

**T.C.**

**BAHCESEHIR UNIVERSITY**

**GRADUATE SCHOOL**

**THE DEPARTMENT OF EDUCATIONAL TECHNOLOGY**

**INVESTIGATING PRESCHOOL CHILDREN'S PARENTS' PERCEPTION  
OF PROBLEMATIC MEDIA USE AND INTERNET PARENTING STYLES  
IN TERMS OF VARIOUS DEMOGRAPHICS**

**PHD THESIS**

**KÜBRA MERTER TÜRÜNG**

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**ISTANBUL 2024**



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This Thesis has been read by us, it has been deemed sufficient and accepted as a PhD thesis in terms of quality and content.

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**I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.**

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## **ABSTRACT**

### **INVESTIGATING PRESCHOOL CHILDREN'S PARENTAL PERCEPTION OF PROBLEMATIC MEDIA USE AND INTERNET PARENTING STYLES IN TERMS OF VARIOUS DEMOGRAPHICS**

Merter Türling, Kübra

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Supervisor: Assoc. Prof. Yavuz SAMUR

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Children start to use digital media at significantly younger ages. Screen usage is rapidly increasing among both young children and adults. Research emphasizes the importance of parental involvement in screen usage during early childhood. The aim of this study is to examine the problematic media use of preschool children and their parents' styles and roles in this regard.

The research consists of two phases to understand the relationship between problematic media use (PMU) in preschool children and their parents' internet parenting styles, as well as the underlying reasons. Sequential explanatory design was employed in the study. In the first stage, a demographic information form, problematic media use scale, and internet parenting styles scale were conducted to 228 participants. Based on quantitative results, purposive sampling was used to select 9 participants, and semi-structured interviews were conducted.

The results indicate that there is no significant association between PMU and internet parenting styles which demonstrate that parental styles do not serve as predictors for children's PMU. However, higher problematic media use scores were observed as the time spent by the child in front of the screen increased. Children showed problematic media use, as perceived by their parents, when they used screens occasionally during travel, while their parents were busy, preferred watching YouTube, used digital media devices alone, resisted turning off the screen, reflected screen content in their choices of games and toys, and had shorter period between screen time and bedtime compared to the ones that never used. Additionally, results indicated that as parents' daily screen time increased, their children were more likely to have PMU tendencies. Moreover,

children whose parents perceived their children's screen time as excessive had higher PMU scores. Additionally parental control and warmth scores were negatively associated with parent's perception of excessive screen time. According to the findings of the interviews, parents and children had less screen time when alternative activities were available. This study makes a significant contribution to understanding the underlying reasons for problematic media use, internet parenting styles, and children's screen usage. It provides important insights for educators and parents in promoting healthy screen media use among preschool children.

**Keywords:** Problematic Media Use, Preschool Children, Internet Parenting Styles.



## ÖZ

# OKUL ÖNCESİ ÇOCUKLARIN EBEVEYNLERİNİN PROBLEMLİ MEDYA KULLANIMI VE İNTERNET EBEVEYNLIK STİLLERİNE İLİŞKİN ALGILARININ ÇEŞİTLİ DEMOGRAFİK DEĞİŞKENLER AÇISINDAN İNCELENMESİ

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Tez Yöneticisi: Doç. Dr. Yavuz SAMUR

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Çocuklar dijital medyayı belirgin biçimde daha erken zamanda kullanmaya başlamaktadır. Ekran kullanımı hem küçük çocuklar hem de yetişkinler arasında hızla artmaktadır. Araştırmalar, erken çocukluk dönemindeki ekran kullanımında ebeveynlerin oynadığı rolün önemini vurgulamaktadır. Bu çalışmanın amacı, okul öncesi dönemdeki çocukların ekran kullanımını ve ebeveynlerinin stillerini ve bu konudaki rollerini incelemektir.

Araştırma, okul öncesi dönemdeki çocukların problemli medya kullanımını ve ebeveynlerinin internet ebeveynlik stilleri arasındaki ilişkiyi ve bu ilişkinin altındaki nedenleri anlamak amacıyla iki aşamadan oluşmaktadır. Çalışmada, sıralı açıklayıcı desen kullanılmıştır. İlk aşamada, problemli medya kullanımı ölçeği ve internet ebeveynlik stilleri ölçeği ile birlikte araştırmacı tarafından hazırlanan demografik bilgi formu, 228 katılımcıya uygulanmıştır. Nicel sonuçlara dayanarak, amaçlı örnekleme yapılarak 9 katılımcı belirlenmiş ve yarı yapılandırılmış görüşmeler gerçekleştirilmiştir. Sonuçlar, problemli medya kullanımı ile internet ebeveynlik stilleri arasında anlamlı bir ilişki bulunmadığını göstermektedir. Ancak, çocuğun ekran başında geçirdiği zamanın artmasıyla problemli medya kullanımı puanlarında farklılıklar gözlemlenmiştir. Okul öncesi dönemdeki çocukların, ebeveynleri meşgulken veya seyahat sırasında ekran kullanmaları, YouTube izlemeyi tercih etmeleri, dijital medya cihazlarını tek başlarına kullanmaları, ekranı kapatmaya karşı direnç göstermeleri, ekran içeriğini oyun ve oyuncak tercihlerine yansıtmaları ve ekran

zamanı ile yatma saati arasındaki sürenin azalması gibi durumlarda problemli medya kullanımı puanlarında artış görülmüştür. Ayrıca, ebeveyn ekran süresinin artması ve çocukların problemli medya kullanımı puanları arasında anlamlı bir farklılık bulunmuştur. Bununla birlikte, araştırmaya katılan ebeveynler, çocuklarının ekran süresinin fazla olduğunu düşünüyorlarsa, problemli medya kullanımı ve internet ebeveynlik stilleri puanlarında farklılık olduğu görülmüştür. Görüşmelerin bulgularına göre, alternatif etkinliklerin mevcut olduğu durumlarda ebeveynlerin ve çocukların ekrana daha az ihtiyaç duyduğu görülmektedir. Bu çalışma, problemli medya kullanımı, internet ebeveynlik stilleri ve çocukların ekran kullanımı altında yatan nedenleri derinlemesine anlama açısından önemli bir katkı sağlamaktadır. Okul öncesi çocuklarda sağlıklı ekran medya kullanımını teşvik etme konusunda eğitimciler ve ebeveynler için önemli bilgiler sunmaktadır.

**Anahtar Kelimeler:** Problemli Medya Kullanımı, Okul Öncesi Dönemdeki Çocuklar, Internet Ebeveynlik Stili.



To My Grandfather...

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## TABLE OF CONTENTS

|                                                          |      |
|----------------------------------------------------------|------|
| ETHICAL CONDUCT .....                                    | iii  |
| ABSTRACT .....                                           | iv   |
| ÖZ .....                                                 | vi   |
| DEDICATION .....                                         | viii |
| ACKNOWLEDGMENTS .....                                    | ix   |
| TABLE OF CONTENTS .....                                  | x    |
| LIST OF TABLES .....                                     | xvi  |
| LIST OF FIGURES.....                                     | xx   |
| LIST OF ABBREVIATIONS .....                              | xxi  |
| Chapter 1 Introduction .....                             | 1    |
| 1.1 Theoretical Framework .....                          | 1    |
| 1.2 Problem of the Study.....                            | 1    |
| 1.3 Purpose of the Study .....                           | 3    |
| 1.4 Research Questions .....                             | 4    |
| 1.5 Importance of the Study .....                        | 5    |
| Chapter 2 Literature Review .....                        | 7    |
| 2.1 Traditional Media and Digital Media.....             | 7    |
| 2.2 Children’s Screen Time .....                         | 8    |
| 2.3 Characteristics of Preschool Children.....           | 10   |
| 2.4 Screen Time during Mealtimes and Busy Parenting..... | 11   |
| 2.5 Sleep and Screen Time.....                           | 13   |
| 2.6 Parental Monitoring and Mediation Strategies .....   | 14   |
| 2.7 Children’s Ownership of Digital Media Device .....   | 16   |
| 2.8 Parents and Screen Time of Children.....             | 17   |
| 2.9 The Problematic Media Use of Children .....          | 18   |

