

CHAPTER III : RESEARCH METHODOLOGY

3.1 Introduction

The primary objective of this research is to explore and evaluate the parent-child playtime, as well as investigate the dynamics of the parent-child relationship. The study aims to assess any potential associations between playtime and family interaction. Therefore, selecting an appropriate methodology is of utmost importance to ensure the attainment of the research objectives.

This chapter provides a comprehensive overview of the tools and frameworks employed in the research. It encompasses the research design, details regarding the target population and sampling methodology and the instruments used for data collection. Additionally, it outlines the specific methods and approaches adopted to conduct the analysis.

3.2 Research Design

The research design entails a cohesive and specific strategy outlining the acquisition, analysis, and interpretation of data. It adopts a descriptive, correlational, and regression analysis approach, given that the data is presented both numerically and descriptively, as well as in inferential form.

In a correlational study, the aim is to ascertain the degree of association between two variables, determining whether changes in one variable correspond with changes in another (Creswell, 2021). Correlations can be positive, negative, or no correlation, facilitating prevalence and relationship predictions based on existing data. The values

can be range from small, medium and large providing insights into relationships strength between(Pallant, 2020).

On the other hand, regression analysis offers several advantages, including the ability to assess whether independent variables have a significant impact on a dependent variable, quantify the relative strength of these effects, and make predictions (Creswell, 2021). Therefore, the utilization of both correlational and regression analyses in this study was deemed appropriate and beneficial.

Hence, the research aims to investigate the correlation between the independent variable, parent-child playtime with dependent variable, the parent-child relationship. The researcher employed a correlational method to obtain relevant results, without incorporating any experimental interventions. Correlational statistics are utilized to define and measure the extent of association between multiple variables or sets of scores within a nonexperimental quantitative correlational design (Creswell, 2021). Besides, the research also concerns about the regression. It is to identify the effect of parent play attitude towards parent-child relationship among parents.

Participants were asked to respond to a series of questions pertaining to demographics, parent-child playtime, as well as the parent-child relationship. Demographic information is assessed using a concise set of questionnaires developed by the researcher. The measurement of parent-child playtime is based on items derived from the Parent Play Questionnaires (PPQ; Ahmadzadeh et al., 2020). The evaluation of the parent-child relationship employs items from the Child-Parent Relationship Scale- Short Form (CPRS - SF; Driscoll et al., 2011).

3.3 Research Subject

This section provides a comprehensive discussion on population and sampling considerations in the research. Population refers to the entire target group or scope of the study, whereas sampling refers to the selection of specific samples that represent the study population. These concepts play a crucial role in determining the scope and representativeness of the research findings.

3.3.1 Population

The target population for this study comprises working parents in Peninsular Malaysia who have early years children. In Peninsular Malaysia, there are 11 states and 2 federal territories.

3.3.2 Sampling

The sample selection process involved the use of a probability sampling method, specifically simple random sampling. This method was chosen to ensure that every member of the population had an equal probability of being included in the sample, thereby minimizing bias (Creswell, 2021). Additionally, it ensured that all possible samples of a given size had an equal chance of being selected.

The Klang Valley region was selected to represent working parents from Peninsular Malaysia. This decision was made to ensure that working parents from each state and federal territory had an equal opportunity to be included in the study.

In accordance with UNICEF's definition, early years or early childhood refers to the period from newborn to 8 years of age. However, for the purpose of this study, parents with children ranging from newborns to 2 years old will be excluded. Therefore,

the sample as a respondent in this study will be parents with child aged 2 to 8 years working in Klang Valley.

Additionally, snowball sampling will be used as well by requesting respondents to forward the questionnaires to their similar contacts. This approach is chosen based on the accessibility and availability of the target population, taking into account the nature of the respondents who are working. The administration of the questionnaire is facilitated through the utilization of the Google Form application.

The questionnaires serve as the primary data collection tool from the respondent, facilitating specific research aim. All working parents with children within the specified age range were invited to participate in the study, ensuring that each of them was given the same opportunity to take part. All gathered information is anonymous and treated with utmost confidentiality with data solely employed for research purposes.

3.4 Research Instrument

The main data collection method employed in this study entails the utilization of sets of questionnaires presented in the format of rating scales. Questionnaires allow for the collection of data from a sizable sample, making them suitable for studies requiring a broader representation of the population (Creswell, 2021). Besides, rating scales offer several advantages of being an efficient and cost-effective method for data collection (Brown & Room, 2021).

