Impact of Non-parental Early Childhood Education on Digital Friendship Tendency

Sheel Chakraborty

Abstract—Modern society in developed countries has distanced itself from the earlier norm of joint family living, and with the increase of economic pressure, parents' availability for their children during their infant years has been consistently decreasing over the past three decades. This has been promoted in the US through the legislature and funding. Early care and education may have a positive impact on young minds, but a growing number of kids facing social challenges in making friendships in their teenage years raises serious concerns about its effectiveness. The survey-based primary research presented here shows that a statistically significant number of millennials between the ages of 10 and 25 years prefer to build friendships virtually than face-to-face interactions. Moreover, many teenagers depend more on their virtual friends whom they never met. Contrary to the belief that early social interactions in a non-home setup make the kids confident and more prepared for the real world, many shy-natured kids seem to develop a sense of shakiness in forming social relationships, resulting in loneliness by the time they are young adults. Reflecting on George Mead's theory of self that is made up of "I" and "Me", most functioning homes provide the required freedom and forgivable, congenial environment for building the "I" of a toddler; however, daycare or preschools can barely match that. It seems social images created from the "Me" perspective in preschoolers in a daycare environment has interfered and greatly overpowered the formation of a confident "I" thus created a crisis around the inability to form friendships face to face when they grow older. Though the pervasive nature of social media cannot be ignored, the non-parental early care and education practices adopted largely by the urban population have created a favorable platform of teen psychology on which social media popularity thrived, especially providing refuge to shy Gen-Z teenagers. This can explain why young adults today perceive social media as their preferred outlet of expression and a place to form dependable friendships, despite the risk of being cyberbullied.

Keywords—Digital socialization, shyness, developmental psychology, friendship, early education.

I. INTRODUCTION

THOUGH the concept of kindergarten education is rooted more than 150 years ago, the popularity and adaptation of pre-preliminary education in the United States were greatly fueled in the mid-1990s. It is important for us to understand from a historical perspective how the non-parental, pre-preliminary education system in the US was influenced by the attitudes and beliefs of society and governmental policies at various time periods [1].

Developmental theories that lay the foundation of early childhood education describe how a child's mind changes over time in expressing social behavior, thought, language or perception. Two major developmental theorists, Jean Piaget and Lev Vygotsky, dominated the topic of children's cognitive development on which most of today's kindergarten systems are built [2].

Piaget's Cognitive-Stage theory believes in an "inside-out" approach in which a child's cognition develops independently of environmental and social influences and is genetically predetermined. Piaget built his theory using the concept of epistemology which combines philosophy with the scientific method of logic and fact [3]. He believed children play an active role in their intellectual growth while observing, imitating, and most importantly interpreting as they interact with their surroundings. The rate at which a child constructs knowledge can vary from one individual to another, however for all, cognitive development involves understanding a new experience based on previous experiences and achievement of a successful extrapolation. In other words, intellectual development is cumulative.

According to Piaget, the most important principle of human functioning is adaptation [4]. This process consists of both assimilation which means fitting new information into preconceived notions about the world and accommodation. Piaget determined that up until the age of seven and a half, children prefer to work alone rather than in small or large groups. Up to that age, he determined the function of language is egocentric. Even when alone, children are found to speak as they play or act. This means words at this stage are more like a toy than a tool to express their thoughts. Piaget's research concludes that communicating children's own thoughts consistently and understanding someone else's thoughts do not appear until around age seven or seven and a half years [5].

Vygotsky's "outside-in" theory regards a child's developing knowledge as a reflection of the child's cultural, historical, and social background. Vygotsky stated that an individual's mind cannot be understood without considering the surrounding society [6]. He identified children's thinking as being attributed to social interactions and psychological tools such as language. Social problem solving and expressing feelings is the essence of cognition.

The National Association for The Education of Young Children concluded that young children learn best through authentic, meaningful, and purposeful learning experiences guided by responsive adults to mold the child's growth and development [7].

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II. EXPERIENCE AND OBSERVATIONS

Experiencing the public school system in the US while growing up, it was realized by Denise that there has been nationwide, consistent debate whether a rework in parts of the education system is overdue. However, usually this gets talked about a lot for the high school and college education, but not much around the pre-preliminary education system. There are advocates who share concern and say current early education policies are based on unproven methods rather than research-based practices and are fueled by political pressures rather than educational knowledge [8].

