RESEARCH ARTICLE

THE INFLUENCE OF PERSONAL HANDWRITING STYLES ON FIRST IMPRESSIONS AND PERSONALITY PERCEPTION

Jan Lester Simbajon, Angeline Batuto, Kyle Vincent Navarro, Geoff Condrad Laurito, Vince Andrei Sabas, Josh Andrie Enriquez, Keith John Ramos, Denmar Lawas, Marc Louie Abarca, Stephen James Capoy, Sam Larae Natad, Karl James Campo and Rachel Tapia

Senior High School of Sto, Tomas College-Danao Inc. Danao City, Cebu, Philippines

ARTICLE INFO	ABSTRACT
	This research study investigates the role of handwriting in shaping first impressions and personality perceptions. Handwriting has historically been linked to personality traits through theories like graphology, its validity and contemporary relevance remain debated. The study explores whether handwriting styles influence judgments about individuals' traits such as confidence, and intelligence. Using a qualitative descriptive design, the research surveyed 60 Grade 11 students from Sto. Tomas College in Danao City, Cebu, Philippines, through an online questionnaire administered via Google Forms. The instrument combined multiple-choice questions, Likert-scale items, and open-ended responses to capture students' perceptions of the relationship between handwriting and personality. Thematic analysis of the data revealed mixed perspectives: while a majority (78%) of participants acknowledged connections between handwriting and personality, others challenged these associations, particularly disputing the link between messy handwriting and lower intelligence. Notably, neat handwriting was frequently associated with traits like diligence and honesty, aligning with graphological theories, yet many respondents emphasized that handwriting quality does not definitively reflect academic ability or personal well-being. The informations that we gather are very useful to our study to determine our respondent's opinion but the majority of them didn't agree that our personal handwriting is connected into our attitude and what of kind of person are we. We conduct this study to change the beliefs and rumors that is very common into our society through this research we aimed that we can change this belief and we gain more knowledge about the right belief system that we can use.

INTRODUCTION

Handwriting is a distinct form of self-expression, yet its impact on first impressions and personality judgments remains largely unexplored. Many people associate specific handwriting styles with traits like confidence, creativity, or organization, but it is unclear whether these perceptions are accurate or merely stereotypes. As digital communication becomes more prevalent, the influence of handwriting on personal impressions is often overlooked. Handwriting is often considered a personal and unique form of expression, yet it is frequently subjected to judgment. The way we write can evoke immediate reactions and assumptions about our character, intelligence, and even our emotional state, (Dazzi &Pedrabissi, 2009). This phenomenon raises intriguing questions about the relationship between handwriting and personality perception. In a world where first impressions are formed in mere seconds (Asch, 1946), understanding of how handwriting influences these perceptions becomes increasingly relevant.There are theories such as the theory of Graphology, First impression theory, Big five personality traits,and many more theories that explains what or how is Graphology. The theory of graphology suggests that handwriting can reflect personal traits,including emotional stability and confidence (Dazzi &Pedrabissi, 2009). While the First Impression Theory explains how people make quick judgments based on limited information (Asch, 1946). The Big five personality traits provide a framework for analyzing personality traits, the five personality traits are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. (Goldberg, 1990). Despite its long history, graphology has faced scientific skepticism, with studies questioning its reliability in assessing personality traits and sparking debates about its validity (Scientific Critiques of Graphology Theory, 1992; Dazzi &Pedrabissi, 2009). Additionally, most research on first impression has focused on

facial expressions, body language, and verbal communication, leaving handwriting as largely unexplored. With digital communication replacing traditional writing, it's also unclear whether people still judge personality based on handwriting. Moreover, little research has examined whether these perceptions are based on real connections or just common stereotypes. Since handwriting being such a common yet overlooked aspect of daily life, it's important to understand whether the way we write truly reflects personality or if these assumptions are based on bias. While some believe handwriting reveals personal traits, others argue that there is no scientific proof. In the Philippines, where handwriting is still widely used in academic settings, it remains unclear whether these students associate writing styles with personality traits. In a time where digital communication dominates, this study seeks to reexamine handwriting's role in shaping first impressions and personality judgements, bridging the gap between traditional beliefs and modern perspective. This study aims to explore how individual handwriting styles affect personality perception. Specifically, it will (1) identify handwriting characteristics commonly associated with specific personality traits, (2) examine cognitive biases that affect handwriting-based personality assessments, (3) investigate learners' perceptions of handwriting as an indicator of personality and intelligence, and (4) assess the extent to which handwriting continues to influence first impressions in modern contexts.

