WE AVEC U PUBLICATION

Journal of Personality and Mental Abilities
An Open Access Peer Reviewed Journal

2025, VOL 02, NO. 02, P. 29-41

ISSN: 3048-8184

Texting and Facial Emotional Cues Recognition Among Young Adults

[1]Rajashree.D, [2]Dr. Darshini. M

[1]B.Sc. Applied Psychology, Dept. of Applied Psychology, Faculty of Behavioural and Social Sciences, Sri Ramachandra Institute of Higher Education and Research, Chennai, Tamil Nadu, 600044, India.

[2]Assistant Professor, Dept. of Applied Psychology, Faculty of Behavioural and Social Sciences, Sri Ramachandra Institute of Higher Education and Research Chennai Tamil Nadu, 600044, India.

Abstract

In an increasingly digitalized world, text messaging has undoubtedly enhanced interpersonal connectivity, however, the psychosocial consequences of this trend have largely been unexplored. Previous literature suggests a neuropsychological link between emotional face expression recognition and problematic internet use, which might interfere with emotional evaluative and regulative mechanisms. However, the direct relationship between texting habits and the ability to recognize facial emotional cues in particular has not been identified. Data was collected from 150 young adults aged 18-25 using convenience sampling. The texting habits were quantified using the SMS Problem Use Diagnostic Questionnaire (2007). To evaluate their capacity to read facial emotional cues, participants were presented with a series of facial expressions depicting various emotions and were asked to identify the emotions displayed. Regression analysis was used to test the relationships between variables. The results indicated that young adults who engage in texting more frequently reported better facial emotional cue recognizing skills compared to those who communicate through texting less frequently. The relationship between the absence of face to-face interaction and its psychosocial consequences might be more complex and not as direct as earlier predicted. Additionally, role of family structure, level of co-curricular activities and other modes of communication are further explored. The study findings would have implications on the development of tech-based social skills training modules as well as identifying potential pathways of other sequelae of long-term prioritizing of text messaging over face-to-face interactions.

Keywords: Facial cue recognition, Text-based communication, technologically mediated interactions

How to cite: Rajashree, D., Darshini. M (2025). Texting and Facial Emotional Cues Recognition Among Young Adults. J*ournal of Personality and Mental Abilities, 2 (2), 29-41.*

Introduction

Texting has emerged as a cornerstone of modern communication, profoundly transforming the way we connect with one another and interact in our increasingly digital world. It has given rise to a new lexicon, characterized by abbreviations, acronyms, and emojis. Critics argue that this linguistic shorthand has led to a degradation of language skills, while proponents maintain that texting represents a natural evolution of language, with its unique rules and conventions. Character limitations inherent to early SMS messages encouraged brevity and conciseness, a trend that continues in modern texting. Emojis, small pictorial representations of emotions and objects, have become an integral part of text-based conversations, adding nuance to expressions and helping convey tone and sentiment. While texting offers undeniable advantages, such as convenience, cost effectiveness, and the ability to maintain a written record of conversations, it is not without its drawbacks.

The absence of nonverbal cues like tone of voice and body language can lead to misunderstandings. Excessive texting can result in social isolation and decreased face-to-face communication which might have implications on the communication skills of the individual.

Development of Communication skills in adolescents.:

Adolescent development is a process that evolves through learning from experiences. During this time adolescent also demonstrate growth in linguistic competence, which is defined as the increased ability to use and understand the abstract meaning of words, concepts, and figurative language such as metaphors (Novak, 2002). The ability to adjust speaking styles according to audience needs and to control and reflect on the ideas that are conveyed also develops in adolescence (Novak, 2002). Adolescents are able to modify their communication to fit the listener's viewpoint (Novak, 2002).

Texting and communication skills

Despite the pervasiveness and popularity of text messaging, especially with young people, research involving text messaging and its social implications is scarce. There is however research to indicate that SMS texting might have an impact on written communication skills among students (Dansieh, 2011), where texting functions lead to students to adopt nonstandard uses and

contracted forms of English words in an academic environment.

Face to face communication:

Face-to-face communication is often regarded as the most authentic and profound form of human interaction. It encompasses spoken words, body language, facial expressions, and the unspoken nuances that convey emotions and intent. This mode of communication transcends the limitations of text messages and phone calls, allowing for a deep and immediate connection between individuals.