This study utilizes a combination of questionnaires comprising two types of instruments, namely the Parent Play Questionnaire (PPQ) and a condensed version of the Child-Parent Relationship Scale – Short Form (CPRS - SF). These questionnaires are carefully selected to address various aspects of interest, including demographics,

parent-child play, and the parent-child relationship. The questionnaire consists of three distinct parts, namely Part A, Part B, and Part C.

Part A focuses on demographic characteristics, encompassing relevant information such as age, gender, ethnicity, marital status, number of children, children's ages and educational level. This section aims to provide a comprehensive understanding of the participants' background.

Part B incorporates the Parent Play Questionnaire (PPQ), which consists of 22 questions. These questions specifically assess parent-child play dynamics, enabling the exploration of various dimensions related to play interactions within the parent-child playtime.

Part C incorporates the shortened version of the Child-Parent Relationship Scale- Short Form (CPRS - SF), comprising 15 questions. This section delves into the parent-child relationship, capturing crucial aspects and evaluating the quality and nature of the bond between parent and child. It is important to note that this research follows a quantitative approach, collecting data in numerical form.

3.4.1 Parent Play Questionnaire (PPQ)

The Parent Play Questionnaire (PPQ) was developed by Ahmadzadeh, Lester, Oliver, and McAdams (2020) as a measurement tool for assessing parent-child play dynamics including play frequency, screentime and parent play behavior. The questionnaire consists of 22 items and is intended to be completed from the perspective of the parent.

The PPQ comprises three distinct subscales: the Frequency of Parent-Child Play, the Frequency of Digital Media Use and the Parent Attitudes towards Play. Each subscale serves to evaluate specific aspects related to parent-child play interactions.

The Frequency of Parent-Child Play scale includes 8 items that gauge the frequency of parent engagement in various types of play with their infant. These items were derived from an extensive review of the play literature to encompass a comprehensive range of parent-child play activities suitable for infants. Responses to these items are rated on a 6-point frequency scale which is never=1, less than once a week=2, once or twice a week=3, several times a week=4, once or twice a day=5 and several times a day=6.

In contrast, the Frequency of Digital Media Use scale is designed to assess the extent of child exposure to different forms of digital media, such as television, computers, tablets, smartphones, and games. This scale consists of 3 items and allows parents to indicate the frequency of digital media use by their child. Similar to the Frequency of Parent-Child Play scale, responses to the Digital Media Use scale are measured on a six-point frequency scale.

The Parent Attitudes towards Play scales encompass 11 items aimed at capturing parent perceptions and behaviors during play with their child. 4 items focus on assessing parental involvement in play, while 7 items pertain to parent enjoyment of parent-child play. Negative items were reversed coded for the Parent Attitudes Towards Play subscale (items: 1, 2, 3, 5, 6, 7, 8). Parents provide their responses using a 4-point scale, indicating the extent to which they agree with each statement, comprises of never (1), sometimes (2), often (3) and always (4).

The mean score is interpreted using mean score interpretation framework from Pimentel et al. (2019).

Table 3.1: Mean Score Interpretation for Frequency of Parent-Child Playtime and Digital Media Use

Mean Score	Mean Score Interpretation
1.00-1.82	Very Low

1.83-2.65	Rather Low
2.66-3.48	Low
3.49-4.31	High
4.32-5.1	Rather High
5.15-6.00	Very High

Source: Pimentel, J. L. (2019)

Table 3.2: Mean Score Interpretation for Parent Attitude Towards Play

Mean Score	Mean Score Interpretation
1.00-1.75	Very Low
1.76-2.51	Low
2.52-3.27	High
3.28-4.00	Very High

Source: Pimentel, J. L. (2019)

The frequency subscale was correlated in the same direction across samples with validated measures of parenting feelings and behaviors, contributing evidence of convergent validity. Good internal consistency was found for items in each subscale across all samples. The Cronbach coefficient alpha values are obtained for each of three subscales which are 0.8 for Frequency of Parent-Child Play, 0.63 for Frequency of Digital Media Use and 0.8 for Parent Attitude towards Play. The Cronbach alpha values for two subscales; Frequency of Parent-Child Play and Parent Attitude are exceeded 0.7 which is high and acceptable. Even the Cronbach alpha value for Frequency of Digital Media Use is slightly lower than 0.7, however it is still acceptable to be used.