|           |                                                                     |    |
|-----------|---------------------------------------------------------------------|----|
| 2.10      | Internet Parenting Styles .....                                     | 21 |
| 2.10.1    | Authoritarian internet parenting style .....                        | 23 |
| 2.10.2    | Authoritative internet parenting style.....                         | 25 |
| 2.10.3    | Permissive parenting styles .....                                   | 26 |
| 2.10.4    | Laissez-faire internet parenting style .....                        | 27 |
| 2.11      | Internet Parenting Styles and Media Use of Children.....            | 28 |
| Chapter 3 | Methodology .....                                                   | 31 |
| 3.1       | Research Design.....                                                | 31 |
| 3.2       | Participants.....                                                   | 32 |
| 3.2.1     | Participants for the Quantitative Study .....                       | 32 |
| 3.2.2     | Participants for the Qualitative Study .....                        | 35 |
| 3.3       | Procedures.....                                                     | 37 |
| 3.3.1     | Data collection instruments for the quantitative study.....         | 37 |
| 3.3.1.1   | Problematic media use measure (PMUM) .....                          | 37 |
| 3.3.1.2   | Internet parenting styles instrument.....                           | 38 |
| 3.3.1.3   | Demographic information form .....                                  | 38 |
| 3.3.2     | Data collection instruments for the qualitative study.....          | 40 |
| 3.3.2.1   | Semi-structured interview form. ....                                | 40 |
| 3.3.3     | Data collection procedures for the quantitative study.....          | 40 |
| 3.3.4     | Data collection procedures for the qualitative study.....           | 41 |
| 3.3.5     | Data analysis procedures for the quantitative study.....            | 41 |
| 3.3.6     | Data analysis procedures for the qualitative study.....             | 42 |
| 3.3.7     | Reliability and validity .....                                      | 42 |
| 3.3.7.1   | Credibility, transferability, dependability and confirmability..... | 43 |
| 3.4       | Limitations .....                                                   | 45 |
| Chapter 4 | Findings .....                                                      | 46 |
| 4.1       | Demographic Questions.....                                          | 46 |

|           |                                                                                                           |     |
|-----------|-----------------------------------------------------------------------------------------------------------|-----|
| 4.2       | Research Questions .....                                                                                  | 58  |
| 4.2.1     | Is there a relation between problematic media use and internet parenting styles?.....                     | 58  |
| 4.2.2     | Does problematic media use of preschool children differ according to some demographics? .....             | 59  |
| 4.2.3     | Do internet parenting styles of preschool children’s parents differ according to some demographics? ..... | 75  |
| 4.2.4     | How do parents describe their views regarding problematic media use and internet parenting styles?.....   | 93  |
| 4.2.4.1   | Benefits and challenges.....                                                                              | 93  |
| 4.2.4.1.1 | Benefits. ....                                                                                            | 94  |
| 4.2.4.1.2 | Challenges.....                                                                                           | 94  |
| 4.2.4.2   | Underlying Reasons of Screen Use.....                                                                     | 95  |
| 4.2.4.2.1 | Entertainment. ....                                                                                       | 96  |
| 4.2.4.2.2 | Relaxation. ....                                                                                          | 97  |
| 4.2.4.3   | Limitations and restrictions.....                                                                         | 98  |
| 4.2.4.3.1 | Screen free time of parent and child. ....                                                                | 98  |
| 4.2.4.3.2 | Limitations. ....                                                                                         | 100 |
| 4.2.4.3.3 | Ideal screen use. ....                                                                                    | 101 |
| 4.2.4.4   | Parents’ screen use patterns. ....                                                                        | 102 |
| 4.2.4.4.1 | Reasons for Parents’ Screen Use. ....                                                                     | 102 |
| 4.2.4.4.2 | Children’s thoughts of parent’s screen use. ....                                                          | 103 |
| 4.2.4.5   | Internet parenting styles. ....                                                                           | 104 |
| 4.2.4.5.1 | Parent-Child interactions.....                                                                            | 104 |
| 4.2.4.5.2 | Establishment of household rules. ....                                                                    | 106 |
| 4.2.4.5.3 | Parent-Child conflict. ....                                                                               | 107 |
|           | Chapter 5 Discussion, Conclusion and Recommendations.....                                                 | 109 |
| 5.1       | Discussion of Findings for Research Questions .....                                                       | 109 |

|          |                                                                                                                      |     |
|----------|----------------------------------------------------------------------------------------------------------------------|-----|
| 5.1.1    | Is there a relation between problematic media use and internet parenting styles?.....                                | 109 |
| 5.1.2    | Do problematic media use scores differ according to some demographics .....                                          | 112 |
| 5.1.2.1  | Children's enrolment to preschool.....                                                                               | 112 |
| 5.1.2.2  | Minimum screen time, maximum screen time.....                                                                        | 113 |
| 5.1.2.3  | Requirement of screen in daily activities.....                                                                       | 114 |
| 5.1.2.4  | Owning a digital media device.....                                                                                   | 115 |
| 5.1.2.5  | Sleeping hours and time between the end of screen time and bedtime.....                                              | 115 |
| 5.1.2.6  | Competence in using digital media devices.....                                                                       | 116 |
| 5.1.2.7  | Streaming service preferences.....                                                                                   | 117 |
| 5.1.2.8  | Reactions when ending the screen time.....                                                                           | 117 |
| 5.1.2.9  | Child's influence from the content they watch while playing or selecting a toy.....                                  | 118 |
| 5.1.2.10 | YouTube preferences.....                                                                                             | 119 |
| 5.1.2.11 | Number of movies children watch with their parents in a week.....                                                    | 120 |
| 5.1.2.12 | Parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities..... | 120 |
| 5.1.2.13 | Parents' view regarding screen time is excessive or not.....                                                         | 123 |
| 5.1.2.14 | Screen time as a positive or negative reinforcer.....                                                                | 123 |
| 5.1.3    | Do parental control and warmth (internet parenting styles) differ according to some demographics? .....              | 123 |
| 5.1.3.1  | Children's enrolment to a pre-school.....                                                                            | 124 |
| 5.1.3.2  | Minimum screen time, maximum screen time.....                                                                        | 124 |
| 5.1.3.3  | Requirement of screen in daily activities.....                                                                       | 125 |
| 5.1.3.4  | Owning a digital media device.....                                                                                   | 125 |

|          |                                                                                                                       |     |
|----------|-----------------------------------------------------------------------------------------------------------------------|-----|
| 5.1.3.5  | Sleeping hours and time between the end of screen time and bedtime.....                                               | 126 |
| 5.1.3.6  | Competence in using digital media devices. ....                                                                       | 127 |
| 5.1.3.7  | Streaming service preferences.....                                                                                    | 127 |
| 5.1.3.8  | Reactions when ending the screen time. ....                                                                           | 128 |
| 5.1.3.9  | Child's influence from the content they watch while playing or selecting a toy.....                                   | 129 |
| 5.1.3.10 | YouTube preferences. ....                                                                                             | 130 |
| 5.1.3.11 | Number of movies children watch with their parents in a week.....                                                     | 131 |
| 5.1.3.12 | Parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities. .... | 132 |
| 5.1.3.13 | Parents' view regarding screen time is excessive or not.....                                                          | 133 |
| 5.1.3.14 | Screen time as a positive or negative reinforcer. ....                                                                | 134 |
| 5.1.4    | How do parents describe their views regarding problematic media use and internet parenting styles?.....               | 134 |
| 5.1.4.1  | Benefits and challenges.....                                                                                          | 135 |
| 5.1.4.2  | Underlying Reasons of Screen Use.....                                                                                 | 136 |
| 5.1.4.3  | Limitations and Restrictions of Screen Time.....                                                                      | 137 |
| 5.1.4.4  | Parents' screen use patterns. ....                                                                                    | 139 |
| 5.1.4.5  | Internet Parenting Styles. ....                                                                                       | 141 |
| 5.2      | Conclusion .....                                                                                                      | 142 |
| 5.3      | Recommendations .....                                                                                                 | 144 |
| 5.3.1    | Recommendations for Researchers .....                                                                                 | 144 |
| 5.3.2    | Recommendations for Parents .....                                                                                     | 145 |
| 5.3.3    | Recommendations for Educators .....                                                                                   | 147 |
|          | REFERENCES.....                                                                                                       | 149 |
|          | APPENDICES .....                                                                                                      | 181 |

|                                             |     |
|---------------------------------------------|-----|
| A. Demographic Information Form .....       | 182 |
| B. Internet Parenting Styles Scale.....     | 190 |
| C. Problematic Media Use Measure .....      | 193 |
| D. Semi-structured Interview Questions..... | 197 |



