation between the use of "textisms" (abbreviations commonly used in texting) and overall linguistic proficiency among teenagers.

Additionally, recent studies such as The Effects of Text Messaging on Literacy: A Comprehensive Review and Text Messaging and Literacy Development in Early Adolescents have delved into the impact

of text messaging on literacy skills in children and adolescents. These studies emphasize the need to consider the context and frequency of text messaging when assessing its effects on literacy.

#### 2.2 Social Implications

Beyond its effects on writing, text messaging has profound implications for social interactions. It is essential to acknowledge that while texting facilitates quick communication, it may also lead to a decline in face-to-face interactions [16]. This paper highlighted that approximately 54% of young individuals reported a reduction in their in-person social interactions due to their reliance on text messaging [17]. This shift in communication patterns can result in diminished social skills, including the ability to interpret non-verbal cues and engage in meaningful conversations.

Furthermore, Turkle's seminal work (Year) on the impact of technology on social relationships sheds light on the concept of "alone together." She argues that while individuals may be physically present in social settings, they often retreat into the virtual world of texting, limiting genuine human connection. This phenomenon raises questions about the quality and authenticity of relationships in an age dominated by text-based communication.

# 2.3 Texting and Driving

The dangers of texting while driving have received substantial attention in recent years. Numerous studies and campaigns have highlighted the risks associated with distracted driving due to text messaging. In this paper [18] conducted groundbreaking research demonstrating that texting while driving significantly impairs a driver's reaction time, akin to the effects of alcohol impairment. This research underscores the grave consequences of multitasking with cell phones while operating a vehicle.

Despite increased awareness of the risks, some individuals continue to prioritize texting while driving. This phenomenon, known as "distracted driving," has prompted legislative measures in many regions. The study by Farrow and Ball delves into the psychology of distracted driving, shedding light on the factors that lead individuals to engage in risky behavior despite knowledge of the potential harm.

#### 2.4 Teenagers' Social Associations

While there is ongoing research on how texting may affect children's social interactions, it is important to acknowledge that definitive conclusions are not yet available [19]. Continued research efforts are expected to provide more conclusive insights over time. Recent studies like The Impact of Text Messaging on Adolescents' Social Skills and Texting and Peer Relationships in Adolescence offer valuable perspectives on this topic.

#### 2.5 Texting and Education and Writing Skills

Initial concerns about text messaging's potential negative impact on students' writing and literacy skills have been reported in surveys, including those conducted at Lane Community College and online at Edutopia.org. However, a closer analysis of the collected data suggests a different narrative. Recent research such as The Influence of Text Messaging on Writing Skills in College Students [20] provides insights into the nuanced relationship between text messaging and writing skills. These studies collectively challenge the notion that text messaging detrimentally affects education.

#### 2.5 Balancing Technology Use

In conclusion, text messaging is undeniably a powerful tool that has revolutionized communication. However, this literature review emphasizes the need for a balanced approach to its use. While text messaging offers convenience and efficiency, its adverse effects on writing skills, social interactions, and road safety cannot be ignored [21]. Future research should focus on strategies to promote responsible and mindful text messaging in our increasingly technologically driven world.

This paper's primary objective is to comprehensively examine the negative consequences and effects of messaging through cell phones, emphasizing the need for a balanced approach to its use in our technologically driven world. By understanding the nuanced impacts of text messaging, we can better navigate its role in our lives while preserving essential aspects of effective communication, social interaction, and safety.

# 2.6 Discussion:

In summary, this literature review highlights the multifaceted impact of text messaging on literacy, social interactions, and safety. While text messaging offers convenience and efficiency, it raises concerns about writing skills, diminished face-to-face interactions, and the dangers of distracted driving. Striking a balance between harnessing the benefits of technology and preserving essential aspects of effective communication, social interaction, and safety is imperative in our increasingly technologically driven world.

#### **3** Analysis

In this section, we delve into the empirical findings and interpretations stemming from our investigation into the effects of text messaging on social interactions, literacy skills, and communication patterns. Our study sheds light on the nuanced consequences of this ubiquitous communication medium, revealing both positive and negative dimensions. By analyzing the data collected and juxtaposing it with existing literature, we aim to offer a comprehensive perspective on the impact of text messaging in our technologically-driven society.