The above concern should not be overlooked because there is a reason of social approval and popularity of the early non-parental pre-preliminary education centers in the US, and it directly links with the growing number of women in the workforce - much of it is driven by economic needs, social demands and career aspiration followed by the widespread education among women.

Over the years, the policy makers in the US realized the need of the mothers of young children who are in the workforce and policies were modified. Social trends for young toddlers, even infants to go to preschool or daycare kept on increasing in the last two decades. According to the Education Commission of the States, nineteen states plus Washington, D.C. require kids to attend kindergarten. In addition, 39 states plus the District of Columbia are required by law to offer kindergarten either full or half day [9].

It is important to note that the average age to attend kindergarten is 5 years in the US. However, sending children to pre-PreK centers below that age is a choice of the parents. As pointed out earlier, Piaget stated till seven and half years, young children use language more as a tool to play and not to communicate their thoughts and feelings. That means if preschoolers do not feel the sense of protection in a preschool setting, they would not be able to communicate their mind effectively to their parents or guardians. The lack of sense protection may have nothing to do with the preschool teachers or caregivers, it can stem simply from the lack of familiarity.

We feel this possibility is quite real, especially for the shy-natured and introverted kids, more so, who come from other ethnic backgrounds. Without denying any positive effects that pre-preliminary education may have brought to the society, a question comes: Could the US pre-preliminary education practice cause much detrimental effects to many young children and is this one of the reasons for growing speech delay among the younger kids, especially boys?

According to Healthline, shyness is an unpleasant feeling of self-consciousness, a fear or discomfort originating from what some people believe others are thinking. This fear can inhibit a person's ability to do or say what they want, ultimately preventing the formation of healthy relationships. [10].

According to a research paper written by Sheel Chakraborty and recently published by InPACT, "I did not speak till he was 4 ½ years old, which was classified in elementary school as a speech delay. I went through speech therapy. I always enjoyed being in his own world: I state that he loved numbers, playing video games, electronic media, alongside possessing a vivid memory for numbers/images often not important to others. When I introspect, he's always been a shy person since birth [11]."

The generation that started going to kindergarten in the year 2000 or after is a generation that has been struggling to make social relationships today. It is widely observed that the Gen Z population has distinct behavioral characteristics from the generation above and they feel more comfortable in the virtual world, and they prefer to express themselves over social media more than direct verbal communication [12]. Many think this could be because of the pervasive nature of smart phones and digital media but that could be coincidental and may not be the only reason. The availability of smart phones in a lot of toddler years certainly shaped the recent generations' childhood habits, but the conjecture is that the non-parental, pre-preliminary education centers bolstered the effect. Kids who do not have a sense of protection in preschool environment and/or who were inherently introverted simply adapt and assimilate to that situation reinforcing shyness traits and wrap their comfort more easily around the virtual media as they grow up.

To test this hypothesis, a survey was carried out; the correlation between going to preschool below age 4 years, especially, those who are shy demonstrates astonishing tendency towards digital friendship.

III. METHODOLOGY

The 12-question "Virtual Friendship Tendency" web survey got over 100 responses where the responders used a web link and filled in the answers. The overwhelming majority came from social media and direct messaging. Questions were framed to capture an idea of the early childhood experiences e.g., happiness, early relationships and family bonds, personality traits such as, shy, or extroverted, and congeniality of the pre-preliminary education environment where they grew in. This survey was promoted and targeted towards people between the ages of 10 and 25 years, ranging from middle school to college graduates. The survey generated ordinal data for each question that gauged the experience on a scale of 1-5 ranging from the extreme negative to the extreme positive. The goal of the survey was to link the inherent shy nature along with the sense of protection in early childhood as perceived by a kid and their difficulty in making relationships at a later age.

The results show that 52% of the responders came from middle and high school whereas 48% were college students or recent graduates. The respondents were from all ethnic backgrounds as detailed in Table I. The survey was randomized and no targeting towards ethnicity, educational level, socio-economic conditions, or age group (beyond the specification of age boundaries), was built in the survey.

