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The Feeling of Being Helpless in the Face of Autism: Using AI to Synthesize Communications Between Grandchildren and Their Grandparents

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Abstract

Using generative AI (ChatGPT 3.5), the paper addresses the issues of communication between possibly non-verbal autistic children, 3-6 years old, and their grandparents who may be living far away. The power of generative AI allows the creation of different scenarios for simulation. This paper presents four such scenarios called phases. Phase 1 instructs the AI to simulate a reporter who is asked to do a story for an internet publication, dealing with "What autistic children would like to tell their grandparents who live far away," with the results generating four different "stories" as written by the reporter. Phase 2 instructs AI to generate questions and answers. The questions are generated by AI and the answers are generated from the point of view of the autistic grandchild. Phase 3 shows how AI can synthesize messages that the autistic child would like to say to his grandmother. Phase 4 shows "advice" to give to the grandmother about interacting with her grandson, the advice similar to what one might receive either from "online" sources (internet) or from friends, and is not treated as medical advice. The four phrases provide an approach for educating professionals and laypeople alike about various issues of a social and perhaps medical nature.

Keywords: Autism, Generative AI, Grandparent-Grandchild Interaction, Mind Genomics, Natural Language Processing

Abbreviations

AI: Artificial intelligence

ChatGPT: Chat Generative Pre-Trained Transformer

NLP: Natural Language Processing

Introduction

Grandparents of young autistic grandchildren often face overwhelming emotions such as sadness, frustration, confusion, and helplessness. They may struggle to provide the necessary support and care due to a lack of understanding about autism, communication barriers, financial constraints, and physical limitations. To overcome these challenges, grandparents can actively listen, use clear language, ask open-ended questions, and use non-verbal cues. They can also find common interests, spend quality one-on-one time, and be patient when communication challenges arise. Technology can help bridge communication gaps, especially when distance is a barrier [1-4].

Phase 1: A Story from a Report for an Internet Publication

The objective here is to create the story [5-9]. Table 1 shows the results. Generative AI makes it simple to create the stories. Table 1 shows four such stories, with the result that the reader may get a sense of "being there." While the stories themselves are fiction, they are real enough to give students and other readers a sense of the type of questions that would emerge from a 3-6-year-old. The examples in Table 1 are meant only for illustration and discussion. This caveat about the use of the tabular material applies to all the information generated by AI.

Table 1: Four sets of "interviews" which are to be embedded in stories about what a 3-year-old autistic child might like to tell their grandmother who lives far away.

INSTRUCTIONS GIVEN TO THE ARTIFICIAL INTELLIGENCE IN THE MIND GENOMICS PLATFORM (IDEA COACH IN BIMILEAP.COM)

I am a reporter who has been asked to create a story for an internet publication. The story deals with the topic of "What autistic children would like to tell their grandparents who live far away."

For this topic, please write a six-paragraph story after you have talked to the children. In the story you write, tell me who they are and what they would like to tell their grandparents who live far away. Make the story interesting. Use quotes to express the exact thought of the child, or the exact words that the child uses. Remember that this internet story is the autistic child telling grandma or grandpa who lives far away what the child would like to say.

THE FOUR "STORIES" GENERATED BY AI TO SIMULATE WHAT THE REPORTER "WROTE"

Story #1 from the Reporter

As a reporter who has been tasked with creating a story on what autistic children would like to tell their grandparents who live far away, I had the opportunity to speak with a group of children ages 3-6. These children shared their heartfelt messages and thoughts with me, expressing their genuine desires to connect with their beloved grandparents, despite the physical distance between them.

One little girl, Emily, expressed, "I miss you, Grandma! I wish you were here to read me stories and sing me lullabies at bedtime." Another child, Jacob, shared, "I want to show you my new toy cars, Grandpa. They go really fast!"

Sophie, a shy but sweet little girl, whispered, "I love you, Grandma. I hope you're doing okay." Meanwhile, Tommy enthusiastically declared, "Grandpa, when are you coming to visit again? I want to play hide and seek with you!"

Olivia, with a twinkle in her eye, shared, "I drew you a picture, Grandpa. It's a rainbow with lots of colors, just like my love for you!" And little Liam, with a big grin, said, "I want to tell you all about my day at school, Grandma. I learned how to spell my name!"