In face-to-face communication, individuals experience the full spectrum of human expression. One can perceive not only what someone says but also how they say it—the tone, inflection, and emphasis on certain words—all of which provide valuable context. Body language, including gestures, posture, and eye contact, offers a wealth of additional information that enhances one's understanding of the message being conveyed. For instance, a smile can convey warmth and sincerity, while crossed arms may signal defensiveness or discomfort. These nonverbal cues serve as an essential complement to the spoken word, enabling us to navigate the intricacies of social interaction.

The superiority of texting amongst young adults is a defining function of cutting-edge verbal exchange styles. This demographic, regularly referred to as the "virtual natives," has grown up in a generation in which cell devices and texting have turned out to be ubiquitous tools for staying linked with friends, family, and the world at large. Texting is not just a conversation technique for teenagers; it's a manner of existence that has had a profound effect on how they have interaction, shape relationships, and navigate the modern-day global.

Texting affords young adults with a brief and handy means of communique. the benefit of sending and receiving text messages on smartphones permits for immediate connectivity, enabling young human beings to stay in touch with pals and family no matter geographical distances. This immediacy has reshaped the manner they maintain relationships, fostering a non-stop and frequently intimate connection with their social circles.

But, the ubiquity of texting has raised worries as screen time, regularly related to texting and other virtual communique, could have detrimental outcomes on interpersonal and social health. The pressure to preserve regular connectivity and immediate

responses can result in pressure and a sense of social obligation. Additionally, the informality of texting can now and again cause misunderstandings, misinterpretations, and a loss of nuanced communication, which might also have implications for his or her capacity to navigate complex social situations effectively.

In conclusion, the superiority of texting among teenagers is a defining function of their technology's conversation landscape. even as it gives undeniable advantages in phrases of convenience and connectivity, it additionally comes with demanding situations associated with mental fitness and the nice of interpersonal interactions. As this demographic maintains to evolve and evolve in an increasing number of digital international, it's vital to strike a balance among the advantages and capacity drawbacks of this general mode of communication.

Facial emotional cues:

Facial emotional cues, frequently called facial expressions, are a popular and difficult language of human emotions. They serve as a window into our innermost emotions, conveying a considerable spectrum of emotions, from joy and like to anger and disappointment. these cues are essential component of nonverbal communique, allowing us to understand and empathize with others on a profound degree. Our faces are remarkably adept at reflecting our emotional states. whilst we enjoy happiness, our smiles light up our functions, with our eyes crinkling on the corners. Conversely, disappointment is regularly expressed via a downturned mouth, furrowed brows, and drooping eyelids. Anger can occur as narrowed eyes, tightened lips, and a furrowed forehead, even as marvel is conveyed through wide-open eyes and a barely parted mouth. Disgust might lead to a wrinkled nostril and a raised higher lip, at the same time as worry normally consequences in widened eyes and aggravating, open-mouthed expression.

One amazing issue of facial emotional cues is their universality. no matter cultural or linguistic variations, those expressions have a tendency to be diagnosed and understood across the globe. Psychologist Paul Ekman's studies, as an example, diagnosed six ordinary emotions— happiness, sadness, anger, fear, disgust, and marvel—every associated with wonderful facial expressions. This universality underscores the organic and evolutionary foundation of those cues, as they have probably advanced to serve critical capabilities in human survival and social interaction.

Facial emotional cues play a vital position in our ordinary lives. They assist us navigate social situations by using presenting insight into the feelings and intentions of these round us. for instance, recognizing a chum's happy expression can result in shared laughter and celebration, whilst discerning someone's distress allows us to provide support and luxury. In professional settings, the capacity to understand and interpret those cues is critical for powerful conversation and teamwork, because it aids in information colleagues' perspectives and resolving conflicts.

Additionally, facial emotional cues are crucial to empathy, a cornerstone of human connection. whilst we see someone's face mild up with pleasure or contort with pain, our reflect neurons prompt, permitting us to enjoy a semblance in their feelings. This emotional resonance fosters empathy, compassion, and the capacity to construct deeper connections with others.

In conclusion, facial emotional cues are a super and universal language of human feelings. They transcend cultural limitations, offering us a profound insight into the emotional stories of those round us. expertise and empathizing with those cues enriches our relationships, fosters powerful conversation, and lets in us to attach on a deeper, extra meaningful degree with our fellow humans.

This study aimed to explore the relationship between frequent texting habits in young adults in the ability to recognize facial emotional cues.