A greater percentage of the surveyors identified that most of their childhood was spent with both biological parents as shown in Fig. 1. About 90% of the respondents felt their childhood was pleasant and they remember it fondly.

The survey did not distinguish between the sex of the survey respondents. Though the survey was fully randomized, it is important to mention that 44% of all who took the survey

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identified themselves as shy, which was unexpected. Fig. 2 shows the distribution percentage.

TABLE I
DEMOGRAPHIC INFORMATION OF THE SURVEYORS

Age group (years)	Ethnicity	Count
10-13	Asian or Pacific Islander	3
	Other/Mixed	2
	African American	1
	Subtotal	6
14-17	Caucasian	12
	Asian or Pacific Islander	11
	Other/Mixed	11
	African American	8
	Hispanic	4
	Subtotal	46
18-21	Asian or Pacific Islander	8
	Other/Mixed	8
	Caucasian	8
	African American	4
	Hispanic	3
	Subtotal	31
21+	Asian or Pacific Islander	1
	Subtotal	1
21-25	Caucasian	5
	Other/Mixed	5
	Asian or Pacific Islander	5
	African American	1
	Subtotal	16
	Grand Total	100

Fig. 1 Home environment of the responders as a child

The answers to the survey questions were funneled through a mapping exercise, described in Fig. 3, that links the results to the reasoning of the virtual tendency of the respondents if such tendencies are observed in the data. As can be seen in the next section, the data unambiguously prove that the age group between 10 and 25 years displays tendencies towards digital friendship.
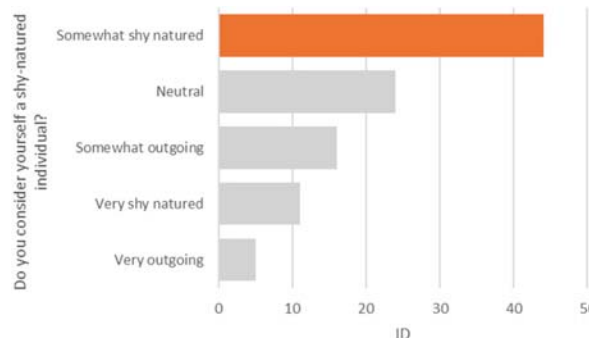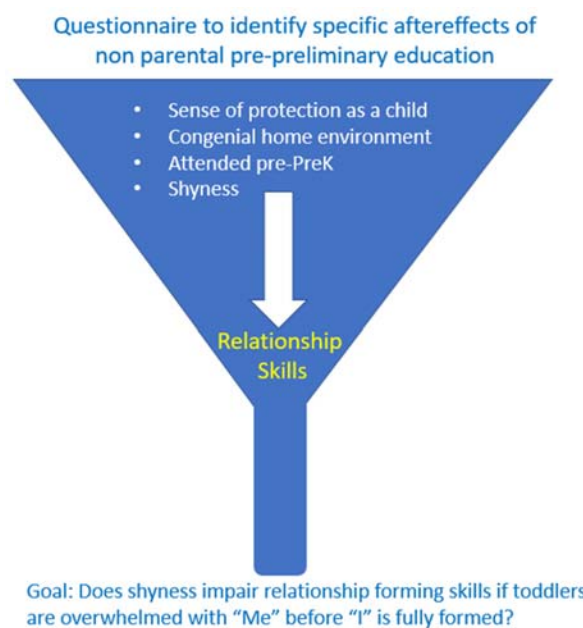

Fig. 2 Shy nature respondents

Fig. 3 Funnel to map survey results to meaningful aftereffects

A. Survey Results Summary

The 100 responses were broken into two sub-sets; one that includes all the responses originated from the individuals who never attended a non-parental pre-preliminary education facility prior to age 4 and the other subset from all who attended by age 4. In the US, because it is mostly mandatory or at least customary for all children to start pre-kindergarten by the age of 5, the age cut-off for preschool attendance question was 4. Five different bar graphs displayed in Fig. 4, summarize the results from which significant conclusions can be drawn. In Fig. 4, responses of those who did not attend any non-parental pre-preliminary education facility are shown in blue whereas the responses of those who attended are shown in orange. The first blue bar from left showing 40% indicates that those who took the survey never attended a pre-preliminary education center; contrarily the orange bar representing 60% points out that, 60% who took the survey went to some form of non-parental education center before age 4.

