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Play And Psychosocial Development In Children Aged 3–7 Years

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ABSTRACT

This study explores the influence of play in fostering a child's psychosocial development based on Erikson's theory of the Psychosocial Stages of Development. Specifically, it examines the impact of play on children's development during the initiative vs. guilt and industry vs. inferiority stages. Using a mixed-methods approach, data were collected from 40 parents of children aged 3-7 years via the My Child's Play (MCP) questionnaire, a modified version of the Modified Erikson Psychosocial Stage Inventory (MEPSI), and Kinetic Family Drawings (KFDs). The data were analysed using descriptive statistics, correlation matrices, and linear regression models. Results indicated moderate-to-strong positive correlations between psychosocial development stages and play performance, with themes of positive parent-child interactions, independence, goal-oriented play, and accomplishment emerging from the KFDs. The findings underscore the critical role of play in children's psychosocial development and provide valuable insights for educators, parents, and policymakers. Future research should further explore these dynamics to enhance our understanding of play's multifaceted benefits.

Keywords: play, play perception, psychosocial development, Erikson, childhood competence, parental guidance.

CHAPTER I

INTRODUCTION

Why do children need to play? Play is more than just about fun, there are deeper meanings behind every playful activity. Theorists and psychologists have studied the origins and nuances of play since as early as the 19th century and to date, new concepts are being developed and worked upon. Play is essential to learning and development in young children. One of the first definitions of play was given by Froebel (1887) stating that 'Play is the highest expression of human development in childhood for it alone is the free expression of what is in a child's soul'. This definition aligns with the perspective that development in childhood is facilitated via the exploration of one's physical and social environment, something that naturally occurs when a child engages in play. Smith (2013) defined play as a spontaneous, pleasurable, flexible and voluntary activity that involves a combination of the use of body, object, symbols and social relationships. Smith stated that play behaviour can be characterised as an activity that is more disorganised than 'games', and believed that the process of play is of more significance than completing any goal or reaching an endpoint.

Garvey (1977) attempted to define play behaviour by bifurcating the definition into five main components. He stated that play is i) pleasurable and perceived positively by the individual engaged in play, ii) intrinsically motivated, iii) voluntary and spontaneous, iv) involves active participation by the player and v) connected to what is not play in specific methodical ways.

Although researchers differ on a precise definition of play, it is largely believed that play plays a significant role in childhood development. This study aims to investigate the impact of play on the psychosocial development of children aged 3-7 years, with a specific focus on Erikson's stages of Initiative vs. Guilt and Industry vs. Inferiority.

CHAPTER II

REVIEW OF LITERATURE

Besio et al. (2018) emphasize adapting play activities to maintain engagement and accessibility, using observational techniques like narrative interviews, and recognizing parents' roles in facilitating play. Burke, Schaaf, and Lomba Hall

(2008) stress the importance of understanding life stories for effective therapy and recommend play observation to address psychosocial, physical, and cognitive needs.

Miller-Kuhaneck et al. (2013) highlight the limited focus on assessing play itself or setting play-based goals, indicating a disconnect in recognizing play's importance. Rosenblum, Waissman, and Diamond (2017) suggest that parent-reported play characteristics can identify challenges faced by children with Developmental Coordination Disorder (DCD). Warash, Root, and Doris (2016) explore parental perspectives on play, finding that mothers value play more than fathers, but this perception diminishes as children grow older due to societal pressures towards academics. Stagnitti & Unsworth (2000) argue that limitations in these skills can restrict social participation and advocate for occupational therapists to promote pretend play to reduce these restrictions.

Trawick-Smith (2009) proposes a model that highlights the complex interactions during play, with findings beneficial for classroom practice. Brown (2007) emphasizes play interventions in hospital settings for children with serious illnesses and grief, highlighting play's role in self-expression, mastery, and coping with anxiety and trauma.

Bautista et al. (2019) examine the gap between Singapore's kindergarten curriculum's vision of "purposeful play" and actual practices, finding limited Learning Centre Time sessions and inconsistencies in teacher involvement, suggesting a disconnect between curriculum ideals and classroom realities. Neppl & Murray (1997) found that same-sex pairs are more cooperative, boys prefer adventure themes and functional play, while girls favour dramatic play. Vigil-Dopico et al. (2022) found associations between play performance and psychosocial difficulties, with executive functioning being a key factor. Lunga et al. (2022) emphasize play-based pedagogy's role in holistic development, advocating for its extensive use in early childhood education. Romli & Yunus (2020) evaluate play instruments for pediatric occupational therapy, identifying the Revised Knox Preschool Play Scale and the Test of Playfulness + Test of Environmental Supportiveness Unifying Measure as comprehensive tools. Romero-Ayuso et al. (2021) validate the My Child's Play (MCP) questionnaire cross-culturally, confirming its utility in assessing play needs and challenges in children with neurodevelopmental disorders.