Method

Study Design

Research Design: Ex post facto - Quantitative

Sampling design and procedure: Non-random convenience sampling technique was used for data collection, wherein, individuals from the study population were invited to participate through Google Forms. explaining the general topic of the survey, the time it would take to complete, and a link to the online questionnaire. The time needed to answer survey questions was limited to approximately 10 minutes, and participants were allowed to attempt the questionnaire once. we obtained 200 samples and the results were calculated.

Participants

Individuals between the age group 18 to 25 were invited for participation in this study. The choice of participants aged 18 to 25 for the study is due to their relevance in

the digital age. This age group represents individuals who have grown up with digital communication as a central aspect of their lives, making them highly pertinent to studying the effects of texting on emotional cues recognition.

Tools Used

- SMS Problem Use Diagnostic Questionnaire (Rutland et al., 2007)

- Perception of Emotion - Assessing Emotions Scale is a self-report inventory (Schutte, Malouff, Buller, 2009)

- U.C Berkeley Facial Emotional Cue Recognition Test (Corten, 2011): 20 items in which the participant is asked to identify the expression of the person in the image.

Ethical Considerations

Prior to the conduction of the study, the study proposal was approved by the Institutional Ethics Committee of Sri Ramachandra Institute of Higher Education and Research where both authors are engaged. Informed Consent was collected from study participants who were recruited through voluntary participation after briefly explaining the nature of the study.

Data Analysis

The data were analyzed using quantitative statistical methods to examine the relationship between Texting and Facial Emotional Cue Recognition. Descriptive statistics, including mean, standard deviation, range, minimum, and maximum scores, were calculated for the main variables. The normality of the data distribution was assessed using the Shapiro-Wilk test. A simple linear regression analysis was conducted to evaluate the predictive relationship between the variables. All statistical analyses were performed using standard statistical software (R Software) The threshold for statistical significance was set at $p < 0.05$. No data imputation was necessary, as the dataset was complete. Outliers and potential confounding variables were reviewed during data screening, but no major issues were identified, ensuring the robustness of the findings.

Result

Descriptive Statistics

The study collected data from students between the ages of 18 and 25. A total of 194 young adults were included in the analysis. The mean age of the participants was 19.11 years, with a standard deviation of 0.92. The youngest participant was 18 years

old, while the oldest participant was 21 years old. Out of the total 196 participants, 53 were male, 140 (72.16%) were female. Of the 194 participants, 158 (81.44%) are from nuclear families, 36 (18.56%) reported as being from joint families, while 151 (77.83%) reported as having siblings, 43 (22.16%) were the only child.

Descriptive Statistics and Normality Assessment of Variables under Investigation: Descriptive Statistics

Table 1 *Descriptive Statistics of Facial Emotional Cue Recognition, SMS Addiction.*

Variable	Min. Score	Max Score	Mean	SD
Facial Emotional Cue Recognition	5	18	11.32	2 .56
SMS Addiction	8	38	20.49	6 .86

Normality Assessment

The normality of the data was assessed using the Shapiro-Wilk test for the variables of Facial Emotional Cue Recognition, SMS Addiction. The results of the Shapiro-Wilk test are presented.

Table 2 *Normality Assessment of Facial Emotional Cue Recognition, SMS Addiction.*

Variable	W value	p-value
Facial Emotional Cue Recognition	0.98	0.01*
SMS Addiction	0.98	0.02*

Note: * $p < 0.05$, ** $p<0.01$, *** $p<0.001$

For Facial Emotional Cue Recognition, the Shapiro-Wilk test produced a W-value of 0.98 and a p-value of 0.01 indicating strong evidence against the null hypothesis, and thus, rejecting the assumption of normality for this variable. In the case of SMS Addiction, the Shapiro-Wilk test yielded a W-value of 0.98 and a p-value of 0.02 suggesting that there is a significant departure from normality, and the data can be reasonably considered to be non-normally distributed.

Relationship between SMS Usage and Facial Emotional Cue Recognition

Table 3 displays the regression between SMS Addiction and Facial Emotional Cue Recognition

Table 3 *Regression Analysis of SMS Addiction and Facial Emotional Cue Recognition*

	Estimate	Standard Error	t value	P value
Intercept	11.20	0.58	19.21	0.00***
SMS	0.01	0.03	0.21	0.838

Note: *p < 0.05 (significant), **p < 0.01 (significant)***p < 0.001

(significant)Residual standard error: 2.564 on 191 degrees of freedom

Multiple R-squared: 0.0002204,

Adjusted R-squared: -0.005014

F-statistic: 0.0421 on 1 and 191 DF, p-value: 0.8376

The intercept, representing the predicted value of Facial Emotional Cue Recognition when SMS Addiction is zero, is 11.20. This intercept is statistically significant ($p < 0.001$). Results reveal that SMS Addiction is not a statistically significant predictor of Facial Emotional Cue Recognition in this analysis. The residual standard error is 2.564 on 191 degrees of freedom, reflecting the degree of variability in the data that is not explained by the regression model.