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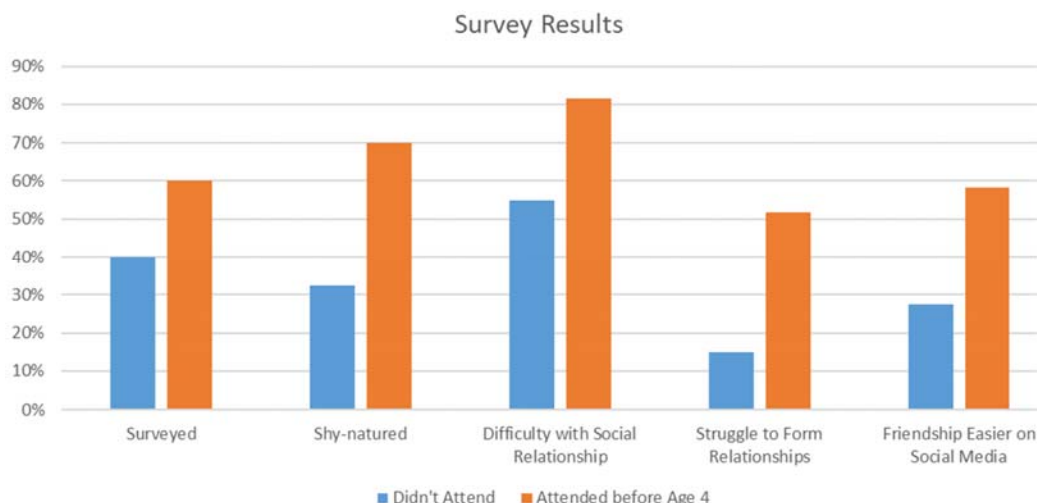International Journal of Educational and Pedagogical Sciences
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Fig. 4 Survey results showing different trends

The second blue-orange bars in Fig. 4 show that 33% of those who did not participate in any non-parental pre-preliminary education identified themselves as shy natured; in contrast, an overwhelming 70% of those who went to a day-care or similar facilities before age 4 felt they were shy. The third and fourth blue bar graphs demonstrate that 55% of those who never went to a pre-PreK schooling felt social relationships are difficult, out of which 15% struggle to make such relationships. Among those who attended pre-preliminary schooling shown in orange bars, 82% face relationship forming difficulties and a staggering 52% report that they struggle in forging any kind of social relationships. This gap between blue and orange is unexpectedly high, and the rise of the loner population cannot be neglected if emotional balance in a healthy society is to be maintained. When asked if the social media helps making friendship easier, 28% of who never attended any pre-PreK agreed, whereas 58% of all who attended day care or some other form of schools before age 4, felt that digital media is their refuge for making friends in today's world. This proves the original hypothesis.

B. Results Discussions

This study points out that today's society has evolved primarily under two different forces, one that came from the advent of technology, e.g., smart phones, Internet, and social media but a more fundamental unnoticed shift occurred perhaps from the adoption of early childhood pre-preliminary education by common households. This made the current generation much shier and not equipped with skills of making face-to-face relationships. The preference of social media usage among younger generations may have been fueled by their mental need of making friends that they were incapable of forming, otherwise.

Though the workforce needs of mothers to be at work will remain unchanged and nuclear or single parent families today will not be able to give children an environment that a joint family could give a century ago, it is important that we recognize the rising concerns around social relationship difficulties faced by the younger generations. The outbreak of frustration may even be seen as grudges expressed through unexplained gun-violence or other puzzling detrimental actions towards society by young people of less than 25 years of age.

IV. CONCLUSION

The sample data size used for this research is small, but the initial findings look to be of great importance. This research should be further carried out among a larger group with more diversity, and if what is found is a nation-wide trend, then policies around the pre-preliminary education systems and child-raising must be re-thought to accommodate the mental needs of the toddlers. Children under the age of 4 years may never be able to voice their concerns because of the cognitive developmental stage they are in. Therefore, it is the duty of the policy makers and educators to protect them and their future.

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