Kim and Suh (2013) discuss Kinetic Family Drawings (KFD) as a tool for evaluating cognitive characteristics and understanding children's internalizing problem behaviors. They identify various style variables indicative of emotional and behavioral characteristics. Veltman and Browne (2001) highlight KFD and Favorite Kind of Day (FKD) techniques as effective screening tools for child maltreatment, emphasizing the importance of qualitative and quantitative measures in interpreting children's drawings.

CHAPTER-III

METHODOLOGY

3.1 Objectives:

a) To examine the impact of play on the overall psychosocial development in children aged 3-7 years
b) To examine the impact of play on the psychosocial developmental stage of Initiative vs. Guilt in children aged 3-7 years.
c) To examine the impact of play on the psychosocial developmental stage of Industry vs. Inferiority in children aged 3-7 years.
d) To analyse play based on the parental interaction with, and facilitation of their child's play activities.
e) To measure a child's psychosocial development corresponding to their age.

3.2 Hypotheses:

H0: There will be no significant impact of play on the overall psychosocial development in children aged 3- 7 years.
H1: There will be a significant impact of play on the overall psychosocial development in children aged 3- 7 years.

3.3 Variables of the study:

- Independent Variable (IV)- Play
- Dependent Variable (DV)- Psychosocial Development in Stages of Initiative vs. Guilt and Industry vs. Inferiority

3.4 Sample and its Selection

In total, 40 participants took part in this study. All participants were parents with children aged 3-7 years. A two-part sampling approach was employed for this study-

a) Survey Sample: Convenience sampling was used to recruit parents with children belonging to the age group of 3-7 years. Convenience sampling is a non-random method of sampling in which data is collected from a conveniently available pool of respondents. This type of sampling method recruits' respondents that are in easy access for the researcher and are readily available to take part in the study. For the purpose of this study, a convenience sample of 40 parents who have children aged 3-7 was recruited. In this case, both questionnaires were sent across various social media platforms, particularly Linkedin, Whatsapp and via Email, to maximise the reach of the same.
b) Kinetic Family Drawing Subsample: From the survey sample chosen, a purposive subsample of 10 respondents was recruited for the Kinetic Family Drawings (KFDs) i.e. the qualitative portion of the study. Respondents were selected based on their availability and willingness to take part in the additional activity. Selected participants were then contacted for an offline or online one-hour session where the KFD activity and analysis were conducted.

3.5 Inclusion Criteria

A parent who currently has at least one child belonging to the age group of 3-7 years, and given their consent to participate in the study was included. There was no age restriction or economic qualifier for the parents.

3.6 Research Design

This study employs a mixed-methods research design to comprehensively investigate the impact of play on psychosocial development, with a focus on Initiative vs. Guilt and Industry vs. Inferiority stages in children aged 3-7 years. Quantitative data are collected through the standardised psychometric assessments- My Child's Play Questionnaire (MCP) and a modified version of the Modified Erikson Psychosocial Stage Inventory (MEPSI), allowing for the quantitative measurement of play behaviours and psychosocial outcomes. Concurrently, qualitative data are gathered through Kinetic Family Drawings (KFDs) to understand parental perception of play and its influence on children's psychosocial development. The inclusion of both quantitative and qualitative data facilitates a comprehensive understanding of the research problem.

3.7 Description of the tools employed

3.7.1 Quantitative Approach

My Child's Play Questionnaire (MCP) has been used to measure a child's play performance while a modified version of the Modified Erikson Psychosocial Stage Inventory (MEPSI) has been used to measure a child's psychosocial development according to the developmental stage they currently belong to.