The coefficient of determination (R-squared) is 0.0002204, suggesting that only a very small proportion of the variance in Facial Emotional Cue Recognition is explained by the predictor variables. The adjusted R-squared is -0.005014, which takes into account the number of predictors in the model and adjusts the R-squared value accordingly.

Discussion

The preliminary hypothesis posited that SMS addiction could serve as a significant predictor of Facial Emotional Cue reputation. However, contrary to expectations, the statistical evaluation revealed that SMS dependency emerged as a massive predictor in this version. The absence of a good sized courting between

SMS dependency and Facial Emotional Cue recognition raises questions about the widely held belief that excessive engagement with short message service (SMS) platforms may want to have an impact on an individual's ability to appropriately understand facial emotional cues. even as previous studies have recommended a capability link between era use and social-emotional abilities, the present day findings prompt a reevaluation of these assumptions. it's miles vital to bear in mind alternative elements or explore extra nuanced aspects of era use that could affect emotional cue popularity.

The overall version's loss of statistical significance is an essential commentary that underscores the want for a more comprehensive exploration of the factors influencing Facial Emotional Cue popularity. The interaction between SMS dependency and the ability to understand facial expressions is absolutely complex, and the current model might not capture all applicable variables. Researchers need to recollect expanding the scope of their investigation to consist of additional factors that would make contributions to the variance in Facial Emotional Cue reputation. These surprising effects additionally spotlight the importance of thinking about individual differences and contextual factors in know-how the connection among era use, emotional intelligence, and social-emotional capabilities. it's far conceivable that sure subpopulations might also show off distinctive styles of affiliation between those variables, and destiny studies could explore these capacity variations. Moreover, the effect of cultural and societal factors on those relationships need to no longer be overlooked, as they will play an important position in shaping people' responses to generation and emotional cues.

Evolving digital technologies with advanced communication applications, that mimic and facilitate face to face communication (eg. video call apps) bypass this issue of potentially stunting facial emotional cue recognition. The latest digital expressions, while still in nascent stages are capable of conveying the depth of human facial expressions and might not lead to atrophy or diminishing of facial emotional cue recognition ability.

Additionally, facial expressions are suggested to be innate (Russell, 1995) and this might mitigate any degeneration of facial emotional cue recognition ability from lack of proper social stimulus.

Limitations

The study has several limitations that need to be considered when interpreting the findings. First, the age group limitation may restrict the generalizability of the results, as emotional cue recognition abilities can vary across different age groups, including adolescents, young adults, and older individuals. Additionally, the focus on young adults may not capture a comprehensive understanding of emotional cue recognition.

Cultural and socioeconomic factors also pose a limitation, given that the samples were predominantly collected in urban areas. This lack of diversity may limit the applicability of the findings to other cultural contexts and socioeconomic backgrounds. To enhance the study's validity, future research should include a more diverse sample to account for potential variations in emotional cue recognition and texting habits.

Gender imbalance is another concern, as the majority of the 194 samples were female subjects. This gender skew may introduce bias and impact the generalizability of the study's results. It is crucial to strive for a more balanced representation of genders in future research to ensure a more accurate understanding of emotional cue recognition in texting. The artificial setting in which emotional cue recognition experiments are conducted may also influence the study's external validity. Real-world texting scenarios can be more unpredictable and intricate, raising questions about the transferability of findings from controlled environments to everyday communication.

Furthermore, the study does not account for variations in texting behaviour, such as frequency, the use of emojis, or message length, which could impact emotional cue recognition differently. These factors are important to consider, as they play a significant role in shaping the nuances of text based communication. Individual differences in cognitive abilities, emotional intelligence, and prior technology experience are not fully controlled for in the study. These differences may influence how texting affects emotional cue recognition and should be taken into account to provide a more nuanced understanding of the relationship between texting and emotional cues.

The relatively small sample size is another limitation, potentially restricting the generalizability of the findings. A larger and more diverse sample would strengthen the study's external validity and enhance the reliability of the results. The reliance on self-reported data introduces the possibility of recall bias, as participants may not accurately recall or report their texting behaviours and

emotional cue recognition abilities. This limitation calls for caution when interpreting the results, as they may be influenced by subjective perceptions rather than objective observations.