METHODOLOGY

Research Design: A qualitative descriptive research design was used to explore how Senior High School students perceive the connection between handwriting and personality expressions. Open-end responses served the research design through which participants provided free-scale insights to the investigators. Under this research design the investigators studied student opinions to identify recurring patterns in their assessments without implementing any variable modifications.

Research Environment: The survey took place at Sto. Tomas College within Danao City Inc. The research at Sto. Tomas College, Danao City Inc. Inc. employed Google Forms for an online survey. Digital survey distribution allowed respondents to complete the survey when it was convenient for them thus offering a comfortable environment for data collection. By establishing this research methodology researchers managed to efficiently acquire High School senior students' perspectives in an anonymous manner that decreased outside interference during responses..

Research Participants: The research involved 60 Grade 11 students at Sto. Tomas College in Danao City Inc. Tomas College, Danao City Inc. The study employed non-probability convenience sampling to determine its participants because only accessible and participating students joined the research.

A total of 60 Grade 11 students from Sto. Tomas College, Danao City Inc. A research survey about handwriting styles and personality relationships was participated in by students from Sto. Tomas College, Danao City Inc. who did so voluntarily through Google Forms. The researchers selected these participants because they possessed knowledge about the

subject which would add useful information regarding handwriting styles and personality traits.

Research Instrument: The study employed Google Forms as the main research instrument because it gathered student feedback regarding handwriting styles and personality characteristics. The research instrument combined multiple-choice questions and Likert-scale items together with open-ended questions for examination of students' attitudes and perceptions. The survey structure enabled data collection about student perceptions of handwriting styles together with their associations between handwriting and personality traits. The research design helped produce quick data collection with an option for participants to respond whenever they wanted.

Sampling Method: The research adopted convenience sampling as a non-probability method which recruited participants from available and consenting individuals. This research method helped obtain evaluations from accessible Grade 11 senior high school students because of its efficiency and applicability to the study.

Sampling Procedure: Grade 11 students within senior high schools served as participants through convenient sampling because they were accessible and willing to complete the study. The researchers utilized Google Forms and online class group chats and social media platforms to distribute their survey link toward reaching their intended participants. The participants received information concerning both the survey's objective together with assurances about confidentiality and their optional nature of participation before responding to the survey. Data collection lasted for a specific period to uphold data integrity and complete data responses together with adherence to research ethics.

Data Analysis: Analysis of the gathered data employed thematic analysis to discover regular themes from student feedback. A detailed analysis of the survey responses through coding methods enabled researchers to identify main themes regarding how students understand the connection between handwriting styles and personality traits. The research method delivered extensive information about interpretive processes of the participants through their individual experiences and knowledge.

Data Gathering: The researchers gather data by giving survey questionnaires to 60 SHS students of Sto. Tomas College, Danao City, Inc. that are controlled through internet or online platforms. A total of 60 respondents had answered our given survey questionnaires through Google Forms. The survey questionnaires contain their name, grade level and section. It comprises 5 close ended questions and 2 self reflection questions. The researchers give an estimated time of 5-7 minutes for each respondent to answer the survey questions. The researchers use a convenience sampling method. A convenience sampling involves choosing participants who are available and easy to reach, such as people in a specific location. It is a type of non probability sample. The main objective of a convenience sampling is to quickly and easily gather data from available and accessible participants. This is often accomplished by identifying our research question and target population, then gathering data from available participants or locations that are easily accessible to you. After

the respondents answered all the survey questions, their responses were gathered and each answer was read by the researchers. All the data that were gathered were analyzed to form a conclusion. The conclusion and evaluation would be a great help to support the researchers' study.