These precious children's messages reflect the deep longing and love they have for their grandparents who are far away. Despite the physical distance, their hearts and minds remain closely connected, and they eagerly await the day when they can be reunited.

Story #2 from the Reporter

Meet Alex, a 4-year-old autistic child with a love for trains and a contagious smile. When asked what he would like to tell his grandparents who live far away, he grins and says, "I miss you so much, Grandma! Can you send me pictures of your garden? I love plants."

Then there's Emily, a 5-year-old girl who is fascinated with animals and has a special bond with her grandma. She shyly admits, "I wish you were here to play with me, Grandma. Can we have a tea party when you visit next time? I have a new tea set."

Next is Liam, a 3-year-old boy who is drawn to anything with wheels and loves to play outside. He confidently says, "Grandpa, I want to show you my new toy truck! It's red like your old one. When can you come over and play with me?"

Sophie, a 6-year-old girl with a passion for art and creativity, expresses, "I want to show you the painting I made, Grandma. It has lots of colors like a rainbow. Do you like rainbows too?"

Nathan, a 4-year-old boy who is always curious about the world around him, says, "Grandpa, can you tell me stories about when you were little? I like listening to your adventures. Maybe we can have an adventure together someday."

Samantha, a 5-year-old girl who loves to dance and twirl around the room, giggles and says, "I want to show you my new dance moves, Grandma! Do you dance too? Let's have a dance party on video call."

Finally, there's Jack, a 6-year-old boy who is fascinated by outer space and dreams of becoming an astronaut. He excitedly exclaims, "Grandpa, I saw a shooting star last night! I made a wish for you to visit soon. When are you coming?"

Story #3 from the Reporter

The sun was shining brightly as I walked into the classroom filled with excited children. As I introduced myself as a reporter, the children's faces lit up with curiosity. These children, all aged 3-6 years old, were eager to share their thoughts with me about what they would like to tell their grandparents who lived far away.

First, I spoke to little Emily, a sweet 4-year-old girl with a shy smile. She whispered, "I miss you, Grandma. I love you to the moon and back." Her words were filled with longing and affection for her grandmother who lived miles away.

Next, I sat down with Tommy, a 5-year-old boy with a mischievous twinkle in his eyes. He declared proudly, "Grandpa, I caught a big fish today! I wish you were here to see it." It was heartwarming to see the joy in his face as he shared his adventures with his beloved grandfather.

As I moved around the classroom, I could sense the yearning in each child's words as they expressed their feelings for their grandparents who were far away. From drawings and crafts they made to messages they dictated, their love and longing for their grandparents were palpable.

The children shared stories of their day-to-day activities, their favorite toys, and the adventures they had at school. Each child had a unique message for their grandparents, a special bond that transcended distance and time.

One little girl, Mia, expressed her wish to her grandma in a simple but heartfelt manner, saying, "I want to give you a big hug, Grandma. I love you so much." Her eyes sparkled with love and warmth as she spoke, her words echoing the sentiments of all the children in the classroom.

As I left the classroom, I couldn't help but feel touched by the innocence and love that radiated from these children. Their message to their grandparents was clear—they missed them, they loved them, and they cherished the memories they shared together, despite the distance that separated them. In the end, I realized that the bond between grandparents and grandchildren is a special one, one that knows no bounds and transcends distance. The love and longing that these children expressed for their distant grandparents were a testament to the power of family and connection, a reminder of the importance of staying connected despite the miles that separate us.

Story #4 from the Reporter

The soft sound of children's laughter filled the room as I sat down with a group of autistic children, all aged between 3 and 6 years old. These young ones had a unique perspective on the world, and I was eager to hear what they wanted to tell their grandparents who lived far away.

One little boy with bright blue eyes looked up at me and said, "I miss you, Grandma. I wish you were here to play with me." His words were filled with longing and a sense of connection that transcended distance and time.

Another child, a shy little girl with curly hair, whispered, "I love you, Grandpa. Even though you're far away, I still think about you every day." Her words were simple yet heartfelt, reflecting the deep bond she shared with her grandparent.

As we talked, it became clear that these children had so much to say to their grandparents who lived far away. From sharing their favorite toys to telling stories about their day, the kids had a wealth of love and affection to express.