## LIST OF TABLES

### TABLES

|                                                                                                                                                                   |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 1 Descriptive Information of the Participants (Part 1).....                                                                                                 | 33 |
| Table 2 Descriptive Information of the Participants (Part 2).....                                                                                                 | 34 |
| Table 3 Participants' Characteristics for the Qualitative Study .....                                                                                             | 36 |
| Table 4 Skewness and Kurtosis Coefficients .....                                                                                                                  | 41 |
| Table 5 Examining the Frequency of Watching Movies and Spending Time on the<br>Screen of the Participants.....                                                    | 47 |
| Table 6 Examination of the Number of Digital Media Devices in the Household of<br>the Participants .....                                                          | 48 |
| Table 7 Distribution of Preschool Children's Screen Time Activities .....                                                                                         | 48 |
| Table 8 Examining the Frequency of Parents' Screen Time Activities .....                                                                                          | 49 |
| Table 9 Examining the Frequency of the Preschool Children's Requirement of the<br>Screen in Daily Activities .....                                                | 50 |
| Table 10 Examining the Frequency of the Parents' Requirement of the Screen in<br>Daily Activities .....                                                           | 50 |
| Table 11 Investigation of Children's Owning Digital Media Devices and Daily<br>Sleeping Times.....                                                                | 51 |
| Table 12 Examining the Sources of the Participants to Follow the News Related to<br>the Current Events.....                                                       | 52 |
| Table 13 Examination of Participants' Views on Children's Media Using Skills .....                                                                                | 53 |
| Table 14 Examining the Streaming Service Preferences of Children and their Screen<br>Usage Habits .....                                                           | 54 |
| Table 15 Examination of Parents' Knowing and Implementation of Control Options<br>.....                                                                           | 55 |
| Table 16 Examining the Situations Encountered by the Child During Screen Time<br>(Advertisements, Sexuality, Cursing and Slang Conversations, Violent Elements).. | 56 |
| Table 17 Examination of Participants' Opinions Regarding the Effects of Screen<br>Time Content on Children.....                                                   | 57 |
| Table 18 Investigation of Scores Obtained from Problematic Media Use and Internet<br>Parenting Style Scales .....                                                 | 58 |
| Table 19 Distribution of Participants by Internet Parenting Styles.....                                                                                           | 59 |

|                                                                                                                                                      |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 20 Examining the Relationship Between Family Control, Warmth, and Problematic Media Use .....                                                  | 59 |
| Table 21 Comparing Problematic Media Use Scores by Child's School Enrolment .                                                                        | 60 |
| Table 22 Comparing Problematic Media Use Scores by Minimum Screen Time.....                                                                          | 61 |
| Table 23 Comparing Problematic Media Use Scores by Maximum Screen Time ....                                                                          | 62 |
| Table 24 Comparing Problematic Media Use Scores by Requirement of Screen in Child's Daily Activities .....                                           | 63 |
| Table 25 Comparing Problematic Media Use Scores by The Child's Owning a Digital Media Device .....                                                   | 64 |
| Table 26 Comparing Problematic Media Use Scores by The Child's Daily Sleeping Hours .....                                                            | 64 |
| Table 27 Comparing Problematic Media Use Scores by The Child's Competence in Using Digital Media Devices .....                                       | 65 |
| Table 28 Comparing Problematic Media Use Scores by Child's Streaming Service Preferences .....                                                       | 66 |
| Table 29 Comparing Problematic Media Use Scores by Child's Reaction as Screen Time Ends .....                                                        | 67 |
| Table 30 Comparing Problematic Media Use Scores by the Status of Playing Game With The Effect of The Content Child Watches.....                      | 68 |
| Table 31 Comparing Problematic Media Use Scores by The Status of Choosing a Toy with the Effect of the Contents Watched by the Child on Screen ..... | 68 |
| Table 32 Comparing Problematic Media Use Scores by Type of Content Child Prefers to Watch on YouTube.....                                            | 69 |
| Table 33 Comparing Problematic Media Use Scores by Number of Movies Watched Per Week as a Family.....                                                | 70 |
| Table 34 Comparing Problematic Media Use Scores by Parent's Average Daily Screen Time .....                                                          | 70 |
| Table 35 Comparing Problematic Media Use Scores by The Rate of Parents' Screen Time Activities.....                                                  | 71 |
| Table 36 Comparing Problematic Media Use Scores by the Parents' Requirement of Screen in Daily Activities .....                                      | 72 |
| Table 37 Comparing Problematic Media Use Scores by the Time Between the End of Screen Time and Bedtime .....                                         | 73 |

|                                                                                                                                          |    |
|------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 38 Comparing Problematic Media Use Scores by Parents' Views Regarding The Child's Screen Use .....                                 | 74 |
| Table 39 Comparing Problematic Media Use Scores by Screentime as a Positive Reinforcer.....                                              | 74 |
| Table 40 Comparing Problematic Media Use Scores by Screentime as a Negative Reinforcer.....                                              | 75 |
| Table 41 Comparing Family Control and Warmth Scores by Child's School Enrolment.....                                                     | 76 |
| Table 42 Comparing Family Control and Warmth Scores by Minimum Screen Time .....                                                         | 76 |
| Table 43 Comparing Family Control and Warmth Scores by Maximum Screen Time .....                                                         | 77 |
| Table 44 Comparing Family Control and Warmth Scores by Requirement of Screen in Child's Daily Activities .....                           | 78 |
| Table 45 Comparing Family Control and Warmth Scores by The Child's Owning a Digital Media Tool.....                                      | 79 |
| Table 46 Comparing Family Control and Warmth Scores by The Child's Daily Sleeping Hours.....                                             | 80 |
| Table 47 Comparing Family Control and Warmth Scores by The Child's Competence in Using Digital Media Devices.....                        | 81 |
| Table 48 Comparing Family Control and Warmth Scores by Child's Streaming Service Preferences .....                                       | 82 |
| Table 49 Comparing Family Control and Warmth Scores by Child's Reaction as Screen Time Ends .....                                        | 83 |
| Table 50 Comparing Family Control and Involvement Scores by the Status of Playing Game with The Effect of The Content Child Watches..... | 84 |
| Table 51 Comparing Family Control and Warmth Scores by The Status of Choosing a Toy with the Effect of the Contents Child Watches.....   | 84 |
| Table 52 Comparing Family Control and Warmth Scores by Type of Content Child Prefers to Watch on YouTube.....                            | 85 |
| Table 53 Comparing Family Control and Warmth Scores by Number of Movies Watched Per Week as a Family .....                               | 86 |

|                                                                                                                         |     |
|-------------------------------------------------------------------------------------------------------------------------|-----|
| Table 54 Comparing Family Control and Warmth Scores by Parent's Average Daily Screen Time .....                         | 86  |
| Table 55 Comparing Family Control Scores by The Rate of Parents' Screen Time Activities .....                           | 87  |
| Table 56 Comparing Family Warmth Scores by The Rate of Parents' Screen Time Activities .....                            | 89  |
| Table 57 Comparing Family Control and Warmth Scores by Parents' Requirement of Screen in Daily Activities .....         | 90  |
| Table 58 Comparing Family Control and Warmth Scores by The Time Between the End of Child's Screen Time and Bedtime..... | 91  |
| Table 59 Comparing Family Control and Warmth Scores by The Views Regarding The Child's Screen Use .....                 | 92  |
| Table 60 Comparing Family Control and Warmth Scores by Screentime as a Positive Reinforcer.....                         | 92  |
| Table 61 Comparing Family Control and Warmth Scores by Screentime as a Negative Reinforcer .....                        | 93  |
| Table 62 Benefits and Challenges of Screen Time .....                                                                   | 94  |
| Table 63 Underlying Reasons of Screen Use.....                                                                          | 96  |
| Table 64 Limitations and Restrictions for Screen Time .....                                                             | 98  |
| Table 65 Parents' Screen Using Patterns .....                                                                           | 102 |
| Table 66 Parenting Styles .....                                                                                         | 104 |

## LIST OF FIGURES

### FIGURES

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| Figure 1 Parenting Styles (Baumrind, 1991; Maccoby & Martin, 1983) ..... | 22 |
|--------------------------------------------------------------------------|----|



## LIST OF ABBREVIATIONS

|      |                               |
|------|-------------------------------|
| IPS  | Internet Parenting Styles     |
| PMU  | Problematic Media Use         |
| PMUM | Problematic Media Use Measure |



# **Chapter 1**

## **Introduction**

### **1.1 Theoretical Framework**

The young children today are born into technology. They are called “digital natives”, screenagers or “net generation”. Children begin to use digital media at a significantly younger age. After the pandemic, parents also use digital media more than they used to do. Young children may have been exposed to more screen time while spending time at home during the pandemic (Nagata et. al., 2020; Trott et. al., 2022). In addition, parents who work remotely spend more time using digital devices such as smartphones, or laptops for work.

The world in which today’s children are growing up requires a high degree of immersion in and use of media and technology. Entertainment, social life, and play are all increasingly digital. Between 33% and 75% of children have accessibility to their own mobile device, (Kabali et al. (2015), Radesky et al. (2020), and Rideout (2017). The activities children engage in, and the content and messages to which they are exposed, are based to a considerable extent on the media related choices they and their parents make. We can no longer treat the media as an afterthought when it comes to child development, education, and well-being. Differences in access and use may reflect differences in opportunities and risks that researchers, policymakers, educators, parents, and health care providers need to be well equipped to address. As acceptance of mobile and internet-connected media has increased among young children, distress for healthy child development has been considered regarding excessive or problematic use (Domoff, Borgen, Radesky., 2020).

### **1.2 Problem of the Study**

The pervasive use of digital media has become a significant aspect of modern life, affecting individuals across all age groups, including young children. Parents and caregivers are increasingly dependent on their mobile devices, which often results in decreased attention to their children (McDaniel, 2019). This shift in attention can adversely impact the parent-child attachment relationship, as parents become less responsive to their children's needs due to their preoccupation with screens (Hood et al., 2021).