3.4.2 Child-Parent Relationship Scale-Short Form (CPRS - SF)

The Child-Parent Relationship Scale-Short Form (CPRS - SF) was developed by Pianta (1992) to examine the parent-child relationship. The CPRS - SF assessed three types of relationship which are conflict, closeness and dependency. For the purpose of this study short version of the CPRS – SF will be used to measure the most common factor which are conflicts and closeness.

It has been developed by Driscoll et al. (2011) to further examine the short form of psychometric properties of the CPRS - SF, a 15-item self-report instrument assessing relational conflict and closeness. The 15 items are rated on a 5-point Likert scale indicating the level to which they agree with each statement, comprises of definitely does not apply (1), not really neutral (2), not sure (3), applies somewhat (4) and definitely applies (5). The CPRS - SF can be simply scored by getting the sum value of the responses for each subscale.

The 8-item conflict subscale measures the degree to which a parent feels that his or her relationship with a particular child is characterized by negativity. Conflict item was represented by items 2, 4, 8, 10, 11, 12, 13, 14 and has score range of 8 to 40. Therefore, a lower score is desirable on the conflict subscale. The internal consistency reliability of the short form of the CPRS - SF for maternal conflict was 0.84 and paternal conflict was 0.80.

The 7-item closeness scale assesses the extent to which a parent feels that the relationship is characterized by warmth, affection, and open communication. Closeness items measured by items 1, 3, 5, 6, 7, 9, 15 and has score range of 7 to 35. The higher the score, the greater the appraised level of closeness. Cronbach alphas for maternal closeness was 0.69, while Cronbach alphas for paternal closeness was 0.72.

The CPRS - SF can be simply scored by getting the sum value of the responses for each subscale.

Table 3.3: Total Score of Child-Parent Relationship Scale

Parent-Child Relationship	Summed Items	Total Score
Conflict	P 2+4+8+10+11+12+13+14	8-40
Closeness	P 1+3+5+6+7+9+15	7-35

Source: Driscoll et al. (2011)

3.5 Pilot Study

A pilot study is conducted using an online survey administered to a sample of 54 randomly selected parents from Klang Valley. The pilot study aims to evaluate the suitability and effectiveness of both the Parent Play Questionnaire (PPQ) and the Child-Parent Relationship Scale- Short Form (CPRS - SF) as measurement tools in this context.

The Cronbach's alpha value shown in the reliability of 24 items in PPQ is 0.839 indicate a good internal consistency reliability of the scale. On the other hand, the Cronbach's alpha value presented in the reliability of 15 items for CPRS - SF is 0.649. These values indicating a reliable internal consistency which considered acceptable in reliability for the scale (Eisingerich & Rubera, 2010). This shows that the instrument of the study is suitable for all parents with child aged 2 to 8 years working in Klang Valley regardless of their socioeconomic background.

Table 3.4: Pilot Test

Instruments	Cronbach's Alpha Value
Parent Play Questionnaire (PPQ)	0.839
Child-Parent Relationship Scale- Short Form (CPRS - SF)	0.649

3.6 Data Collection

The study was collected through electronic questionnaires. To ensure the collection of high-quality data, a well-designed procedure will be implemented. Given that the targeted population primarily comprises individuals of Malay ethnicity who use Malay as their primary language, the instrument will undergo translation and proofreading processes. However, to cater to the diverse ethnicities in Malaysia, a dual-language questionnaire consisting of both English and Malay will be presented. The data collection involved administering self-report questionnaires to 240 working

parents who will serve as the sample for the study. Once respondent completed the questionnaire, the researcher key in the data using Statistical Package for the Social Sciences (SPSS) version 25.0 for Windows.