The My Child's Play (MCP) questionnaire is used to measure parental perception of their child's play behaviour and preferences. The My Child's Play (MCP) questionnaire has strong psychometric qualities and has good reliability and validity of internal consistency with Cronbach's $\alpha = 0.86$ (Schneider & Rosenblum, 2014). The questionnaire consists of 50 items that have been divided into four dimensions, namely interpersonal relationships and social participation, choices and preferences in play, executive functions, and opportunities in the environment. This enables researchers to have an in-depth and broader view of something as complex as a child's play. The MCP is a parent-filled questionnaire where parents need to select a response that best reflects the behaviour of their child when the child is engaged in play. A 5-point Likert scale is used for the same, the range being 1=never to 5=always. The responses also include the option of 'Not Observed' or 'N.O.' for items that the parent cannot assess or has not observed in their child. The higher the total score of the child, the better the child's play performance.

Erik Erikson developed eight stages of psychosocial development, and the Modified Erikson Psychosocial Stage Inventory (MEPSI) gauges how strong a person's psychosocial traits are as they advance through each stage. The Erikson Psychosocial Stage Inventory (Rosenthal, Gurney, & Moore, 1981), which evaluates Erikson's first six stages of life cycle development, was modified by Darling-Fisher and Kline Leidy (1988) to create the MEPSI. On a global scale, the MEPSI's alpha dependability coefficient was .97. The study's two subscales, initiative vs. guilt and industry vs. inferiority, which correspond to the developmental stages that are being studied as part of this research have been used. Their respective coefficients were initiative .78 and industry .85. The MEPSI has been designed for an individual's self-assessment.

For the purpose of this study, the MEPSI has been modified to measure the parents' observation and the parents' assessment of their child's development. The MEPSI items for the stages of Initiative Vs. Guilt and Industry Vs. Inferiority (namely items 2, 7, 11, 14, 15, 22, 23, 29, 32, 33, 38, 52, 59, 61, 64, 65, 71, 74, 75 and 76) have been modified for use. Only a section of the MEPSI has been modified as an observational tool. To ensure an ethical framework and that the validity of the original MEPSI is maintained, the developers of the tool, Ms Cynthia S. Darling-Fisher and Ms Nancy

Kline Leidy were contacted and asked for permission. Once the developers granted permission to modify the MEPSI, a modified version of the tool was created in collaboration with the MEPSI developers particularly for the current research. A reliability analysis was also conducted on the modified items which yielded good scale and item reliability (Cronbach's $\alpha = 0.83$). Based on the reliability analysis, items were reversed as needed.

In addition, the participants responded to a series of questions concerning sociodemographic factors, such as their relationship to the kid, the child's age and gender, place of residence, and level of education. The parents were also asked if their children had any type of learning difficulty or a diagnosed mental health condition.

3.7.2 Qualitative Approach (Kinetic Family Drawings)

A kinetic family drawing (KFD) exercise was given to a purposeful subsample of ten respondents from the original survey to obtain deeper insights into play-related family dynamics and parent-child relationships. Parents were selected for the hour-long session based on their availability and willingness to participate. Participants received comprehensive instructions on the additional KFD component during recruitment. They were instructed to draw themselves playing with their children. There were no further cues about the kind of play that was supposed to be shown. Using this open-ended method allowed for the exploration of parents' perspectives of their children's play, the child's play environment and family interactions during play. Once their drawing was complete, respondents were asked brief, open-ended questions regarding their drawings for additional interpretation.

The collected KFDs were analysed using codes that were developed after a thorough examination of all the drawings to identify recurring themes and patterns. Codes were also developed keeping in mind what both the MCP and MEPSI were measuring, to create a correlational relationship between the quantitative and qualitative data sets.

The collected KFDs were analysed using a thematic analysis approach. This involved a systematic examination of the drawings to identify recurring themes and patterns. The analysis focused on capturing key aspects of family play experiences, those being-

a) Play Interaction: Codes as part of this dimension focused on the nature and level of interaction between parents and their children during play.
b) Play Environment: Codes within this dimension examined the setting and context in which play was occurring. These codes also sought to explore the opportunities a child has within his play environment to engage in different kinds of play.
c) Emotional Expression: Codes related to emotional expression focused on the emotional tone that was being conveyed through the drawings, especially during play.
d) Family Dynamics: This category explored how family relationships and structures were being depicted through play.
e) Psychosocial Stage Indicators: This category aimed to identify potential indicators of the child's psychosocial development stage based on Erikson's theory.