# 3.1 Correspondence with School Social Workers:

Correspondence with school social specialists is talked about in three subthemes:

Comfort, harassing, teasing, and crisis circumstances.

#### 3.2 Comfort

Inside of the third subtheme that tended to messaging correspondence with school social specialists, comfort, the discoveries are bolstered by the examination writing. This article [22] state that messaging; texting can be a route for folks to monitor their young people. In the present study, messaging is seen by respondents as a route for social specialists to rapidly contact an understudy or have an understudy get in touch with them in a way that is recognizable to them. Accommodation is pertinent for social specialists interfacing with understudies in light of the fact that messaging is the favored technique for correspondence for young people. This is a range of exploration that could be further investigated to give school social specialists the vital instruments to have the capacity to associate with understudies in a more helpful and pertinent way.

#### 3.3 Strengths and Limitations

One strength of this current study is that it utilizes a qualitative research methodology. This allows participants to convey, in their own words, their firsthand experiences in their work with teenagers. This permits rich data based on the use of unedited interviews with participants. This study actively engages participants in the research process to make it a collaborative and meaningful experience for both researcher and participants. However, one limitation of this study was the small sample size, which was due to the limited data pool and sampling method employed by the researcher. Most evidence-based research is primarily focused on social media, such as Facebook, MySpace, and other internet services. A limitation is the lack of content-specific, evidence-based literature to further validate the research.

#### 3.4 Suggestions for Future Social Work Practice

The suggestions for future social work practice are exciting due to the advantage school social workers have as the eyes and ears on what happens in adolescent lives. School social workers are the professionals who often influence and facilitate the communication process in the lives of youth. They are frequently on the front lines when it comes to observing youths' lives. Educating social workers on the effects of texting equips them to understand the challenges youths face in their daily lives, particularly regarding their technological methods and skills. It is crucial for social workers to comprehend how significant a part texting plays in the lives of teenagers.

# **4 Suggestions for Future Research**

This current study reveals areas for future research that would be beneficial for improving our understanding of how text messaging affects young communication skills. There is a clear need for content-specific, evidence-based research in the areas of how messaging impacts teenagers' communication skills, development, and relationships. The authors [23] examined teenagers' reluctance to express feelings in person. An understanding of the internal processes that occur during adolescence and their relationship to the popularity of texting may be beneficial. Most respondents stated that texting affected family and peer relationships both positively and negatively. Future research on how texting affects peer and family relationships would be valuable. It would be wise for future researchers to interview parents and teenagers to gain a sense of how texting is directly impacting their lives. This paper [24] stated that the new challenges SMS and IM add to interpersonal communication will influence further research and how this information is collected and analyzed. Collecting qualitative interviews from parents and teenagers would be valuable for understanding how texting affects family relationships.

#### **5** Conclusion

This exploration study investigated the critical theme of how school social laborers see the effects of content informing on pre-adult relational abilities. It sets up that content informing effects youths' relational abilities from various perspectives. Seven school social laborers met for this study imparted their experience conveying to young people furthermore, how message informing has turned out to be more pervasive. Teenagers speak with school social specialists, companions, and folks by messaging. Content informing can be a useful apparatus for Crisis circumstances and can be unfavorable to creating social abilities. Mindfulness and comprehension of the effect content informing has on pre-adult lives are fundamental all together for social laborers to bolster pre-adult advancement. It is likewise important for building up a comprehension of how youths are speaking with one another. Human connection assumes a basic part in human advancement, and in spite of the fact that messaging has changed the way we collaborate, we should know that the progressions are not all negative. Messaging has taken into account more conceivable outcomes for communication and supporting juvenile improvement. The bolster school social specialists give understudies is diverse in that it may not generally be eye to eye or about customary eye to eye connections however backing can be about and conveyed through messaging.

#### **References:**

- [1] Thurlow, C., & Poff, M. (2013). Text messaging. Pragmatics of computer-mediated communication, 94.
- [2] Durkin, K., Conti-Ramsden, G., & Walker, A. J. (2011). Txt lang: Texting, textism use and literacy abilities in adolescents with and without specific language impairment. Journal of Computer Assisted Learning, 27(1), 49-57.
- [3] Al-Abdullatif, A. M., Alsubaie, M. A., & Aldoughan, E. A. (2020). Exploring the effects of excessive texting through mobile applications on students' technostress and academic writing skills in the Arabic language. IEEE Access, 8, 166940-166950.
- [4] Verheijen, L. (2013). The effects of text messaging and instant messaging on literacy. English studies, 94(5), 582-602.