Young children are particularly vulnerable to the effects of digital media. Excessive media use has been linked to several negative outcomes, including cognitive and academic problems such as learning difficulties (Zoromba et al., 2023) and language delays (Zimmermann et al., 2007). Additionally, high levels of TV exposure or background TV have been associated with poorer executive functioning (Hill et al., 2016), reduced physical activity, and increased obesity rates (Hinkley et al., 2012). Media use can also negatively affect sleep quality and duration (Suglia et al., 2013), and media use during mealtimes has been connected to aggressive behavior (Domorff et al., 2018), decreased well-being, impaired family functioning, and heightened family conflict and anxiety (Hill et al., 2014; Lee et al., 2009).

The role of parents in managing and moderating children's media use is critical. Research shows that children's media habits are influenced by their parents' media use (Paudel et al., 2017) and by parents' attitudes towards media (Radesky et al., 2020). Despite this, the specific parenting styles related to internet use and their impact on children's media consumption remain ambiguous. While some studies suggest that parenting styles do not significantly affect children's media use (Eastin et al., 2006), inconsistent parenting approaches are correlated with higher levels of problematic media use in children (Ying & Kim, 2021).

Moreover, the COVID-19 pandemic has intensified the reliance on digital media, altering the dynamics of media use within families (Dutta et al., 2020). This increased reliance underscores the need to understand how different internet parenting styles influence children's media habits and vice versa.

Despite the extensive research on internet parenting styles and problematic media use separately, there is a noticeable gap in studies that simultaneously address both issues in the context of young children and their parents. Specifically, there is a lack of comprehensive research that considers the underlying reasons and needs for digital media use among both children and parents, and how these factors interact with various demographic variables.

Therefore, this study aims to investigate the perceptions of parents of preschool children regarding problematic media use and internet parenting styles. It seeks to explore the relationships between these perceptions, the reasons behind media use, and the broader impact on children's development and family dynamics across different

demographics. By addressing these gaps, this research hopes to contribute to a better understanding of how to effectively manage children's media use in today's digital age.

### **1.3 Purpose of the Study**

Problematic media use, or media use that interferes with daily functioning, is most often studied in adolescent or young adult age groups. Less research has examined problematic media use within the family system, among parents and young children (Holmgren, et al., 2022). On the other hand, it should be severely considered that children are also using media at younger ages and at increasing rates (Rideout, 2017). Since young children spend a lot of time with their parents or caregivers, parents' attitudes towards media use, their own screen media use habits or their parenting styles play a significant role in the problematic media use of children. This dissertation aims to seek through the relationships between the internet parenting styles and problematic media use of young children regarding various variables such as parents' role on child's use of media or the how much they require digital media in their own life. Through individual interviews collected as the secondary sources of data, insights from parents are collected by surveys as primary data. This study aims to clarify preschool children's situation and habits about using screen media and the relations between media use and internet parenting styles in scope of other variables that affect these habits. The other variables include children's enrolment to a pre-school, minimum screen time, maximum screen time, requirement of screen in daily activities like eating, traveling etc., children's owning a digital media device, sleeping hours, competence in using digital media devices, streaming service preferences, reactions when ending the screen time, child's influence from the content they watch while playing and while selecting toys, YouTube preferences, number of movies children watch with their parents in a week, parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities, time between the end of screen time and bedtime, parents' view regarding screen time is excessive or not, screen time as a positive reinforcer, screen time as a negative reinforcer. With the assistance of individual interviews that will be held with the parents of the preschool children, the underlying reasons, benefits, or challenges behind the problematic media use will be clarified along with the parental attitudes and parent-child relationship.

## 1.4 Research Questions

The study addresses the following main research questions:

1. Is there a relation between Problematic Media Use and Internet Parenting Styles scores of preschool children?

2. Do problematic media use scores of preschool children differ according to some demographics (2.1. children's enrolment to a pre-school, 2.2. minimum screen time, 2.3. maximum screen time, 2.4. requirement of screen in daily activities, 2.5. owning a digital media device, 2.6. sleeping hours, 2.7. competence in using digital media devices, 2.8. streaming service preferences, 2.9. reactions when ending the screen time, 2.10. child's influence from the content they watch while playing, 2.11. toy selection, 2.12. YouTube preferences, 2.13. number of movies children watch with their parents in a week, 2.14. parents' daily screen time, 2.15. parents' screen time activities, 2.16. parents' requirement of screen in daily activities, 2.17. time between the end of screen time and bedtime, 2.18. parents' view regarding screen time is excessive or not, 2.19. screen time as a positive reinforcer, 2.20. screen time as a negative reinforcer)?

3. Do internet parenting styles scores of preschool children's parents differ according to some demographics (3.1. children's enrolment to a pre-school, 3.2. minimum screen time, 3.3. maximum screen time, 3.4. requirement of screen in daily activities, 3.5. owning a digital media device, 3.6. sleeping hours, 3.7. competence in using digital media devices, 3.8. streaming service preferences, 3.9. reactions when ending the screen time, 3.10. child's influence from the content they watch while playing, 3.11. toy selection, 3.12. YouTube preferences, 3.13. number of movies children watch with their parents in a week, 3.14. parents' daily screen time, 3.15. parents' screen time activities, 3.16. parents' requirement of screen in daily activities, 3.17. time between the end of screen time and bedtime, 3.18. parents' view regarding screen time is excessive or not, 3.19. screen time as a positive reinforcer, 3.20. screen time as a negative reinforcer)?

4. How do parents describe their views regarding problematic media use and internet parenting styles?

## **1.5 Importance of the Study**

Problematic media use and internet parenting styles are crucial areas of study when considering the well-being of preschool children in today's digital age. Understanding the relationship between these two factors is essential for developing effective strategies to promote healthy media habits and positive parenting practices. Research by Sukumaran & Balakrishna (2021) delves into the connection between parenting styles and the social-emotional development of preschool children, highlighting the significant impact parental behaviours can have on children's well-being. This study provides a foundation for exploring how different parenting styles may influence problematic media use and internet parenting styles among preschoolers.

Moreover, Sarı et al. (2021) focus on screen media exposure in preschool children and its relation to temperament and parental attitudes, shedding light on how parental attitudes towards media use can shape children's interactions with digital devices. This research underscores the importance of considering parental influences when examining problematic media use and internet parenting styles in preschoolers. By understanding how parental attitudes and behaviours intersect with children's media habits, interventions can be tailored to address specific challenges. Zena & Heeralal (2021) further contribute to this area by investigating the relationship between parenting styles and preschool children's social-emotional development. This study emphasizes the critical role of parenting styles in shaping children's emotional well-being, which is closely linked to their media use behaviours. By exploring how different parenting styles impact children's development, insights can be gained into how these styles may influence problematic media use and internet parenting attitudes.

Additionally, Sarıyıldız (2023) explores the mediation role of parental guilt in the relationship between working mothers' smartphone addiction and children's problematic technology use. This study highlights the complex relation between parental behaviours, such as smartphone addiction, and children's media habits, suggesting that parental factors play a significant role in shaping children's technology use patterns. Understanding these dynamics is essential for comprehensively addressing problematic media use and internet parenting styles among preschoolers.

Furthermore, Gan et al. (2021) focus on the interrelations among parenting styles, depressive symptoms, and problematic online game use in adolescents, offering

insights into how parenting styles can influence children's behaviours and mental health outcomes. While focusing on adolescents, this study provides a valuable framework for understanding how parenting styles may impact media use behaviours across different age groups, including preschool children.

In conclusion, the importance of studying the relationship between problematic media use and internet parenting styles in preschool children lies in understanding how parental behaviours, attitudes, and styles influence children's media habits.



## **Chapter 2**

### **Literature Review**

#### **2.1 Traditional Media and Digital Media**

Before the internet had such a powerful place in our lives, when we said media, we thought of mass media such as newspapers, magazines, radio, and television (Adıgüzel, 2017). However, the intertwining of mass media, computer and telecommunications systems, a new type of media has emerged which is called “digital media” (Aktaş, 2007). Contrary to the limited content in traditional media within the digital environment, social media sites, video games, photography, music, advertising, news, television and radio broadcasts, newspapers host numerous websites serving various purposes.

Traditional media typically was produced externally by an established production source, such as a film studio, TV network, or editorial staff and were provided either to individuals or to a broader audience for passive viewing or reading. In contrast, contemporary forms of digital media, such as social and interactive media, allow users to both consume and actively create content. This includes various applications (apps), multiplayer video games, YouTube videos, and video blogs (vlogs). Particularly for children and adolescents, the integration of passive viewing and active engagement with media has become seamless and natural. The traditional distinctions between traditional or broadcast media and interactive or social media have become indistinct or difficult to perceive. (Reid et al., 2016).