Table 1 *Assessment Codes and Analyses for KFDs*

Key Areas	Codes	Analyses
i. Play Interaction	1. Play Depicted (Yes/No)	Indicates the presence or absence of play activity in the drawing. "Yes" suggests play is a perceived aspect of family life, while "No" might indicate alternative family priorities or a lack of emphasis on play.
	2. Type of play: 2.1 Strucured Play 2.2 Imaginative or Pretend Play 2.3 Physical Play 2.4 Solitary Play 2.5 Interactive Play	Identifies the specific type of play depicted. This can offer insights into the family's preferred play styles (imaginative, physical, structured) and the child's developmental stage.
	4. Focus of Play 4.1 Child-led 4.2 Parent-led 4.3 Shared Play	Identifies who initiates and leads the play. Child-led could indicate parental support for autonomy, while parent-led might suggest a focus on teaching or structure. Shared focus suggests a collaborative and engaging play experience.

ii. Play Environment	1. Setting of Play: 1.1 Indoor 1.2 Outdoor 1.3 Imaginary setting	Identifies where the play activity takes place. Indoor settings might suggest play routines, while outdoor settings could indicate opportunities for exploration and physical activity. Imaginary settings could reflect the child's creativity and sense of wonder.
	2. Play Materials: 2.1 Toys 2.2 Imaginary objects 2.3 Household items 2.4 Nothing depicted	Identifies the objects used for play. Toys indicate access to resources, while imaginary objects suggest creative thinking. Household items might signify resourcefulness or a focus on open-ended play.
iii. Emotional Expression	1. Overall Mood: 1.1 Positive (joyful, engaged) 1.2 Neutral 1.3 Negative (withdrawn, sad, angry)	Reflects the general emotional tone conveyed in the drawing. Positive suggests a happy and engaged family environment, while neutral or negative could indicate a lack of enjoyment or potential conflict during play.
	2. Child's Emotion: 2.1 Positive 2.2 Neutral 2.3 Negative	Identifies the depicted emotion of the child during play. Positive emotions suggest a fulfilling play experience, while negative emotions might indicate frustration, boredom, or conflict.
	3. Parent's Emotion: 3.1 Positive 3.2 Neutral 3.3 Negative	Identifies the depicted emotion of the parent during play. Positive emotions suggest parental enjoyment and support, while negative emotions might indicate stress or disengagement.
iv. Family Dynamics	1. Figure Placement: 1.1 Centralized 1.2 Scattered 1.3 Isolated figures	Identifies the arrangement of figures within the drawing. Centralized placement suggests closeness and interaction, while scattered or isolated figures might indicate emotional distance or lack of cohesion within the family.
	2. Figure Size: 2.1 Child larger than parent(s) 2.2 Parent(s) larger than child 2.3 Figures similar in size	Compares the relative sizes of figures. A larger child could suggest parental perception of the child's importance or dominance, while a larger parent might indicate a focus on parental authority. Similar size suggests a sense of equality within the family.
	3. Physical Proximity: 3.1 Close physical contact (holding hands, hugging) 3.2 Moderate distance 3.3 Significant distance	Identifies the physical closeness between figures in the drawing. Close contact suggests affection and positive interactions, while moderate or significant distance might indicate emotional distance or limited physical connection.
	4. Body Language: 4.1 Open and Relaxed 4.2 Tense or Closed	Identifies the body language cues in the drawing. Open and relaxed suggests positive communication and engagement during play, while tense or closed body language might indicate potential conflict or strain in the interaction.
	5. Eye Contact: 5.1 Eye Contact 5.2 No Eye Contact	Identifies the presence or absence of eye contact between parent and child. Eye contact suggests communication and connection, while its absence might indicate a lack of engagement or emotional distance.

v. Psychosocial Stage Indicators	1. Initiative vs Guilt: 1.1 Independent play themes 1.2 Hesitant or withdrawn play 1.3 Focus on self in play	Independent play themes suggest the child takes initiative and leads play activities, which could indicate a sense of autonomy. Hesitant or withdrawn play might suggest feelings of guilt or insecurity. A focus on self in play (larger child) could reflect a child-centered approach.
	2. Industry vs Inferiority: 2.1 Goal-oriented play activities 2.2 Evidence of accomplishment in play 2.3 Unfinished play or lack of engagement	Goal-oriented play activities could suggest a focus on achievement and mastery, potentially reflecting the industry stage. Evidence of accomplishment within the play might indicate a sense of competence. Unfinished play or lack of engagement could suggest feelings of inferiority or difficulty completing tasks.