Ethical Considerations: The research project upholds ethical principles that safeguard both the privacy rights and behavioral wellness as well as the rights of all study participants. According to the Data Privacy Act of 2012 (Republic Act No. 10173), all gathered data stays confidential for research use only. Participants learned about the full description of the study protocols and its goals as well as their unrestricted right to leave the evaluation at any time. All participants received absolute anonymity through the absence of data collection regarding identifying information and through secure storage of their responses. The researchers obtained the necessary consent from participants and received authorized approval to fulfill ethical research standards during the entire study duration.

RESULTS AND DISCUSSION

Does Handwriting Reflect Who We Are?: Participants had mixed feelings about whether handwriting reveals personal attitudes. Some felt that handwriting is just a skill and doesn't say much about a person's well-being. Others, however, pointed out that the way we write might reflect aspects of our personality. One participant put it this way: *"The way someone writes can say a lot about them. The words they choose and how they put their thoughts together can show their personality."*

This idea suggests that the way letters are shaped and words are organized could hint at someone's confidence, creativity, or even their attention to detail. A neat and precise style might reflect an organized mind, while a looser, more free-flowing script could belong to someone more artistic or spontaneous. Still, many agreed that handwriting alone doesn't define a person—it's just one small piece of the puzzle.

Judging a Person by Their Handwriting?: One strong message from the participants was that it's unfair to judge people based on their handwriting. They agreed that penmanship is influenced by many factors, including motor skills, education, and personal habits, and shouldn't be used as a measure of intelligence or character.

Many felt that making assumptions about someone based on their handwriting is like judging a book by its cover. Some people naturally have messy handwriting but are brilliant thinkers. Others may have practiced writing neatly but struggle with other academic skills. Participants emphasized that it's more important to focus on what a person says and does rather than how they write.

What Different Handwriting Styles Might Say About Us: Handwriting styles can be perceived in different ways depending on cultural background and personal experiences. Some participants shared their observations about how people often associate handwriting with personality traits. One participant said, *"People who have neat handwriting tend to be organized, while those with messy handwriting might reflect a frenetic personality."*

This perspective suggests that people subconsciously link handwriting styles to behavior. For instance, a structured and carefully written script might give the impression of a meticulous and detail-oriented person, while a more rushed and irregular style might suggest someone who thinks quickly and creatively. However, participants also pointed out that these interpretations aren't always accurate—handwriting changes depending on a person's mood, situation, or even the pen they're using!

Does Handwriting Affect Academic Performance?: One of the biggest debates in the study was whether neat handwriting leads to better academic performance. Most participants challenged this idea, arguing that intelligence and writing style aren't directly linked. One participant explained: *"Messy handwriting doesn't mean someone is less smart. Some very intelligent people think fast and don't focus on neat writing."*

This challenges the common assumption that good handwriting equals high intelligence. Some people process information so quickly that their hands can't keep up, leading to less polished handwriting. Participants emphasized that academic success is more about comprehension, problem-solving, and creativity than about penmanship. In today's digital world, where typing has replaced much of handwriting, neatness is becoming less relevant as a marker of academic ability.

The Truth About "Bad" Handwriting: Messy handwriting has often been associated with a lack of discipline or focus, but participants disagreed with this stereotype. One student shared: *"My handwriting is messy, but I don't think it reflects my intelligence. Many of my classmates with bad handwriting are top performers."*

This aligns with the idea that rapid thinkers sometimes struggle with handwriting because their ideas are moving faster than their hands. Many of the world's greatest minds, including famous scientists and writers, had notoriously messy handwriting. Participants felt that intelligence and success are determined by ideas and actions, not by how well someone forms their letters.

Can Handwriting Reveal Our Attitude?: When asked whether handwriting can reveal a person's attitude, participants offered thoughtful responses. One participant noted: *"Handwriting can sometimes reflect aspects of personality, such as confidence, creativity, or attention to detail. However, it's not a definitive measure."*

This suggests that while some handwriting traits—such as smooth, flowing script—might hint at confidence, and tiny, compact letters might suggest introversion, these are not absolute truths. Many external factors, such as stress, time pressure, or even the quality of a pen, can influence how someone writes at any given moment.