One little boy exclaimed, "I want to show you my new dinosaur toy, Grandma! It's so cool, you'll love it." His excitement was infectious, and it was clear that he wanted nothing more than to share his joy with his beloved grandparent.

A shy girl with wide eyes spoke up, saying, "I hope you're doing okay, Grandpa. I think about you all the time and I pray for you every night." Her words were filled with a sense of care and concern that belied her young age.

Each child had their own unique message for their grandparents who lived far away, and as I listened to them speak, it was clear that their love knew no bounds. From simple gestures to heartfelt confessions, these children had so much to share with their loved ones who were miles away.

As I prepared to leave, one little girl tugged at my sleeve and said, "Tell Grandma and Grandpa that I love them so much. I can't wait to see them again soon." Her words were a poignant reminder of the power of love and the enduring connection between grandchildren and their grandparents.

Phase 2: Using AI to Synthesize a Question-and-Answer Session with an Autistic Child About Their Grandparent(s)

People using their own minds may be limited by their biases, experiences, and knowledge, but generative AI can provide a fresh perspective and offer innovative questions that spark new conversations and ideas, enhancing the overall communication experience. This technology also reduces the burden on caregivers and family members, making communication with grand-children with autism more meaningful and rewarding. Generative AI has revolutionized communication, particularly in the context of communicating with grandchildren with autism. Its ability to tailor questions and answers to individual needs and preferences makes the process more engaging and effective. Generative AI can generate questions faster and more efficiently than human minds, saving caregivers time and energy. Additionally, it offers a wide range of questions and answers, allowing for greater variety and stimulation in communication interactions.

Generative AI can generate age-appropriate, engaging, and stimulating questions for children with autism. This ensures that the questions and answers provided are clear, concise, and tailored to the child's level of understanding. This facilitates more effective communication between grandparents and their grandchildren with autism. Generative AI also saves time and effort for grandparents who may not have the resources or knowledge to come up with appropriate questions on their own. By having AI do the work of generating questions and answers, grandparents can focus on building meaningful connections with their grandchildren and fostering positive communication experiences.

Another benefit of using generative AI for communication with grandchildren with autism is its ability to create a structured and consistent approach to interaction. AI-generated questions can be organized in an easy-to-follow manner, maintaining a sense of predictability and routine for children with autism who thrive on consistency and repetition [10-13].

Table 2 presents a set of questions synthesized by AI; these questions are presented from the point of view of the child with autism, an approach that would be a far more difficult and daunting task if AI were not available as a guide [14-18].

Table 2: AI synthesizing the question-and-answer session, with the answers created to represent what the autistic child might say.