The analyses presented in the table above are based on research conducted on parent-child interactions during play and well-established knowledge of child development. The interpretations of emotional expression have been drawn from research on children's emotional development (Saar & Feldman, 2013), play types (Santrock, 2023) and play environment (Santrock, 2023) were identified and built upon utilising pre-existing general categories. To interpret the family dynamics codes, already developed conceptual theories (Bowlby, 1982) were used. Furthermore, as has been covered in the literature review section, interpretations for the psychological stage indicators expand upon Erikson's stages of development theoretical framework. In general, the coding scheme facilitates a methodical examination of how parents perceive the family play dynamics portrayed in the KFDs.
The rationale behind using these focused codes to analyse the KFDs was to obtain a more nuanced picture of how parents perceive family dynamics, parent-child interactions, and the emotional components of play, as well as their child's play in general.

3.9 Data Analysis

3.9.1 Quantitative Data Analysis

The quantitative data obtained from the questionnaires distributed was analysed using Jamovi (Version 2.3), a statistical analysis software. To consolidate the demographic information of the same, descriptive statistics were employed. A correlation analysis was done to establish whether there is any relationship between play and psychosocial development in stages and to find the direction and the degree of the same. Furthermore, multiple linear regression analyses were run to better understand which specific aspects of play influenced psychosocial development.

3.9.2 Qualitative Data Analysis

The data collected from the KFDs and interview transcripts was analysed using a thematic analysis approach. Codes were developed systematically, by identifying recurring themes and patterns. Additionally, a review of existing literature on play and development was also referred to to develop relevant codes. The process of qualitative data analysis has been outlined below:

1. Familiarisation: The researcher reviewed the KFDs and interview transcripts to become well-versed in the data.
2. Preliminary Coding: Following an initial examination of the data, codes were created. These codes, which focused on play interaction, play setting, emotional expression, family dynamics, and psychosocial stage indicators, captured important elements of the family play experiences that were portrayed in the KFDs.
3. Refinement of the Codes: To guarantee uniformity and clarity in application throughout the data collection, the original codes underwent additional refinement and operationalization.
4. Coding the Data: Using the chosen coding scheme, the KFDs and interview transcripts were methodically coded. This required giving each data segment that represented the themes and patterns found appropriate codes.

Relevant quotes from the interview process have also been used to support the conclusions that were drawn from the analysis. The qualitative analysis of the KFDs and interview data was conducted without the use of any particular programme, however Jamovi was employed for the quantitative analysis. Larger research, however, might benefit from the use of a qualitative data analysis software (like NVivo or Atlas.ti) to speed up the coding process.

CHAPTER IV

RESULTS AND INTERPRETATION

As part of the first step of the study, a modified version of the MEPSI scale was administered which was followed by administering the MCP questionnaire. The next section of the study involved taking a subsample of 10 participants from

the existing sample of 40 and conducting a KFD activity with said subsample. The KFD activity was followed by a brief semi-structured interview consisting of questions about their KFDs to add to the understanding of parental perspectives of their child's play. The descriptive statistics for collected data have been given below-

Table 2
Descriptives for Psychosocial Development in Stages (MEPSI)

	Initiative Vs. Guilt	Industry Vs. Inferiority	Total Average Score (Psychosocial Development Stages)
N	40	12	40
Mean	40.3	39.6	4.03
Standard deviation	4.94	4.93	0.479
Minimum	28.0	30.0	2.80
Maximum	48.0	47.0	4.80

Table 3.1
Linear Regression for Total Overall Psychosocial Development in both the Stages and Subscales of the MCP (n=40)

Model	R	R^2
1	0.704	0.496

The R-squared value is 0.496, indicating that the regression model explains 50% of the variance in the overall psychosocial development in both stages.

Table 3.2
Linear Regression Model Coefficients - Overall Psychosocial Development in both the Stages

Predictor	Estimate	SE	t	p
Intercept [a]	1.77384	0.64784	2.7381	0.010
Total score of play choices	0.00123	0.01170	0.1052	0.917
Total score of executive function	0.02263	0.00642	3.5234	0.001
Total score of interpersonal relationships	0.02080	0.01701	1.2230	0.231
Total score of opportunities in the environment		0.02438	0.0368	0.971
Child's Gender:				
Male – Female	-0.05348	0.12781	-0.4184	0.679
Child's Age:				
4 – 3	-0.00355	0.24241	-0.0147	0.988
5 – 3	0.01646	0.16754	0.0983	0.922
6 – 3	-0.13155	0.21841	-0.6023	0.552
7 – 3	-0.08146	0.20044	-0.4064	0.687

[a] Represents reference level

Total Score of Play Choices: The coefficient estimate is 0.0012 (p = 0.917), indicating no significant relationship between the total score of play choices and overall psychosocial development.
Total Score of Executive Function: The coefficient estimate is 0.0226 (p = 0.001), which is a positive and statistically significant relationship. This suggests that children with higher scores in executive function tend to have higher overall psychosocial development scores. Therefore, a one-unit increase in the total score of executive function is associated with an increase of 0.22 units in the overall psychosocial development score, after controlling for the other factors in our model.