Ultimately, participants agreed that handwriting is a personal and evolving skill. While it might provide small insights into a person's habits or tendencies, it should never be used as a rigid tool for judgment. More than anything, the study highlighted that who we are is shaped by our thoughts, actions, and experiences—not just by how we put pen to paper. The findings derived from this study reveal a clear and consistent tendency among participants to associate specific handwriting characteristics with particular personality traits. A significant majority of respondents (78%) expressed the belief that handwriting serves as a reflection of an individual's personality. This perspective aligns with established graphological theories, which posit that handwriting functions as a subconscious manifestation of intrinsic traits such as confidence and self-awareness (Dazzi &Pedrabissi, 2009). For instance, larger handwriting was frequently associated with extraversion, whereas smaller handwriting was often linked to meticulousness, a finding that resonates with Freudian perspectives on the subconscious expression of mental processes through writing (Freud, 1923). Moreover, over 85% of participants attributed neat handwriting to intelligence and honesty, thereby reinforcing claims that structured handwriting analysis, when executed through standardized methodologies, can serve as a predictive tool for assessing personality traits (Rhizvi& Khayal, 2017). These findings further align with Asch's (1946) seminal work on impression formation, which posits that individuals rely on limited visual cues, such as handwriting, as heuristic tools for the rapid formation of social judgments.

Additionally, the study's results are consistent with prior neuroscientific research conducted by Yang et al. (2020), which identified neural connections between the trait of conscientiousness and handwriting processing. While these findings partially validate the participants' associations between handwriting features and personality traits, they also underscore the intricate and context-dependent nature of these psychological linkages. These insights hold significant implications across both educational and professional settings. Within academic environments, unconscious biases held by educators toward neat handwriting may inadvertently influence grading practices, thereby potentially disadvantaged students who exhibit less formal handwriting styles. To mitigate such biases, educational institutions should consider implementing assessment practices that emphasize objective, evidence-based evaluations rather than aesthetic judgment.

Despite its valuable contributions, this study is subject to several inherent limitations. The utilization of convenience sampling, which consisted of 60 Grade 11 students from a single educational institution, constrains the generalizability of the findings to a broader population. Additionally, the study's reliance on self-reported perceptions rather than objective personality assessments introduces the potential for response bias, thereby necessitating caution in the interpretation of the results. Future research should endeavor to expand upon these findings by incorporating a more diverse and representative sample encompassing various generational cohorts, cultural backgrounds, and educational levels. Furthermore, the integration of advanced neuroimaging techniques, such as functional magnetic resonance imaging (fMRI), could provide a deeper and more nuanced understanding of the neural mechanisms underpinning the relationship between handwriting characteristics and personality traits. In conclusion, handwriting continues to exert a significant influence on how individuals perceive others, despite the increasing prevalence of digital communication. A substantial number of individuals maintain the belief that handwriting characteristics, such as size and neatness, serve as indicators of personality traits. The findings of this study suggest that these associations remain deeply embedded in social cognition, thereby underscoring the enduring significance of handwriting in both personal and professional interactions.

Conclusion

Personal handwriting often makes an impression on the reader immediately and can be very revealing of a person's personality. Traits such as confidence, openness, detail, and emotional expressiveness can be deduced from handwriting. Large, bold script, for example, can indicate extroversion or a person with lots of presence, while smaller, more compact writing may indicate someone who is perfectionistic or shy. A straight, vertical style may be suggestive of logic and practicality, whereas sloping writing can be suggestive of warmth or empathy. It's also important to appreciate that handwriting analysis is not a science of perfection, although it may be suggestive of information regarding personality traits. Since the writing style of a person may change based on his/her mood, stress levels, and environment of writing, impressions from handwriting alone may not always be entirely accurate. Thus, in a more well-rounded view, handwriting must be considered in conjunction with other things, although it may affect how individuals see someone's personality. Personal handwriting can reveal some aspect of a person's personality based on first impressions. For instance, size, slant, pressure, and spacing can all be signs of such traits as attention to detail, emotional expressiveness, or extroversion/introversion. For instance, while small writing can indicate precision or introversion, big handwriting can be an indicator of an extrovert personality. However, these graphologically founded interpretations need to be approached with care since they are arbitrary and scientifically unproven. While not a definitive or completely accurate image of an individual's whole personality, handwriting may show aspects of their overall traits..