- 1. Can you tell me about your experience growing up with a grandparent who has been there for you while dealing with autism? Growing up with my grandparent who has been there for me while dealing with autism has been a comforting and enriching experience. They have provided unwavering support, understanding, and love through every challenge I faced. Their presence has been a source of stability and reassurance in navigating the complexities of autism, making me feel accepted and valued for who I am. With their patience and compassion, my grandparent has helped me feel seen and heard, fostering a sense of belonging and acceptance in a world that can often feel overwhelming. Their guidance and encouragement have empowered me to embrace my differences and embrace my unique strengths, enabling me to navigate life with confidence and resilience. Overall, my grandparent's involvement in my life has been instrumental in shaping my identity and helping me thrive as a child with autism.
- 2. How has your grandparent helped you navigate the challenges of autism in your daily life? My grandparent has played a crucial role in helping me navigate the challenges of autism in my daily life by providing me with a safe and supportive environment where I can express myself freely without judgment or pressure. They have been a constant source of encouragement and reassurance, guiding me through difficult situations and helping me develop coping strategies to manage sensory overload and social interactions. Through their unconditional love and understanding, my grandparent has helped me build essential life skills and self-confidence, enabling me to face each day with courage and resilience. Their advocacy and support have empowered me to embrace my unique strengths and talents, fostering a sense of self-worth and belonging that has been invaluable in my journey with autism. Overall, my grandparent's presence in my life has been a pillar of strength and stability, offering me the unwavering support and guidance I need to navigate the challenges of autism with grace and determination.
- 3. What do you think makes your grandparent special in understanding and supporting you with autism? What makes my grandparent special in understanding and supporting me with autism is their innate ability to see beyond the diagnosis and connect with me on a deeply personal level. They approach my autism with empathy, compassion, and acceptance, creating a safe and nurturing space where I can be myself without fear of judgment or rejection. Their willingness to listen, learn, and adapt to my needs has been instrumental in forging a strong bond of trust and understanding that forms the foundation of our relationship. My grandparent's unwavering support and advocacy have empowered me to embrace my uniqueness and navigate the challenges of autism with resilience and grace. Their commitment to my well-being and happiness shines through in every interaction, making me feel valued, understood, and loved in a way that is truly special and profound. Overall, my grandparent's unique ability to see me for who I am and support me unconditionally has made all the difference in my journey with autism.
- 4. Have there been any unique activities or traditions that you and your grandparent have created together to cope with autism? As my grandparent and I navigate the challenges of autism together, we have developed several unique activities and traditions that help us cope and bond. One tradition we have is going for walks in the park every Sunday morning, where we talk about our feelings and experiences with autism. Additionally, we have created a special art project where we paint rocks with positive affirmations and symbols that represent our journey with autism. These activities have provided us with a sense of connection and understanding as we support each other through the ups and downs of living with autism.
- 5. In what ways has your grandparent shown love and care for you as you navigate your autism journey? My grandparent has shown me unwavering love and care as I navigate my autism journey in various ways. They have always been there to listen to my fears and struggles without judgment, offering comfort and understanding. Additionally, my grandparent attends all of my therapy sessions and school meetings, advocating for my needs and ensuring that I receive the support I require. Their consistent presence and support have been a constant source of strength and reassurance for me as I navigate the complexities of living with autism.
- 6. How do you think having a grandparent involved in your life has positively impacted your development and growth as a child with autism? Having a grandparent actively involved in my life has positively impacted my development and growth as a child with autism in numerous ways. Their unconditional love and unwavering support have instilled in me a sense of confidence and resilience that has helped me face the challenges of autism with courage. Additionally, my grandparent's presence has provided me with a safe space to express my feelings and emotions without fear of judgment, fostering a sense of emotional intelligence and self-awareness. Their involvement has also exposed me to different perspectives and experiences, broadening my understanding of the world and enhancing my social skills. Overall, having a grandparent by my side has been instrumental in shaping me into the individual I am today.
- 7. Can you share a memorable moment where your grandparent went above and beyond to support you in a difficult situation related to autism? One memorable moment where my grandparent went above and beyond to support me in a difficult situation related to autism was when I had a meltdown at a family gathering. Instead of getting upset or embarrassed, my grandparent calmly sat with me, comforting me and helping me regulate my emotions. They then took me to a quiet space where I could calm down, providing me with the necessary support and understanding I needed in that moment. Their unwavering patience and compassion in that situation not only diffused the meltdown but also reinforced the bond of trust and love between us, showing me that I could always rely on them for support no matter the circumstances.