Considering the rapid evolution of technology and communication platforms, the study's findings may become outdated over time. What holds true for texting behaviours today may not necessarily be applicable in the future, emphasizing the need for ongoing research to keep up with technological advancements. Lastly, the study's findings may be specific to the studied population and context, limiting their generalizability to other situations or groups of young adults.

Future Research Directions

The implications of understanding how texting influences emotional cue recognition extend across various domains. In the realm of mental health interventions, insights from this research can guide the development of strategies to enhance emotional understanding and communication skills in online interactions. Educational institutions can utilize this research to enhance social skills development programs for young adults, including those with autism spectrum disorders or social communication difficulties. Technology companies involved in the creation of social media platforms and messaging apps can benefit from insights into how texting affects emotional cue recognition. This knowledge can guide the incorporation of features that facilitate users in expressing and understanding emotions more effectively, contributing to improved product design.

In the realm of conflict resolution, professionals such as mediators or human resources specialists can use research findings to address conflicts arising in digital communication. Parents and educators can also benefit from understanding the impact of texting on emotional development in young adults. This knowledge can inform conversations and educational approaches related to digital communication, allowing for a more informed and supportive approach. Furthermore, the research opens avenues for cross-cultural studies examining differences in the impact of texting on emotional cue recognition.

Conclusion

In conclusion, the findings from this interplay analysis mission conventional assumptions about the relationships between SMS addiction and Facial Emotional Cue recognition. The absence of significant

predictors and moderation consequences shows a greater problematic interaction of things that impact a man or woman's capability to interpret and respond to facial expressions. these results emphasize the need for persevered studies to get to the bottom of the complexities of technology use and emotional intelligence within the context of social-emotional abilities. further exploration and refinement of theoretical frameworks will make contributions to a more nuanced know-how of the elaborate relationships at play in the realm of human feelings and technology interaction.

Funding

The authors declare that no financial support was received for the research, authorship, and/or publication of this article.

Author contributions

Rajashree D: Conceptualization, Methodology, Validation, Methodology, Software, Formal Analysis, Investigation, Resources, Writing—Original draft preparation, Visualization.

Darshini Madanagopal: Writing—Review and Editing, Visualization, Supervision,

Both authors have read and agreed to the published version of the manuscript.

Competing interests

The authors declare no competing interests.

Corresponding Author

Dr. Darshini. M, Assistant Professor, Dept. of Applied Psychology, Faculty of Behavioural and Social Sciences, Sri Ramachandra Institute of Higher Education and Research Chennai Tamil Nadu, 600044, India.

darshini@sriramachandra.edu.in

+919841255077

References

Dansieh, S. A. (2011). SMS texting and its potential impacts on students' written communication skills. International Journal of English Linguistics, 1(2), 222.

Emotional Intelligence quiz. (n.d.). Greatergood. https://greatergood.berkeley.edu/quizzes/ei_quiz

Fernández-Abascal, E. G., & Martín-Díaz, M. D. (2015). Dimensions of emotional intelligence related to physical and mental health and to health behaviors. Frontiers in psychology, 6, 317.

Gonzales, A. L. (2014). Text-based communication influences self-esteem more than face to-face or cellphone

communication. Computers in Human Behavior, 39, 197-203.

Graham, J. B. (2013). Impacts of text messaging on adolescents' communication skills: School social workers' perceptions.

Kaylie N. Moropoulos J0414 - California Science and Engineering Fair. (n.d.). https://csef.usc.edu/History/2013/Projects/J0414.pdf

Nelson, Sean E., "Dysfunctional Text Messaging as Related to Social Anxiety, Self Esteem, Emotional Intelligence, and Attentional Control" (2015). Masters Theses.2189. https://thekeep.eiu.edu/theses/2189

Rutland JB, Sheets T, Young T. Development of a scale to measure problem use of short message service: the SMS Problem Use Diagnostic Questionnaire. Cyberpsychol Behav. 2007 Dec;10(6):841-3. doi: 10.1089/cpb.2007.9943. PMID: 18085975.

Schutte, N. S., Malouff, J. M., & Bhullar, N. (2009). The Assessing Emotions Scale. In C. Stough, D. H. Saklofske, & J. D. A. Parker (Eds.), Assessing emotional intelligence: Theory, research, and applications (pp. 119–134). Springer Science + Business Media. https://doi.org/10.1007/978-0-387-88370-0_7.