The evolving global media landscape is characterized by the simultaneous existence and mutual influence of different media formats, the gradual transformation of new media from older ones, and the challenges arising from the adoption of new media. Digital media are interconnected with traditional media (Nwammuo, 2011). The concept of "mediamorphosis" prompts us to analyse all forms of communication media as interconnected elements within a system, emphasizing the similarities and relationships among historical, current, and emerging media formats (Fidler, 1997). Interactive digital media typically necessitate user engagement through behavioural actions, thereby shaping the sequential progression of content based on user interactions (Anderson & Subrahmanyam, 2017).

## 2.2 Children's Screen Time

New media/digital media, which started to replace traditional media with the widespread use of internet access, are used by individuals of all ages. In traditional media, while the individual is a passive receiver of the information given in the digital environment, he/she takes an active role in producing, following, and interacting with the content produced in the digital media. Since today's digital natives are born into a world where fast technology is developing every day, this situation, which comes as innovation or change to adults, has become the normal of children. For this reason, while the use of digital media requires adaptation or reason to use for adults, it is only a part of their lives for children. Although the screens are everywhere and it is getting inevitable to avoid them, it is essential for parents to set reasonable limits for children (Brauchli et al., 2024). The World Health Organization (2019) advises against screen time for children under 2 years old and suggests that 2- to 4-year-olds limit their screen time to no more than one hour, emphasizing that less screen time is preferable.

Many studies conducted in Turkey and around the world have shown a significant increase in the use of screen technologies, especially since the 2010s. According to the Turkish Statistical Institute (TÜİK) report for the year 2020, internet usage among adults in Turkey increased to 79% compared to the previous year, and the percentage of households with internet access at home reached 90.7% (TÜİK, 2020). In an international organization's report, it is noted that the daily internet usage by adults in Turkey has approached seven and a half hours, whereas the global average is approximately six and a half hours (We Are Social, 2020).

The prevalence of high screen-time behaviours among preschoolers has been highlighted, with children accumulating approximately 4 hours of screen time daily, exceeding recommended limits (Tandon et al., 2011). Moreover, the influence of screen time on preschool children's behaviour and cognitive development has been a subject of investigation. Excessive screen time has been linked to behaviour problems and poorer social-cognitive development in preschoolers (Cliff et al., 2017; Nathanson et al., 2013; Musa et al., 2022).

In another study, excessive screen time has also been linked to various negative outcomes, including decreased physical activity, poor sleep quality, and increased risk of obesity (Vandewater et al., 2010). Moreover, exposure to inappropriate or violent content can have adverse effects on a child's emotional and psychological well-being

(Strasburger, 2010). Excessive use of digital media may also contribute to attention problems and decreased academic performance in some cases (Twenge & Campbell, 2018).

Distinguishing media usage patterns between preschoolers and school-age children can be attributed to two factors: (1) the opportunities they have for media engagement and (2) the available content tailored to each age group. According to Lapierre et al., (2012), children transition into formal education, their exposure to background TV diminishes from an average of 3.88 hours during the preschool phase to 2.70 hours, while their active TV viewing time slightly increases from 1.78 hours in preschool to 1.97 hours. Furthermore, divergent expectations and experiences also play a role in shaping the daily lives of children, influencing their executive functioning in either positive or negative ways (Linebarger, et.al., 2014).

Media exposure has been generally related to negative and aggressive behaviour. Although media exposure has negative effects among young children, conversely it has also several positive effects. On a positive note, all the media forms including novels, comic books, radio, movies, television, and interactive digital devices such as computers, electronic games, and touch screen devices (e.g., iPhones and iPads) are asserted to be enriching as they enable children to virtually encounter and observe locations and occurrences that are typically beyond their everyday experiences (Anderson & Subrahmanyam, 2017). For example, educational TV programs for preschoolers, such as "Sesame Street," have identified positive effects on vocabulary, literacy, social behaviour, and academic knowledge (Fisch, 2014). The importance here is the time spent using screen time and the content children are exposed to. The negative effects of sedentary lifestyle for children who spend more time in front of screens are generally associated with obesity, aggressive behaviour, shorter attention span, lower level of basic motor skills (Emund et al., 2018; Webster, et al., 2019).

The study conducted by Webster, et al. (2019) reveals that preschool-aged children (3 and 4 years old) who spend more time in front of screens tend to have diminished basic motor skills. Additionally, it indicates a reciprocal relationship where children with higher motor skill levels spend less time in sedentary activities and more time engaged in moderate to high-intensity physical activities. The issue at hand revolves around the sedentary lifestyle of children who surpass recommended screen time limits and lack sufficient physical activity, posing potential health and

developmental concerns. Historically, studies on traditional screen media, like television, have relied on parental recollection of their child's media consumption duration to examine connections with outcomes such as sleep issues, obesity, and externalizing behaviour (Hill et al., 2016).

### **2.3 Characteristics of Preschool Children**

Preschool children represent a critical developmental stage characterized by significant cognitive and social growth. Studies have shown that preschoolers' understanding of psychological causes of behaviour is linked to their social interactions with caregivers, underscoring the importance of early social cognition (Miller & Aloise-Young, 2017). Additionally, research on social competence and psychopathology in early childhood has highlighted the relationship between prosocial behaviour, social initiative, and internalizing and externalizing symptoms in preschool-aged children (Huber et al., 2018). Furthermore, studies on the impact of sand play on social and emotional development have demonstrated the positive effects of sand play workshops on the social and emotional skills of preschool children (Crişan, 2022).

In the realm of cognitive development, the association between sleep and empathy in young preschoolers has been explored, indicating a potential link between sleep patterns and social-emotional development in this age group (Rong et al., 2021). Moreover, research on language competence and social focus among preschool children has investigated the correlation between social focus in preschool and formal language development, emphasizing the importance of social interactions in language acquisition (Nærland, 2011). Additionally, studies on preschoolers' emotion knowledge have shown that appropriate levels of emotion knowledge are associated with success in social and pre-academic domains during the preschool and kindergarten years (Denham et al., 2012).

Regarding digital media use, the movement behaviours of preschool-aged children have been examined in relation to physical, cognitive, and social-emotional development, highlighting the interplay between physical activity and various aspects of development in this age group (Kuzik et al., 2020). Furthermore, the role of self-learning in practical training among preschool teachers has been studied, shedding

light on the challenges and benefits of incorporating self-learning strategies in preschool education (Zdanevych et al., 2022).

In conclusion, research on preschool children's characteristics and developmental stages, cognitive and social aspects, social relations, and digital media use highlights the importance of early interventions and supportive environments in fostering holistic development during this formative period. Understanding the complexities of preschoolers' cognitive, social, and emotional growth is crucial for the further studies to design effective strategies to promote their well-being and learning outcomes.

## **2.4 Screen Time during Mealtimes and Busy Parenting**

Preschool age period is critical for the healthy development. The period of preschool age, spanning from ages two to five, represents an important phase in the formation of health-related habits, including the establishment of consistent physical activity routines and the reduction of sedentary behaviours to a minimum (LeBlanc et al., 2012).

The widespread use of digital screens is an issue on the daily routines and activities for preschool-aged children as well as adults and older children. The easy access to smartphones, tablets, and other digital devices has blurred the lines between screen time and offline activities, leading to concerns among parents, educators, and researchers regarding its effects on child development (Hinkley et al., 2017). This section aims to examine and consolidate existing research on the patterns, effects, and determinants of screen time among preschoolers in different daily contexts like mealtime screen exposure and screen time as a babysitter.

Preschool children's screen time during mealtimes has become a significant area of concern due to its potential impact on their eating behaviours and overall health. Research has shown that a considerable proportion of preschoolers are exposed to screens during meals, with more than half of children being exposed to screens during mealtimes, either occasionally or daily (Jusiené et al. 2019). The prevalence of excessive screen time during meals has been linked to increased snacking and consumption of energy-dense foods and drinks, highlighting the potential negative impact on children's dietary habits (González et al., 2022).

Additionally, exposure to screens during meals has been associated with unhealthy eating habits, such as consuming sweet and junk food while watching screens, which may contribute to weight gain and poor dietary choices among preschool children (Jusienè et al. 2019).

Furthermore, the association between screen time during meals and obesity risk in preschool children has been explored. Studies have indicated that prolonged screen time, including during mealtimes, can lead to increased caloric intake, alterations in satiety signals, and a higher risk of obesity among children (Matheson et al., 2004). In addition, another study conducted by Robinson et al., (2017) has also shown that screen media exposure can lead to obesity in children and adolescents through increased eating while viewing, exposure to unhealthy food marketing, and reduced sleep duration.

Moreover, the COVID-19 pandemic has exacerbated screen time behaviours among preschoolers, with reports of increased screen time, reduced outdoor playtime, and unhealthy eating habits during the lockdown period (Guo & Kim, 2022). These findings emphasize the importance of monitoring and regulating screen time, particularly during mealtimes, to promote healthy eating behaviours and prevent adverse health outcomes in preschool children.

Parents' motivations for incorporating screen media into their daily interactions with their young children could be either child-centered or parent-centered. Child-centered motivations encompass educational purposes, skill acquisition, knowledge enrichment, entertainment provision, and avoiding boredom. Conversely, the predominant parent-centered rationale is "to occupy the child's attention while attending to other tasks," such as household responsibilities (Brauchli, 2024; Nikken 2018).