- 8. What advice would you give to other children with autism who may not have a grandparent actively involved in their lives? For other children with autism who may not have a grandparent actively involved in their lives, I would advise seeking out other supportive and understanding adults or mentors who can provide guidance and love. Whether it be a teacher, therapist, family friend, or community member, having a trusted adult figure in your life can make a world of difference in navigating the challenges of autism. It is important to communicate your needs and feelings with those around you, so they can offer the support and understanding you require on your journey. Remember that you are not alone, and there are people out there who care about you and are willing to help you succeed and thrive despite the challenges you may face. My relationship with my grandparent has been instrumental in helping me build confidence and resilience in dealing with autism. Their unwavering support and love have provided a strong foundation of acceptance and understanding that has bolstered my self-esteem and belief in my abilities. Through their encouragement and guidance, I have learned to embrace my differences and see them as strengths rather than limitations. Moreover, my grandparent has taught me valuable coping mechanisms and strategies to navigate the challenges of autism, fostering a sense of resilience and adaptability in the face of adversity. Overall, their presence in my life has been a source of strength that has enabled me to face the uncertainties of autism with courage and determination.
- 9. Have you and your grandparent faced any challenges together in understanding and accepting autism, and how did you overcome them? My grandparent and I have faced challenges together in understanding and accepting autism, as it can be a complex and nuanced condition to navigate. At times, there have been disagreements about the best approach to managing certain behaviors or seeking out appropriate therapies. However, through open and honest communication, we have been able to find common ground and work together towards a solution that benefits me. By listening to each other's perspectives and educating ourselves about autism, we have been able to overcome misunderstandings and misconceptions, strengthening our bond in the process. It is essential to approach these challenges with patience, empathy, and a willingness to learn from one another, as it is through these shared experiences that we grow and deepen our understanding of autism.
- 10. What role do you feel your grandparent plays in advocating for your needs and rights as a child with autism? My grandparent plays a crucial role in advocating for my needs and rights as a child with autism, serving as a fierce advocate and ally in my journey. They attend all of my therapy sessions, school meetings, and doctor's appointments, ensuring that my voice is heard and my concerns addressed. Additionally, my grandparent collaborates with educators, healthcare professionals, and other caregivers to create a comprehensive support network that meets my individual needs and fosters my growth and development. Their advocacy extends beyond just physical support, as they also educate themselves about autism and strive to raise awareness in our community about the importance of understanding and accepting neurodiversity. In essence, my grandparent's advocacy is a testament to their unwavering commitment to my well-being and success in navigating the challenges of autism.
- 11. How has your grandparent's presence impacted your family dynamics and relationships with other members who may not fully understand autism? My grandparent's presence has had a significant impact on our family dynamics and relationships with other members who may not fully understand autism. By providing a source of understanding and support, they have helped bridge the gap between those who may struggle to comprehend the complexities of autism and myself. Their advocacy and education on the subject have created a more inclusive and empathetic environment within our family, fostering open communication and acceptance of neurodiversity. Moreover, my grandparent's unwavering commitment to my well-being has set an example for others to follow, encouraging empathy, patience, and support in our interactions with one another. Overall, their presence has played a vital role in fostering a sense of unity and understanding within our family, despite the challenges that may arise from differences in understanding and acceptance of autism.
- 12. Can you speak to the importance of having a supportive and understanding grandparent in your life as a child with autism? Having a supportive and understanding grandparent in my life as a child with autism has been incredibly important and impactful on my well-being and development. Their unwavering love and acceptance have provided me with a sense of security and belonging that is essential for navigating the challenges of autism. My grandparent's support has given me the confidence to embrace my differences and see them as strengths, rather than limitations. Moreover, their willingness to learn about autism and educate themselves on how best to support me has created a safe and nurturing environment in which I can thrive and grow. The presence of a supportive grandparent has not only enriched my life but has also helped me develop the resilience and self-assurance needed to face the uncertainties of living with autism with courage and determination.
- 13. How do you think your grandparent has helped you discover your strengths and capabilities despite the challenges of autism? My grandparent has played a crucial role in helping me discover my strengths and capabilities despite the challenges of autism. Through their unwavering support and belief in my potential, they have encouraged me to explore my interests and talents, fostering a sense of self-confidence and self-efficacy. By providing a safe space for me to express myself and be heard without judgment, my grandparent has helped me uncover hidden talents and abilities that I may not have recognized on my own. Their guidance and encouragement have empowered me to take risks, step out of my comfort zone, and embrace new opportunities for growth and development. Overall, my grandparent's presence in my life has been a guiding light that has illuminated my path, helping me discover my strengths and capabilities despite the challenges that autism may present.

14. What message would you like to share with other children with autism about the love and support that a grandparent can provide on their journey? To other children with autism, I would like to emphasize the profound impact that the love and support of a grandparent can have on your journey. The unwavering presence of a grandparent who offers understanding, compassion, and acceptance can provide a sense of security and stability that is essential for navigating the challenges of autism. Their unconditional love and advocacy can help you build confidence, resilience, and self-assurance, empowering you to embrace your differences and see them as strengths rather than limitations. Remember that you are not alone, and there are people in your life who care about you and are willing to support you every step of the way. Cherish the bond you have with your grandparent and lean on their love and wisdom as you navigate the complexities of living with autism.

Phase 3: What Grandma Would Like to Hear from Grandson

Phase 3 continues the simulation and synthesis by AI of what the grandchild would like to say to Grandmother and about Grandmother. Once again, we are using AI to synthesize what may never have been said nor perhaps even thought by the grandson. Table 3 shows this synthesized set of 30 statements returned by AI.