Total Score of Interpersonal Relationships: The coefficient estimate is 0.0208 (p = 0.231), showing a positive but not statistically significant relationship. It can be concluded that there is no clear association between interpersonal relationships and psychosocial development.
Total Score of Opportunities in the Environment: The coefficient estimate is very small (8.98e-4) and statistically non-significant (p = 0.971). There appears to be no significant link between opportunities in the environment and overall psychosocial development.

Table 4 *Coding Table of the Kinetic Family Drawings*

Drawing	**Play Interaction (Type of Play/ Focus of Play)**	**Play Environment (Setting of Play/ Play Materials)**	**Emotional Expression (Overall Mood/Child's Emotion/ Parent's Emotion)**	**Family Dynamics (Placement/ Size/ Proximity/ Body Language/ Eye Contact)**	**Psychosocial Stage Indicators**
1.	Physical and Interactive Play/ Shared Play Age: 3 years old	Outdoor Setting/ Toys	Positive, Joyful and Engaged	Centralised/ Parent Larger than Child/ Moderate Distance/ Open & Relaxed/ Eye Contact	Independent Play Themes, Focus on Child as Self in Play is present
2.	Physical, Structured and Interactive Play/ Shared Play Age: 4.5 years old	Outdoor Setting/ Toys	Positive, Engaged	Scattered/ Similar in Size/ Moderate Distance/ Open & Relaxed/ Eye Contact	Independent Play Themes, Goal-oriented Play, Evidence of Accomplishment
3.	Physical, Structured and Interactive Play/ Shared Play Age: 6 years old	Outdoor Setting/ Toys	Positive, Joyful and Engaged	Scattered/ Similar in Size/ Moderate Distance/ Open & Relaxed/ Eye Contact	Independent Play Themes, Goal-oriented Play, Evidence of Accomplishment
4.	Physical Play/ Child-Led Age: 6.5 years old	Outdoor Setting/ Toys	Neutral, Withdrawn (Parent)	Centralised/ Parent Larger than Child/ Moderate Distance/ Tense and Closed/ No Eye Contact	Independent Play Themes, Withdrawn Play, Lack of Engagement
5.	Physical and Interactive Play/ Shared Play Age: 5 years old	Outdoor Setting/ Toys	Positive, Joyful and Engaged	Centralised/ Similar in Size/ Moderate Distance/ Open & Relaxed/ Eye Contact	Independent Play Themes, Goal-oriented Play, Evidence of Accomplishment
6.	Imaginative and Interactive Play/ Child-Led Age: 3.5 years old	Indoor/ Household Items and Toys	Positive, Joyful and Engaged	Centralised/ Similar in Size/ Close Physical Contact/ Open & Relaxed/ Eye contact	Focus of Self (Child) in Play, Independent Play Themes
7.	Physical, Imaginative and	Outdoor/ Toys	Positive, Joyful and Engaged	Scattered/ Parent Larger than Child/ Moderate	Focus of Self (Child) in Play,

	Interactive Play/ Child-Led Age: 4 years old			Distance/ Open & Relaxed/ Eye Contact	Independent Play Themes, Goal-Oriented Activities
8.	Physical and Interactive Play/ Parent-Led Age: 7 years old	Outdoor/ Toys	Positive, Joyful and Engaged	Centralised/ Parent Larger than Child/ Close Physical Proximity/ Eye Contact	Focus of Self (Child in Play)
9.	Pretend and Solitary Play/ Child-Led Age: 3 years old	Indoor/ Household Items	Positive, Engaged (Child), Withdrawn (Parent)	Scattered/ Similar in Size/ Moderate Distance/ Open and Relaxes/ No Eye Contact	Focus of Self (Child) in Play, Independent Play Themes, Evidence of Accomplishment in Play
10.	Solitary and Structured Play/ Child-Led Age: 5 years old	Indoor/ Toys	Neutral, Withdrawn (Parent)	Scattered/ Parent Larger than Child/ Moderate Distance/ Tense & Closed/ No Eye Contact	Focus of Self (Child) in Play, Independent Play Themes, Goal-Oriented Activity, Evidence of Accomplishment in Play