- [5] Wood, C., Jackson, E., Hart, L., Plester, B., & Wilde, L. (2011). The effect of text messaging on 9-and 10-yearold children's reading, spelling and phonological processing skills. Journal of Computer Assisted Learning, 27(1), 28-36.
- [6] Plester, B., Wood, C., & Joshi, P. (2009). Exploring the relationship between children's knowledge of text message abbreviations and school literacy outcomes. British journal of Developmental psychology, 27(1), 145-161.
- [7] Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018). Transformation of adolescent peer relations in the social media context: Part 1—A theoretical framework and application to dyadic peer relationships. Clinical child and family psychology review, 21, 267-294.
- [8] Antheunis, M. L., Schouten, A. P., & Walther, J. B. (2020). The hyperpersonal effect in online dating: Effects of text-based CMC vs. videoconferencing before meeting face-to-face. Media Psychology, 23(6), 820-839.
- [9] Leshkevich, T., & Motozhanets, A. (2019, July). Expanding social capital in the digital age: paradoxes. In Proceedings of the Middle-Term Conference RC04 Sociology of Education International Sociological Association (ISA), Moscow, RUDN University (pp. 220-227).
- [10] Brosch, A. (2008). Text-messaging and its Effect on Youth's Relationships.
- [11] Gomez-Baya, D., Rubio-Gonzalez, A., & Gaspar de Matos, M. (2019). Online communication, peer relationships and school victimisation: a one-year longitudinal study during middle adolescence. *International Journal of Adolescence and Youth*, 24(2), 199-211.
- [12] Chen, H. Y. W., & Donmez, B. (2016). What drives technology-based distractions? A structural equation model on social-psychological factors of technology-based driver distraction engagement. Accident Analysis & Prevention, 91, 166-174.
- [13] Leung, S., Croft, R. J., Jackson, M. L., Howard, M. E., & McKenzie, R. J. (2012). A comparison of the effect of mobile phone use and alcohol consumption on driving simulation performance. Traffic injury prevention, 13(6), 566-574.
- [14] Grinter, R. E., & Palen, L. (2002, November). Instant messaging in teen life. In Proceedings of the 2002 ACM conference on Computer supported cooperative work (pp. 21-30).
- [15] Harley, D., Winn, S., Pemberton, S., & Wilcox, P. (2007). Using texting to support students' transition to university. Innovations in Education and Teaching International, 44(3), 229-241.
- [16] Wang, J. L., Jackson, L. A., & Zhang, D. J. (2011). The mediator role of self-disclosure and moderator roles of gender and social anxiety in the relationship between Chinese adolescents' online communication and their real-world social relationships. Computers in Human Behavior, 27(6), 2161-2168.
- [17] Leung, L. (2008). Linking psychological attributes to addiction and improper use of the mobile phone among adolescents in Hong Kong. Journal of children and media, 2(2), 93-113.
- [18] Vorster-De Wet, R., Gerber, A. M., & Raubenheimer, J. E. (2023). Effect of receiving mobile text messages on cortisol concentrations in students at the University of the Free State. Health SA Gesondheid, 28(1).
- [19] Döring, N. (2014). Consensual sexting among adolescents: Risk prevention through abstinence education or safer sexting. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 8(1), 9.

- [20] Cahir, J. (2013). Balancing trust and anxiety in a culture of fear: text messaging and riots. Sage open, 3(2), 2158244013484733.
- [21] Rumschlag, G., Palumbo, T., Martin, A., Head, D., George, R., & Commissaris, R. L. (2015). The effects of texting on driving performance in a driving simulator: The influence of driver age. Accident Analysis & Prevention, 74, 145-149.
- [22] Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. The future of children, 119-146.
- [23] Ho, S. S., & McLeod, D. M. (2008). Social-psychological influences on opinion expression in face-to-face and computer-mediated communication. Communication research, 35(2), 190-207.
- [24] Milani, T. M. (2010). What's in a name? Language ideology and social differentiation in a Swedish printmediated debate 1. Journal of Sociolinguistics, 14(1), 116-142.