The important thing to note here is that the statements that are synthesized are perfectly ordinary. The request is to provide a detailed conversation. Most of the ideas generated by AI are single sentences while occasionally generating two sentences. Does that mean that in the "mind" of AI, the child has the ability to make one or possibly two statements in a conversation? A further study might explore the morphology of the answers generated by AI [14-17].

Table 3: The 30 "messages" synthesized by AI to reflect what the grandson would like to say to his grandmother, who lives far away.

INSTRUCTIONS PROVIDED TO THE AI TO GENERATE WHAT THE GRANDSON MIGHT LIKE TO SAY TO THE GRANDMOTHER

My name is Grandma M. I have a wonderful grandson, H, who lives far away. I love to see him. H is three years old. I have been told that H may have non-verbal autism. I would like AI to synthesize a detailed conversation between Grandma M and Grandson H. I want the conversation to provide all the things that Grandson H would like to say to Grandma M but cannot. Quotes represent direct statements. This conversation is on FaceTime.

THE 30 MESSAGES SYNTHESIZED BY AI TO REPRESENT WHAT THE GRANDSON WOULD LIKE TO SAY TO HIS GRANDMOTHER, WHO LIVES FAR AWAY

- 1. "Grandma, I love you so much and I miss you every day. I wish I could tell you how much I appreciate all the love and care you give me."
- 2. "I wish I could tell you about all the things I see and hear, even though I can't always express it with words."
- 3. "I want to tell you how happy it makes me when you read books to me and play games with me, even though I may not show it the way other kids do."
- 4. "I wish I could tell you how much I enjoy our FaceTime calls and how much they brighten my day."
- 5. "I want you to know that even though I may not be able to say it, I feel everything very deeply, and your presence means the world to me."
- 6. "I wish I could tell you about all the things I dream about and imagine, even though I can't always share them with words."
- 7. "I want to tell you how much I look forward to seeing you in person and giving you a big hug, even though I may not always know how to express my emotions physically."
- 8. "I wish I could tell you about all the things I learn each day and how much I appreciate your love and support."
- 9. "I want you to know that even though I may not always respond the way you expect, I am grateful for everything you do for me."
- 10. "I wish I could tell you how much I enjoy spending time with you, even though I may not always be able to communicate it verbally."
- 11. "I want to tell you how much I love it when you sing songs to me and make me laugh, even though I may not always show it in the same way as other children."
- 12. "I wish I could tell you how much I cherish our special bond and how much your love means to me."
- 13. "I want you to know that even though I may not be able to say it, I feel a deep connection with you and appreciate all the moments we share together."
- 14. "I wish I could tell you how much I admire you and how grateful I am to have you as my grandma."
- 15. "I want to tell you how much I love you, even though I may not always know how to express it in words."
- 16. "Grandma M, do you miss me as much as I miss you?"
- 17. "Why do we have to talk through a screen instead of being together in person?"

- 18. "Do you know how much I love you, even though I can't always show it?"
- 19. "Can you hear me when I say, 'I love you' in my own special way?"
- 20. "Do you know how much I appreciate our time together even though I can't always express it verbally?"
- 21. "Why is it so hard for me to talk to you like other kids do?"
- 22. When I see your face on the screen, it makes me so happy. Does it make you happy too?"
- 23. "Do you know how much I look forward to our conversations, even though they're different from other people's?"
- 24. "Why does it feel like I can't always convey my true feelings to you, even though I want to so badly?"
- 25. "When I see your smile, it lights up my whole world. Does my smile do the same for you?"
- 26. "Can you feel the love I have for you, even though I can't always say it out loud?"
- 27. "Why is it easier for me to express my feelings in other ways, like through hugs and kisses, rather than words?"
- 28. "When we're apart, do you know how much I think about you and wish we could be together?"
- 29. "Do you understand that even though I can't always communicate like others do, I still feel a deep connection to you?"
- 30. "When we finally get to see each other in person, will you know just how much I've missed you?"