Procedure Steps

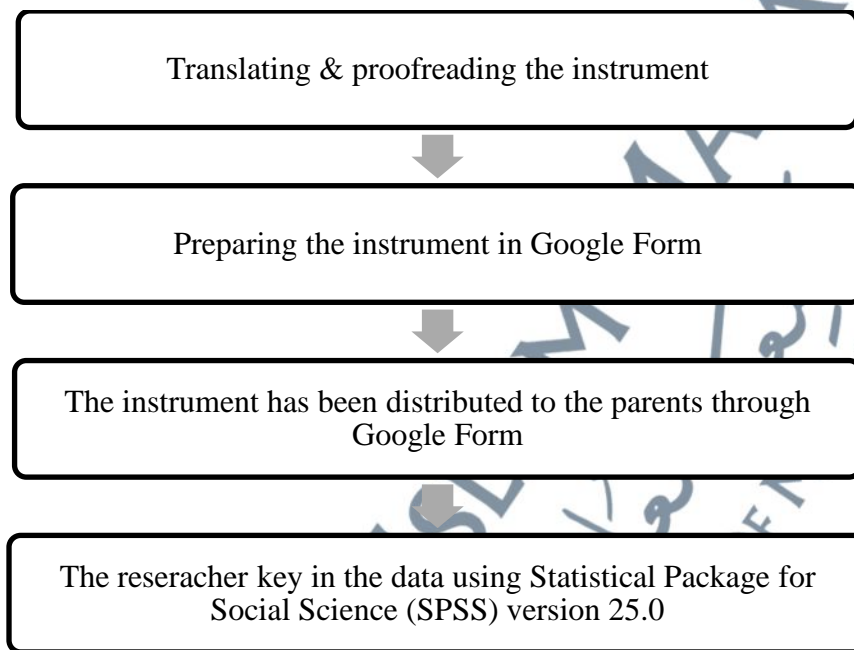


Figure 3.1: Data Collection

3.7 Data Analysis

The data collected for this study analyzed using the Statistical Package for the Social Sciences (SPSS) version 25.0. The analysis will involve utilizing both descriptive and inferential statistics. Descriptive statistics employed to summarize and organize the data, providing information about the relationships between variables within the sample or population. This includes calculating measures such as the mean, frequencies, and percentages. Additionally, graphs will be used to visually present the demographic data.

To address the first and second objectives of the study, descriptive statistics such as frequency, percentage, mean scores, and graphs will be utilized. These statistics will help in examining and presenting the characteristics of the demographic data. For the

third objective, correlation statistics will be employed to explore the relationship between parent-child playtime and the parent-child relationship, Pearson's r was used to investigate the analysis. Regression analysis is used to see the influence of parent play attitude on the parent-child relationship. Then, to determine whether involvement and enjoyment contributing to the parent-child relationship. Inferential analysis will be utilized to determine the significance of the correlations. The findings will be interpreted and explained through tables and figures, providing a comprehensive understanding of the relationship between the variables under investigation.

Table 3.5: Data Analysis

Objective	Analysis	Statistical
Objective 1	Descriptive	Frequency Percentage Mean and standard deviation
Objective 2	Descriptive	Frequency Percentage
Objective 3	Inferential	Mean and standard deviation
Objective 4	Inferential	Correlation Regression

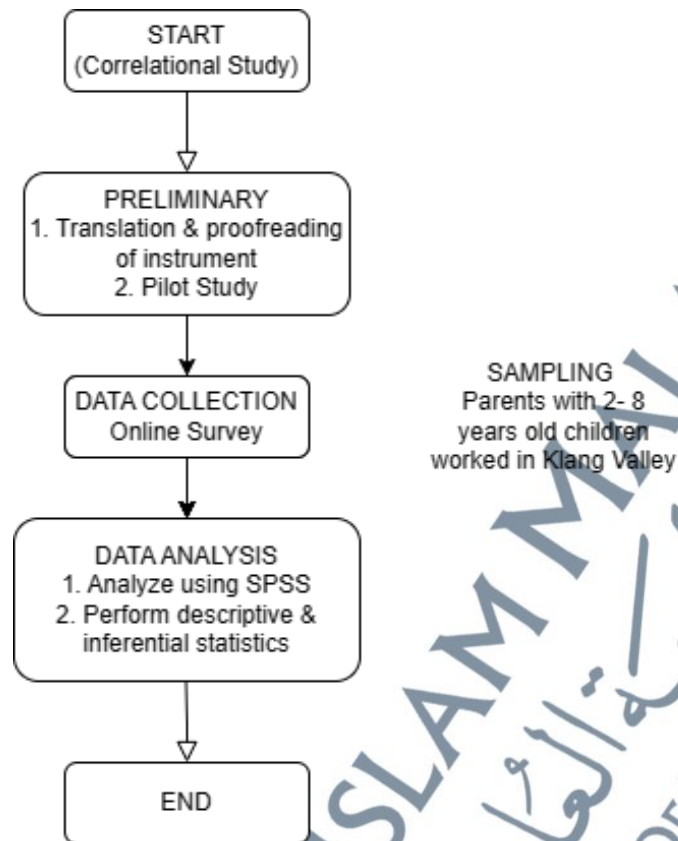


Figure 3.2: Methodology Diagram

3.8 Conclusion

This study employed quantitative design, focusing on investigating the correlation and influence of parent-child playtime and screentime on the parent-child relationship.