The term "digital pacifier" describes the common parental practice of using screen devices to occupy or soothe children while they are busy, such as during household chores or at bedtime (Kabali et al., 2015). Parents' involvement in their children's digital media usage often stems from self-interest, particularly among younger age groups, where digital media is utilized in a more proactive manner. The primary motive behind this parental involvement is the opportunity to engage in other tasks without interruption, thus highlighting the pragmatic nature of their approach (Geurts et al., 2021).

In conclusion, the utilization of screen time as a digital pacifier or an aid for parental tasks may inadvertently cultivate new daily routines characterized by excessive and unwarranted screen exposure. Such habitual reliance on screen-based distractions could potentially contribute to the formation of behaviours that are challenging to modify or discontinue in the future. The literature suggests that screen time during mealtimes is a prevalent issue among preschool children and is associated with unhealthy dietary habits, increased risk of obesity, and disruptions in eating behaviours. Addressing screen time during meals through parental guidance, setting clear screen time rules, and promoting healthy eating practices is crucial in fostering positive dietary behaviours and possible future health problems in preschoolers.

## **2.5 Sleep and Screen Time**

Sleep and screen time are critical factors to consider when evaluating the health and development of preschool children. Research has demonstrated a significant association between screen time and sleep outcomes among school-aged children and adolescents (Hale & Guan, 2015). This relationship also applies to preschoolers, where adherence to 24-hour movement guidelines, including limited screen time and adequate sleep, is crucial for healthy growth and development (Draper et al., 2020; Guo & Kim, 2022). Studies have shown that excessive screen time among preschoolers is associated with a higher risk of obesity (Chang et al., 2023; Karim et al., 2023) and overweight (Reyna-Vargas et al., 2022), highlighting the importance of monitoring screen use in this age group.

Investigations into the impact of screen time on sleep duration and patterns have revealed that screen time is linked to decreased total sleep duration, prolonged sleep-onset latency, and delayed bedtime in children (Xu et al., 2016). Additionally, the correlation between screen time and altered sleep in young children has been highlighted, indicating a relationship between daily screen time exposure and sleep patterns (Kahn et al., 2020; Lin et al., 2020). It has been observed that each hour of screen time is connected to reduced nocturnal sleep in children (Jayanath et al., 2022). Furthermore, the influence of parents on preschoolers' movement behaviours, including screen time and sleep, has been researched (Guo et al., 2022).

Parental role-modelling significantly shapes children's behaviours, including their screen time habits, which can impact their overall health and well-being (Feng,

2024). Additionally, factors such as parent-child interaction, outdoor playtime, and environmental influences have been identified as crucial determinants of screen time and sleep duration among preschoolers (Foo et al., 2022; Wang et al., 2021).

## **2.6 Parental Monitoring and Mediation Strategies**

The concept of "mediation" is widely accepted as a way to describe parental management of the relationship between children and media (Livingstone & Helsper, 2008). Warren (2001) defined parenting mediation as 'any strategy parents use to control, supervise or interpret media content for children'. There have been many variations in what strategies parent use with the aim of mediating or guiding their children's media use (Nathanson, 2001; Nikken & Jansz 2006; Valkenburg 1999). As of today, the most recognized mediation styles include implementing limitations on both time and content, commonly known as (1) implementing limitations on both time and content, commonly known as restrictive mediation; (2) engaging in discussions about content and providing explanations or instructions to enhance safety, foster critical awareness, or encourage educational outcomes (active mediation); and (3) intentionally using media alongside the child, often for entertainment or educational purposes which is known as co-use. In the current mobile media landscape, parents also apply for (4) supervision as a form of mediation, where they remain close by to monitor the child's solitary use of electronic screens, or (5) oversee the child's online activities afterwards by checking browser history or social media logs. Additionally, with modern digital devices, parents can employ (6) technical restrictions, such as the 'parental control' offered by media devices, to regulate or block inappropriate content (Nikken & Schols, 2015). However, it is noteworthy that parents generally prefer the first five social strategies over the use of these technical applications (Livingstone and Helsper, 2008).

The influence of parental mediation styles on preschool children has been a subject of research. Various studies have explored the association between parental mediation and its impact on children's development, behaviour, and habits. For instance, Warren (2005) investigated parental mediation of children's television viewing in low-income families, parental mediation plays a crucial role in shaping children's media use. Chia et al. (2022) investigated the correlation between parents' digital media habits and their preschool-age children's engagement and movement

guidelines, highlighting the interplay between parental and child media habits. Similarly, Fitzpatrick et al. (2023) examined the prospective bidirectional associations between preschoolers' screen time and temperamental displays of anger or frustration during the COVID-19 pandemic, highlighting the complex relationship between media exposure and children's emotional responses.

Parental monitoring encompasses engaging in discussions with children regarding media content ("active mediation") and controlling the quantity and/or nature of media exposure ("restrictive monitoring"). Active mediation involves expressing viewpoints on media content, teaching children about the intentions behind different types of media (e.g., advertising), or offering advice and clarifications (Gentile et al. 2014). On the other hand, restrictive monitoring focuses on controlling the time and type of media exposure that children have, thereby influencing their media consumption habits (Nathanson, 1999; Birch & Ventura, 2009). Restrictive monitoring correlates with reduced screen time and more physical activity (Carlson et al., 2010) along with increased reading duration (Wiecha et al., 2001).

Research has shown that parental involvement in discussing media content and setting restrictions can have a profound impact on children's development. For preschool-aged children, the language experiences they encounter, both at home and in preschool settings, can significantly influence their language and reading abilities (Dickinson & Porche, 2011). Moreover, the home environment, including parental educational levels, can mediate the relationship between screen time and preschool children's behaviours (Määttä et al., 2017).

Parental mediation strategies to limit preschool children's screen time and control screen options play a crucial role in promoting healthy screen habits. Research has highlighted various factors and interventions that can influence children's screen time behaviours and parental involvement in managing screen use. Xu et al. (2015) emphasized the importance of parental influences on children's physical activity and screen time, indicating that parental encouragement and support can positively impact children's activity levels while reducing parents' own screen time may lead to decreased screen time among children. Similarly, Vanderloo (2014) highlighted the link between parental screen time and children's screen-viewing levels, suggesting that interventions to limit screen time in young children should focus on decreasing parental screen time and enhancing parental self-efficacy in setting screen time limits.

A systematic review of effective strategies for reducing screen time among young children emphasizes the scarcity of studies on early intervention strategies to limit TV or total screen time which impressed on the need for interventions that discourage parents from placing TVs in children's bedrooms or removing TVs if already present (Schmidt et al., 2012). Additionally, explored the mediating role of the home environment in relation to parental educational level and preschool children's screen time, identifying potential mediators such as access to screens at home, parental attitudes, and rules for limiting screen time (Määttä et al., 2017).

Huo et al. (2022) suggested that well-educated primary caregivers who are knowledgeable about the risks of screen time exposure are more likely to set limits on screen time for preschoolers, leading to better screen time management. Furthermore, Hinkley et al. (2017) highlighted the mediating role of maternal perceptions of screen time impact on children's actual screen time, indicating that mothers' perceptions significantly influence children's screen time behaviours. In conclusion, parental strategies to limit preschool children's screen time and control screen options are essential for promoting healthy screen habits. Interventions that focus on parental involvement, setting limits on screen time, and creating a conducive home environment can play a significant role in shaping children's healthy screen time behaviours.

## **2.7 Children's Ownership of Digital Media Device**

The age at which children begin to have their own digital media devices is a topic of growing interest in research. Studies have provided insights into the prevalence of digital device ownership among young children and the implications of early exposure to technology. Kabali et al. (2015) found that most children had their own tablet by the age of 4, indicating a significant uptake of technology at a young age. Similarly, it was reported that five percent of children aged 5 to 7 years had their own smartphone, while forty-two percent owned a tablet (Alvarez-Peregrina et al., 2020). Furthermore, Nathan et al. (2022) observed that the average age for preschool children's initial exposure to digital devices was 3.9 years. Another research stated that children's ownership of digital devices had a positive relationship with age and the most frequent devices that children were exposed to were tablets (Kılıç et al., 2019).

Reid Chassiakos et al. (2016) stated in their research that in 1970's children began to watch Tv at the age of 4 while today young children begin interacting with digital media at the age of 4 months old, indicating a trend towards earlier engagement with technology. In contrast, Kalabina & Progackaya (2021) noted that children in Russia typically begin using devices at an average age of 3 years, with variations ranging from 1.5 to 5 years old. Kılıç et al., 2019 stated that the youngest children that used mobile devices were 6 months old in Turkey. These findings suggest that the age at which children acquire their own digital media devices can vary based on cultural and regional factors.