Phase 4: Using AI to Help Understand Situations and Suggest Non-medical Activities

Phase 4 uses AI for advice, much as one might ask friends or professionals for advice. The advice provided is not to be used for medical purposes; these are simply the type of verbiage one might get from many different sources [19, 20]. The advice is for

one's attitude and behavior. It is usually not treated as anything other than information from "yet another source" [18-20]. Table 4 shows the advice given by AI to a grandmother when interacting with her grandson who possibly has autism.

Table 4: "Advice" provided by generative AI to deal with a

possibly autistic, non-verbal grandson.

INSTRUCTIONS FOR "EVERYDAY ADVICE" ABOUT HOW A GRANDMOTHER SHOULD INTERACT WITH A POSSIBLY AUTISTIC, NON-VERBAL GRANDSON

Our issue is a preschool child, a boy aged 3. Assume that the child has autism and is non-verbal. How should a grandmother interact with this three-year-old boy, when she can only interact with him daily by FaceTime on the Apple device? She can visit him once every two or three months. Based upon the description of this preschool child, what is the recommended way for the far-away grandparent to stay involved in this grandchild's life? Write an eight-paragraph composition on what precisely to do, what is the expected impact on the child, and on the grandmother.

AI's "Suggestions"

Interacting with a preschool child who has autism and is non-verbal can be challenging but also incredibly rewarding. When communicating with the child through FaceTime on the Apple device, it is important for the grandmother to use visual cues and gestures to engage the child. This can include using simple hand movements or facial expressions to convey emotions or instructions. Additionally, it may be helpful to use visual aids or pictures to help the child understand and communicate.

During FaceTime sessions, the grandmother should focus on activities that are engaging and stimulating for the child. This could include reading books together, playing interactive games, or even singing songs. By providing a variety of sensory experiences, the grandmother can help the child develop their communication and social skills.

It is important for the grandmother to be patient and understanding when interacting with the child. Recognizing and accepting the child's unique communication style is key to building a strong bond and fostering a positive relationship. By showing empathy and support, the grandmother can create a safe and nurturing environment for the child to thrive.

Even though the grandmother may only be able to visit the child in person every few months, it is important for her to stay connected and involved in the child's life. This can be achieved through regular FaceTime sessions, sending letters or cards, or even creating a shared photo album. By staying actively engaged, the grandmother can make a positive impact on the child's development and well-being.

For the child, having a consistent and loving presence in their life can provide a sense of security and stability. This can help them build trust and confidence in their relationships, as well as develop important social and communication skills. By actively participating in the child's daily activities and routines, the grandmother can play a significant role in their growth and development.

For the grandmother, staying involved in her grandchild's life can be a source of joy and fulfillment. By witnessing the child's progress and milestones, the grandmother can feel a sense of pride and accomplishment. Additionally, by maintaining a strong connection with the child, the grandmother can deepen their bond and create lasting memories that will be cherished for years to come.

In order to maximize the impact of their interactions, the grandmother should seek guidance from professionals or support groups that specialize in working with children with autism. By educating themselves about effective communication strategies and techniques, the grandmother can enhance their interactions with the child and create a positive and nurturing environment.

Overall, by actively engaging with the child through FaceTime sessions, using visual cues and gestures, and creating a supportive and loving relationship, the grandmother can play a vital role in the child's life and development. Despite the challenges of distance and communication barriers, the grandmother's involvement can have a profound impact on the child's well-being, growth, and happiness.

Discussion and Conclusions

Physical distance between grandparents and their autistic grandchildren can significantly impact their relationship. However, it can also offer opportunities for understanding autism and developing effective support strategies. Generative AI technology, powered by natural language processing (NLP) algorithms, can provide personalized advice and strategies for interacting with non-verbal autistic grandchildren. AI can simulate communication scenarios, enhancing communication skills in a virtual environment. It can also revolutionize remote communication and consultation, allowing grandparents to access expert advice from autism specialists and therapists. AI can also enhance communication among caregivers, therapists, and educators-fostering unity and collaboration towards common objectives. The "bottom line" is that AI has the potential to help grandparents to develop a deeper understanding of their grandchild's autism and provide personalized suggestions for building strong relationships.