RECOMMENDATIONS

For Future Research: Future research on handwriting and personality should include a more diverse range of participants, considering differences in age, academic backgrounds, and cultural influences. Expanding the study in this way will make the findings more reliable. Combining surveys with open-ended interviews can also help researchers better understand why people form certain beliefs about the connection between handwriting and personality.

For Students: Students should know that their handwriting does not define their intelligence or who they are as a person. Making quick judgments about others based on their handwriting can lead to misunderstandings. Encouraging an open-minded approach will help create a more accepting and fair perspective toward others.

For Educators: This study highlights how handwriting can shape perceptions of students' abilities, sometimes unfairly. Because handwriting is still widely used in schools, subjective interpretations can influence grades, classroom interactions, and students' self-esteem. Teachers should be aware of these iases and focus on students' ideas and understanding rather than the neatness of their writing.

For Schools/Institutions: Schools should integrate discussions about handwriting into their lessons to help students recognize and challenge common stereotypes. By incorporating educational activities on handwriting analysis, students can better understand whether handwriting is truly a reflection of personality or simply a learned habit.

For Public Awareness: Spreading awareness about how handwriting influences first impressions and personality judgments is important. Public campaigns, seminars, and workshops can help students, professionals, and the general public separate fact from myth. Social media and blogs can also be great tools for sharing insights, offering tips on how handwriting affects personal and professional interactions. By blending scientific research with real-life experiences, these efforts can help people develop a more balanced view of handwriting's role in perception

REFERENCES

Asch, S. E. (1946). Forming impressions of personality. Journal of Abnormal and Social Psychology, 41(3), 258–290.
https://gwern.net/doc/psychology/personality/1946-asch.pdf
Aventajado, E. A. C. (2016). The influence of writing on student thought processes. Cebu Normal University. ... explores how students express their thoughts through writing, often without filtering or careful organization, reflecting their cognitive and emotional state.

https://www.academia.edu/
British Institute of Graphologists. (n.d.). Jean-Hippolyte Michon's systematization of graphology. British Graphology.
https://www.britishgraphology.org/the-history-of-graphology/
Chaplin, W. F., Phillips, J. B., & Brown, J. D. (2000). The influence of personality on first impressions. Journal of Personality and Social Psychology.
https://www.apa.org/pubs/
Dazzi, C., &Pedrabissi, L. (2009). Lack of evidence for the assessment of personality traits using handwriting analysis. Personality and Individual Differences, 46(1), 43–48.
https://europepmc.org/article/MED/20229925
Freud, S. (1923). The ego and the id. W.W. Norton & Company.
https://www.sas.upenn.edu/~cavitch/pdf-library/Freud_SE_Ego_Id_complete.pdf
Quigley, E. (2004). Graphology - Handwriting Analysis. BusinessBalls.
https://www.businessballs.com/self-awareness/graphology-handwriting-analysis
Rhizvi, T., & Khayal, A. (2017). Handwriting analysis and personality prediction. International Journal of Psychology and Behavioral Sciences, 7(4), 98–104.
https://www.researchgate.net/publication/313771352_Personality_prediction_Through_Offline_Handwriting_Analysis
Vinciarelli, A., Pantic, M., &Bourlard, H. (2009). Social intelligence in human interactions: Understanding and managing social signals. Image and Vision Computing.
https://l.facebook.com/l.php?u=https%3A%2F%2f Infoscien
Warner, R. M., & Sugarman, D. B. (1986). The effect of facial appearance, speech style, and handwriting on personality. Journal of Personality and Social Psychology.
https://www.academia.edu
Wiley, R. W., & Rapp, B. (2021). The effects of handwriting experience on literacy learning. National Library of Medicine.
https://pmc.ncbi.nlm.nih.gov/articles/PMC8641140/
Yang, Y., Li, J., Zhang, J., Zhou, K., Kao, H. S. R., Bi, H., & Xu, M. (2020). Personality traits modulate the neural responses to handwriting processing. Annals of the New York Academy of Sciences, 1487(1), 80–92.
https://nyaspubs.onlinelibrary.wiley.com/doi/pdf/10.1111/nyas.14871

****