CHAPTER V

DISCUSSION

This study aimed to know the influence of play on Erikson's Psychosocial Stages of Development, specifically the Initiative vs. Guilt and the Industry vs. Inferiority stages of psychosocial development. The study adopted a mixed methods research design where both quantitative and qualitative analyses were done. Standardised instruments of measurement, i.e. the My Child's Play Questionnaire (MCP) and a modified version of the Modified Erikson Psychosocial Stage Inventory (MEPSI) were used to measure play performance and strength of psychosocial attributes in the two stages respectively. Additionally, a Kinetic Family Drawing activity was conducted with a subset of the sample to understand parental perceptions of their child's play. The research relied solely on parental perception of their child's play.

The descriptive statistics for psychosocial development stages, as measured by the modified MEPSI scale, indicate a balanced development in both the Initiative Vs. Guilt and Industry Vs. Inferiority stages in the chosen sample. It can also be understood that there is some variability in how children navigate the challenges and opportunities that are accompanied by each developmental stage, even though most of the children showcase age-appropriate levels of psychosocial development. The frequencies of the strength of psychosocial attributes in each stage reveals that a significant portion of children exhibit positive attributes and a smaller yet notable proportion of children exhibit moderate attributes. According to the results, no child demonstrated negative attitudes which suggests that there is generally a positive disposition in the two psychosocial stages of development. It is important to acknowledge that the data was collected through parent-filled questionnaires which may lead to bias, as parents' perceptions of their children's psychosocial attributes might not always be objective. The absence of negative scores in the Initiative vs. Guilt and Industry vs. Inferiority stages could partially be because of this social desirability bias.

The correlation analysis between psychosocial development in the Initiative Vs. Guilt stage and play performance shows a moderate-to-strong, positive relationship between these variables ($r = .68$, $p = .001$). This suggests that children who exhibit higher levels of initiative, goal-directed behaviours, and a sense of purpose in play activities are more likely to demonstrate enhanced psychosocial development in this stage. This correlation supports Erikson's emphasis on the

importance of encouraging children to explore their environments, take initiative, and develop a sense of competence. This suggests that a higher level of development in Initiative Vs. Guilt is associated with more advanced play performance skills. The linear regression analysis adds to this relationship, with executive function emerging as a significant predictor of psychosocial development in this stage. This highlights the role of cognitive processes, such as planning, problem-solving, and impulse control, in shaping children's psychosocial competencies during the initiative-taking phase.

In the Industry vs. Inferiority stage, the correlation analysis between psychosocial development in this stage and play performance indicated a moderate, positive relationship ($r = .42$, $p = .17$). This correlation would probably come out to be even higher in a larger sample, as the current sample included only 12 responses from parents who had children belonging to the age group of 6-7 years. The analysis still was able to suggest a meaningful association between psychosocial growth in the Industry Vs. Inferiority stage and enhanced play performance skills. The p-value for this correlation, while not statistically significant at the conventional level of 0.05, suggests a trend that may warrant further investigation with a larger sample size. The regression analysis in this stage clearly shows that executive function is a potential influencer of psychosocial development. Further research with a larger and more diverse sample could elucidate this relationship with greater precision.

Results from both stages were also combined and revealed a highly significant positive correlation between overall psychosocial development and play performance in children aged 3-7 years ($r = .67$, $p = .001$). Linear regression reinstated the significance of executive function as a predictor for psychosocial stage progression, where a significant increase in overall psychosocial development is associated with higher executive function abilities in children.

Analysis of the Kinetic Family Drawings (KFDs) results highlights how patterns in children's play may be connected to Erikson's psychosocial stages of initiative vs. guilt and industry vs. inferiority. Using Kinetic Family Drawings as a qualitative addition for this study provided important insights into parent-child dynamics, play behaviours and related psychosocial themes. A prominent feature throughout the KFDs was that of the prevalence of child-led play in the subsample. This means that children have adequate opportunities to take initiative during play and are also actively engaging in initiating play activities. This aligns perfectly with the understanding of the initiative vs. guilt stage where children are actively learning about their capabilities and finding appropriate ways of exerting control, all of which are enabled by play. Independent play themes were present in all the drawings, hinting that children exhibit a certain level of comfort with independent exploration of their environment through play. We also noticed that shared play was another dominant theme in the KFDs, where both the parent and the child were involved in initiating different activities during playtime. This means that children tend to enjoy and prefer some level of interaction and collaboration, which is a key aspect of their social development in the psychosocial stage of initiative vs. guilt. Finally, the positive and joyful emotions observed in most drawings further support this notion. A sense of confidence and enjoyment during play can foster a healthy sense of initiative in young children.