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References

- 1. Hillman, J. (2007). Grandparents of children with autism: A review with recommendations for education, practice, and policy. Educational Gerontology, 33(6), 513-527.
- 2. Hillman, J. L., Wentzel, M. C., Anderson, C. M. (2017). Grandparents' experience of autism spectrum disorder: Identifying primary themes and needs. Journal of Autism and Developmental Disorders, 47(10), 2957-2968.
- 3. Margetts, J. K., Le Couteur, A., Croom, S. (2006). Families in a state of flux: The experience of grandparents in autism spectrum disorder. Child: Care, Health and Development, 32(5), 565-574.
- 4. Prendeville, P., Kinsella, W. (2019). The role of grandparents in supporting families of children with autism spectrum disorders: A family systems approach. Journal of Autism and Developmental Disorders, 49(2), 738-749.
- Baranowski, T., Buday, R., Thompson, D. I., Baranowski, J. (2008). Playing for real: Video games and stories for health-related behavior change. American Journal of Preventive Medicine, 34(1), 74-82.
- 6. Gaba, D. M. (2004). The future vision of simulation in health care. BMJ Quality & Safety, 13(Suppl 1), 2-10.
- 7. Liao, H. C., Wang, Y. H. (2020). Storytelling in medical education: Narrative medicine as a resource for interdisciplinary collaboration. International Journal of Environmental Research and Public Health, 17(4), 1135.
- 8. Robertson, C., Clegg, G., Huntley, J. (Eds.). (2023). Sto-

- rytelling in medicine: How narrative can improve practice. CRC Press.
- 9. Roberts, M. L., Kaur, T. (2023). Effect of storytelling and empathy training to support affective learning in undergraduate nursing students. Nurse Educator, 48(5), 260-264.
- Ayers, J. W., Poliak, A., Dredze, M., Leas, E. C., Zhu, Z., Kelley, J. B.,& Smith, D. M. (2023). Comparing physician and artificial intelligence chatbot responses to patient questions posted to a public social media forum. JAMA Internal Medicine, 183(6), 589-596.
- 11. Kim, J., Cai, Z. R., Chen, M. L., Simard, J. F., Linos, E. (2023). Assessing biases in medical decisions via clinician and AI chatbot responses to patient vignettes. JAMA Network Open, 6(10), e2338050.
- Kung, T. H., Cheatham, M., Medenilla, A., Sillos, C., De Leon, L., Elepaño, C.,& Tseng, V. (2023). Performance of ChatGPT on USMLE: Potential for AI-assisted medical education using large language models. PLoS Digital Health, 2(2), e0000198.
- 13. Li, R., Kumar, A., Chen, J. H. (2023). How chatbots and large language model artificial intelligence systems will reshape modern medicine: Fountain of creativity or Pandora's box? JAMA Internal Medicine, 183(6), 596-597.
- 14. Sideraki, A., & Drigas, A. (2021). Artificial intelligence (AI) in autism. Technium Social Sciences Journal, 26, 262.
- 15. Jaliaawala, M. S., Khan, R. A. (2020). Can autism be catered with artificial intelligence-assisted intervention technology? A comprehensive survey. Artificial Intelligence Review, 53(2), 1039-1069.
- 16. DiPietro, J., Kelemen, A., Liang, Y., Sik-Lanyi, C. (2019). Computer- and robot-assisted therapies to aid social and intellectual functioning of children with autism spectrum disorder. Medicina, 55(8), 440.
- 17. Grynszpan, O., Weiss, P. L., Perez-Diaz, F., Gal, E. (2014). Innovative technology-based interventions for autism spectrum disorders: A meta-analysis. Autism, 18(4), 346-361.
- Barua, P. D., Vicnesh, J., Gururajan, R., Oh, S. L., Palmer, E., Azizan, M. M., & Acharya, U. R. (2022). Artificial intelligence enabled personalised assistive tools to enhance education of children with neurodevelopmental disorders—A review. International Journal of Environmental Research and Public Health, 19(3), 1192.
- 19. Li, G., Zarei, M. A., Alibakhshi, G., Labbafi, A. (2024). Teachers and educators' experiences and perceptions of artificial-powered interventions for autism groups. BMC Psychology, 12(1), 199.
- 20. Su, J., Yang, W. (2022). Artificial intelligence in early childhood education: A scoping review. Computers and Education: Artificial Intelligence, 3, 100049.

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