The impact of early exposure to digital devices on children's development has also been a subject of investigation. Operto et al. (2020) found that prolonged exposure to digital devices was associated with lower language skills in children aged 18 to 36 months, emphasizing the importance of monitoring screen time at a young age. Additionally, Wei (2022) highlighted a decrease in the age at which children are exposed to digital technology, indicating a shift towards earlier adoption of mobile devices and tablets. In conclusion, research indicates that children are gaining access to digital media devices at increasingly younger ages, with ownership of tablets and smartphones becoming more common among preschool-aged children.

## **2.8 Parents and Screen Time of Children**

The influence of parental attitudes, behaviours, and habits on preschool children's problematic media use is a topic of growing interest. The literature on preschool children's media use and parental influence reveals several key findings. Firstly, studies emphasize the connection between parental screen usage habits and those of their children (Lauricella et al., 2015; Nikken, 2017; Wong et al., 2019).

Research highlights the critical role of parents in guiding preschoolers' media practices and screen time, influencing learning, play, and social development (Nikken & Schols, 2015). Parental role modelling emerges as a significant factor in shaping appropriate screen-viewing habits for preschoolers (De Decker et al., 2012). Moreover, the relationship between maternal media use, children's media use, and parent-child interactions has implications for behavioural strengths and difficulties in children (Poulain et al., 2019). The cause and maintenance of problematic media use in early

childhood are highlighted, emphasizing the need to understand parental influences (Domoff et al., 2020).

Parents' educational level also plays a crucial role in shaping children's screen time. Highly educated parents tend to place greater importance on limiting screen time, experiencing fewer societal pressures in this regard, and engaging their children in screen-free activities (Priya, 2021; Määttä, 2017). These factors collectively contribute to reduced screen time among children from more highly educated backgrounds.

The influence of parental attitudes, behaviours, and habits on preschool children's media use extends to broader cultural beliefs, potentially leading to competing agendas, such as prioritizing education over physical activity (Dwyer et al., 2008). The home environment, including parental digital media habits and the immediate family context, is identified as a significant influence on preschool children's digital media habits (Chia et al., 2022). Positive parental modelling, encompassing healthy digital media habits, is crucial for instilling positive lifestyle habits in preschool children (Chia et al., 2022).

Parental mediation strategies regarding digital media use also impact preschoolers' digital media habits. Examining parental attitudes toward children's screen time, positive or negative, highlights the impact on the establishment and enforcement of limits and rules regarding screen use, ultimately influencing children's screen habits (Nikken & Haan, 2015; Nikken & Schols, 2015; De Decker et al., 2015; Downing et al., 2015; Jago et al., 2016). External factors, such as the COVID-19 pandemic, can further impact children's media use, with distress and parenting stress contributing to problematic media use (Wang et al., 2023). This highlights the importance of parental strategies to manage risk and promote mental health during periods of significant stress and routine disruption.

In summary, parental perceptions, conceptions, mediation strategies, and healthy media habits modelling are all crucial factors in shaping children's media behaviours. Understanding these factors is essential for developing effective interventions to promote healthy media use among preschool children.

## **2.9 The Problematic Media Use of Children**

The use of digital media is considered inevitable in children's lives. However, media use may exceed normal or expected levels and eventually become problematic.

Recent figures from research conducted in the UK indicate that 52% of children aged 3-4 and 82% of children aged 5-7 are present in online environments. Studies indicate that children are engaged in online environments from an early age. Consequently, the amount of time children spend in digital environments continues to increase from an early age (URL-1). Despite the increasing amount of time and access of digital media consumption, it is not solely sufficient to describe media use of early children as problematic by considering these factors. Defining what we consider as "problematic" media consumption and differentiating it from typical usage holds significant importance. To begin, it's essential to note that relying solely on the number of hours spent on screen media is insufficient to identify whether a child's media usage is problematic. When we use the term "problematic," we mean an excessive level of engagement that disrupts a child's normal activities. Prioritizing the evaluation of a child's functioning is crucial when examining behavioural or developmental issues. This emphasis on functioning is what distinguishes normal fluctuations from a behaviour that reaches a pathological extent (Domoff, Borgen, Radesky., 2020). Problematic media use in childhood has been conceptualized as excessive use leading to dysfunction in a major domain of a child's development: social, behavioural, or academic (Domoff et al., 2019a).

Problematic media use, which disrupts daily activities, is frequently investigated in adolescents and young adults. There is a scarcity of research on problematic media use within the family unit, specifically focusing on parents and young children. Holmgren's (2022) three-year longitudinal study investigates the correlations between maternal postpartum depression symptoms at Time 1 and problematic media use in both parents and children, along with parental depression at Time 3. The study also explores the potential role of parent-child dysfunctional interactions at Time 2 as a mediating variable. Additionally higher problematic media use was associated with depressed mothers (Oh et al., 2022), post-traumatic stress disorders, psychological neglect, physical neglect, paternal physical violence, sexual violence (Hsieh et al. 2016). High PMU was also associated with low level of family income or family education (Muslu & Aygun, 2020; Park & Park, 2021) and parental marital status like divorced, widower or separated (Yang & Kim, 2021).

The literature delves into the developmental and cognitive aspects related to media use in preschool children. For instance, the association between emotional

dysregulation in preschool age and later media use and gaming disorder symptoms has been examined by Paulus et al. (2021), highlighting the potential long-term implications of early emotional regulation on media habits. Additionally, the perception of media messages by preschool children and its influence on consumer behaviour has been explored by (Šramová & Pavelka, 2017), providing insights into the cognitive and behavioural aspects of media consumption in early childhood.

Problematic media use symptoms in children younger than 12 years may present differently than in adolescents. Children are more reliant on parents for media access as compared with adolescents, who have relatively more autonomy in their media use and have higher personal media ownership rates (Rideout, 2015). In contrast to teenagers, who can engage in self-reflection and potentially assess whether excessive media use negatively affects their functioning in various aspects, younger children may lack awareness of such consequences. Consequently, it is typically adults in a child's life, such as parents and teachers, who are better positioned to observe and report any potential dysfunction linked to a child's media use (Domoff et al., 2019).

Children with emotional and behavioural difficulties may choose solitary activities like screen use. Video games can be a coping strategy for handling negative emotions, providing social interaction and opportunities for role-playing. In hospital settings, lonely children may turn to media and games for communication, potentially increasing addictive tendencies (Erkol & Küçük 2023). The study emphasizes the impact of screen use on the well-being of children facing emotional and behavioural challenges, especially in hospital environments.

Domoff et al. (2020) introduced the Interactional Theory of Childhood Problematic Media Use (IT-CPU), which extends Bronfenbrenner's bioecological model (1979; 2006). This framework underscores diverse factors, including proximal, distal, and maintaining elements that contribute to the emergence of problematic media use in children. Distal factors, such as household disorganization and the digital environment's setup, influence proximal factors like a child's characteristics, parental media behaviours and beliefs, and peer access to technology. Additionally, maintaining factors sustain problematic media use in children, such as positive reinforcement of media consumption, using media for coping, and peer influences promoting gaming or online engagement (Eales et al., 2021). This conceptualization highlights the limitations of simplistic screen time metrics as indicators of problematic

use, aligning with the broader consensus among researchers advocating for more nuanced approaches in evaluating media use among children and adolescents (Kaye et al., 2020).

## **2.10 Internet Parenting Styles**

Darling (1999, p. 1) and Darling and Steinberg (1993, p. 487) define parenting as follows: “Parenting is a complex activity that includes many specific behaviours that work individually and together to influence child outcomes”. Baumrind (1991) defines parenting styles by stating that it serves as a framework to encompass the typical range of variations in how parents seek to regulate and socialize their children. This dual emphasis in the definition is mirrored in the perspective of Eastin et al. (2006), which highlights both socialization involvement and the strictness of control. Two fundamental aspects of parental conduct have emerged out of parental socialization theories which are control and warmth (Amato, 1990; Maccoby & Martin, 1983; Baumrind 1991). Warmth or involvement relate to the level at which parents endorse their children, dedicate time, and engage in communication, and are receptive to their requirements. Control or demand relate to the extent to which parents establish and implement boundaries and oversee their children's activities (Fine, Voydanoff & Donnelly, 1993). In terms of internet parenting styles, parental control and warmth are referred to the following concepts. Parental control manifests through providing guidance, restricting specific online activities, and establishing rules. On the other hand, parental warmth is defined by engaging in open communication with children and offering various levels of support in terms of use of technology (Valcke et al., 2010).