Several drawings also presented goal-oriented activities and some evidence of accomplishment. This is essential to the psychosocial stage of industry vs. inferiority where Erikson states that children develop a sense of industry by completing tasks and achieving their goals. Children in this stage strive for competence and mastery in their respective performative tasks. While shared play may still be present, it is expected that children in this stage will gradually shift towards more independent play behaviour. This is consistent with our findings from the KFDs as half of the child-led play drawings were done by parents who had children in the 6-7 years age group, indicating that children in the industry vs inferiority stage lean towards exploring independent experiences of play which further enhances their sense of industry. If we look at the observed distance between figures and body language in these KFDs, it is observed that most drawings indicated moderate distance and open body language. This could imply that children at this psychosocial stage seek to create a balance between wanting guidance and asserting their independence, which is characteristic of the industry vs. inferiority stage.

In all the drawings, outdoor play environments and toy-based play were prevalent, which supports the importance of environmental stimuli and the availability of resources in facilitating play opportunities and enhancing creative exploration. Drawings where the play was facilitated using household items instead of toys, were mostly seen in instances of pretend or imaginative play. This indicates that even without the resource of toys, children were able to creatively explore and create new meanings using their imagination and household items to enhance the quality of their playtime. The majority of drawings also presented positive and engaged interactions, where children were happy to engage socially with the people around them and include them in their play.

Based on the results obtained in this study, the null hypothesis H0 has been rejected and the alternative hypothesis H1 has not been rejected, which concludes that play does have an impact on psychosocial stages of development, specifically

initiative vs. guilt and industry vs. inferiority. This impact is better understood by the statement that as play performance increases, the strength of positive psychosocial attributes in the psychosocial developmental stages of initiative vs. guilt and industry vs. inferiority also increases.

CHAPTER VI

SUMMARY AND CONCLUSION

6.1 Summary

This study investigated the influence of play on Erikson's psychosocial stages of Initiative vs. Guilt (ages 3-5) and Industry vs. Inferiority (ages 6-7). A mixed-methods research design was employed, utilising both quantitative (questionnaires-MCP and MEPSI) and qualitative (Kinetic Family Drawings) approaches. The analysis of standardised instruments indicated a generally balanced development within both psychosocial stages for the sample population. However, the lack of negative scores might be partially explained by social desirability bias in parental reports. A moderate-to-strong positive correlation was found between play performance and psychosocial development in both stages. This suggests that children with higher play skills tend to demonstrate stronger psychosocial attributes. Executive function emerged as a significant predictor of development in both stages. Analysis of KFDs provided valuable insights into play patterns and their connection to psychosocial stages. Thematic analysis revealed how play behaviours like child-led play, independent exploration, goal-oriented activities, and positive emotions mirrored characteristics associated with each stage."

6.2 Conclusion

This study contributes to the growing body of research that highlights the positive influence of play on children's psychosocial development. The findings suggest that play activities that promote initiative-taking, social adaptation and interaction, and goal-directed behaviour, and provide children with a sense of accomplishment can foster healthy psychosocial development within Erikson's stages of Initiative vs. Guilt and Industry vs. Inferiority. Furthermore, the study underlines the significance of executive function in both play performance and psychosocial development. These findings have implications for many different stakeholders:

- Educators, Teachers and Practitioners: Early childhood educators, therapists, and play specialists can utilise this knowledge to design play-based interventions that target specific psychosocial needs in children. Encouraging child-led play, independent exploration, and goal-oriented activities can support healthy development.
- Researchers: Future research can build upon this study by employing larger and more diverse samples, incorporating direct observations of children's play, and exploring the influence of additional factors like socioeconomic status and parenting styles. Longitudinal studies tracking children's development over time could further elucidate the causal relationship between play and psychosocial growth.
- Policymakers: This research emphasises the importance of play in early childhood development. Policymakers can advocate for increased access to quality play spaces, resources, and training for early childhood professionals to create environments that nurture healthy psychosocial development through play.

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