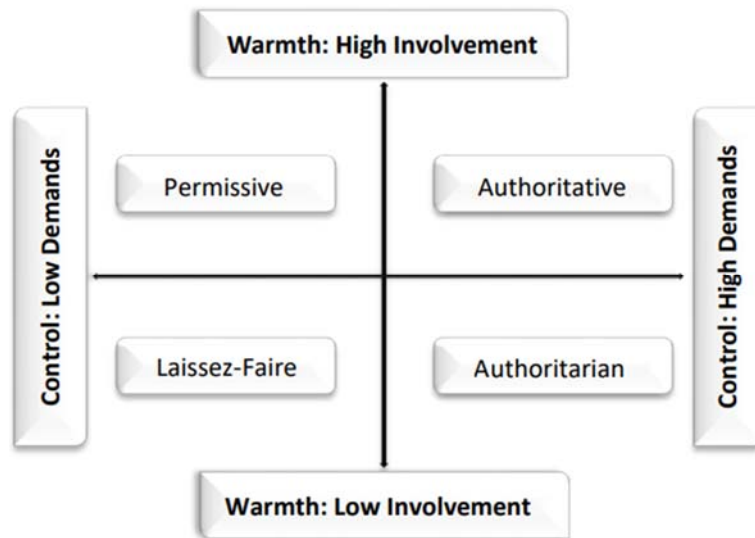


*Figure 1* Parenting Styles (Baumrind, 1991; Maccoby & Martin, 1983)

There are four internet parenting styles in the literature defined by Baumrind (1991) and Maccoby& Martin (1983) as seen in figure 1. The four parenting styles that are formed by the intersection of parental control and warmth can be defined as follows:

**Authoritarian Parenting Style:** In authoritarian parenting style, which is defined as the intersection of low parental warmth and high parental control, the child is expected to obey strict rules set by parents and not to go beyond these rules (Darling, 1999).

**Authoritative (Democratic) Parenting Style:** Authoritative parents are individuals who listen to their children, communicate in a solution-focused relationship with their children, share their ideas mutually and support their child's special abilities and tendencies (Maccoby, 1992).

**Permissive Parenting Style:** Permissive parents are individuals who are not more demanding towards their children, who avoid confronting their children and cannot resist their wishes (Darling, 1999).

**Laissez-Faire (Neglectful) Parenting Style:** These families who tend to give feedback to their child very rarely, provide little or no emotional support or guidance for their child. Parents in this style have weak communication with their children and their interactions are very low (Maccoby, 1992).

**2.10.1 Authoritarian internet parenting style.** Authoritarian internet parenting styles involve strict control, limited emotional support, and an emphasis on obedience (Baumrind, 1991). This style is characterized by parents who may recognize emotional and behavioural problems in their children and exhibit a high level of demand while being low in responsiveness (Horita et al., 2022; Husni et al., 2019; Chao, 1994).

The authoritarian parenting style can lead to children feeling emotionally unstable, passive, lacking independence, confidence, and courage, and avoiding challenges (Van der Fels et al., 2015). It is associated with treating children as possessions, leading children to perceive this style as reflective of their parents' love or concern (Cho, 2020). Studies have introduced the concept of Internet Parenting Style (IPS), which includes categories like authoritative, authoritarian, and "laissez-faire" styles concerning children's internet use (Valcke et al., 2010).

The authoritarian parenting style within the context of internet use can influence children's behaviour and potential addiction issues (Setiawati et al., 2021). Additionally, authoritarian parenting has been linked to negative outcomes such as anxiety, depression, substance misuse, and behavioural problems in school (Dornbusch et al., 2016; Hock et al., 2018). Research has shown that authoritarian parenting can result in various emotional, moral, and behavioural problems in children (Feeney et al., 2017). This parenting style is often associated with limiting children's expression of opinions and feelings, potentially leading to negative behaviours in adolescents (Brosnan et al., 2020).

Research suggests that the authoritarian parenting style can have long-term adverse effects on children's health and well-being, regardless of age. These effects include lower self-esteem, reduced psychological flexibility and maturity, and even the potential for mental illness (Chen, 2022). Furthermore, individuals who have experienced authoritarian parenting may exhibit disruption in conscience development, aggressiveness, resistance to authority, and difficulties in forming intimate relationships in adulthood (Baumrind 1991; Dwairy & Menshar, 2005). Moreover, the impact of authoritarian parenting styles can extend to future generations. Studies indicate that children who experience maladaptive parenting, such as authoritarian parenting, are more likely to adopt similar negative parenting styles when they become parents themselves (Chen & Kaplan, 2001).

This perpetuation of authoritarian parenting can create a cycle of negative outcomes across generations. Additionally, the warmth and emotional support received during childhood, as opposed to authoritarianism, have been linked to higher emotional intelligence in adolescents. Overprotectiveness and authoritarianism from parents have been associated with lower emotional intelligence among adolescents, which can impact their social and emotional functioning as adults (Nguyen et al., 2020).

On the other hand, there are potential positive outcomes associated with directive internet parenting styles. Research by Baumrind (2013) suggests that directive parenting, a style similar to authoritarian parenting but not arbitrary, hostile, or punitive, has been found to be beneficial. This indicates that a parenting style that is demanding but not overly punitive can have positive effects on children.

Additionally, Warsah et al. (2021) found that both authoritarian and authoritative parenting styles contributed to good control of children's gaming routines, suggesting that directive parenting may help establish boundaries and structure in children's online activities. Moreover, Steinberg et al. (1994) highlighted that the directive parenting style was more advantageous to Asian Americans in terms of adjustment and academic performance compared to the authoritative style. This suggests that in certain cultural contexts, directive parenting may lead to positive outcomes for children.

In summary, while authoritarian parenting styles are commonly associated with negative outcomes such as lower emotional intelligence and behavioural issues, recent studies suggest that there may be positive aspects to directive parenting. A balanced and directive approach within the parenting framework could potentially lead to beneficial outcomes for children, particularly in terms of establishing boundaries, academic performance, and adherence to routines. As individuals raised under authoritarian parenting styles transition into adulthood, they may face challenges in forming healthy relationships, exhibit lower emotional intelligence, and have a higher likelihood of perpetuating negative parenting styles in future generations. The implications of authoritarian internet parenting styles, characterized by strict control, limited emotional support, and an emphasis on obedience, can result in various negative impacts on children, including emotional instability, lack of independence, and behavioural issues.

Understanding the effects of authoritarian parenting in the digital age is crucial for promoting healthy child development and overall well-being, emphasizing the importance of considering both the negative and potential positive outcomes associated with different parenting styles.

**2.10.2 Authoritative internet parenting style.** Parenting styles play a crucial role in shaping children's behaviours and outcomes, including their internet usage habits. One prominent parenting style often discussed in the context of internet parenting is authoritative/ democratic style. The authoritative parenting style is characterized by high levels of warmth, responsiveness, and reasonable demands emphasizing collaboration, open communication, and shared decision-making between parents and children (Yusuf et al., 2020). Studies have shown that authoritative parenting style is associated with positive outcomes in children. For instance, children raised under these styles tend to exhibit better problem-solving skills, emotional regulation, and social competence (Aunola & Nurmi, 2005).

Additionally, this parenting style has been linked to lower levels of internet addiction among adolescents (Tur-Porcar, 2017). Parents who adopt authoritative or democratic style are more likely to have children with lower screen time and healthier internet habits (Veldhuis et al., 2014). Warsah et al. (2021) suggested that parents employing authoritative parenting styles acknowledge children's desire to play online games while also maintaining control over their children's schedules by teaching them to manage screen time within appropriate limits. This parenting style aims to foster cooperation in children by promoting effective and democratic communication (Lau & Power, 2020).

Authoritative parents primarily employ reasoning as a disciplinary method rather than resorting to punishment. They prioritize their children's positive behaviour over mere obedience as the main objective of their parenting approach. Consequently, parents who prioritize their children's autonomy and adhere to the principles of authoritative parenting are more inclined to promote academic advancement in their children. This is evidenced by their children's academic performance, reduced instances of disciplinary issues, and enhanced self-esteem (Kurtz-Costes, 2015).

Furthermore, authoritative parenting, marked by consistent engagement and oversight, is linked to greater academic proficiency and focus in adolescents, along

with reduced involvement in delinquent behaviours, when contrasted with alternative parenting approaches (Steinberg et al., 1994). The implications of parenting styles extend into adulthood. Research suggests that the parenting styles experienced during childhood can influence individuals' behaviours and decision-making patterns in later life. For example, individuals raised under authoritative parenting style exhibit higher levels of self-control, resilience, and adaptive coping strategies in adulthood (Shimil & Srivastava, 2022).

In contrast, those raised under authoritarian or permissive styles may struggle with impulsivity, emotional regulation, and addictive behaviours, including internet addiction (Huang et al., 2010). In conclusion, authoritative parenting styles have been associated with positive outcomes in children, including healthier internet habits.

**2.10.3 Permissive parenting styles.** Permissive internet parenting style is characterized by a lack of control, few rules, and low levels of parental monitoring over children's internet use (Darling, 1999). Studies have shown that children of parents with permissive internet parenting styles tend to use the internet more frequently compared to those with authoritative or authoritarian parenting styles (Konok et al., 2019). This style often involves granting children excessive freedom in navigating the online world without proper guidance or restrictions (Maftei & Enea, 2020).

Children raised under permissive internet parenting may spend extended periods engaging in online activities, such as gaming, due to the lack of boundaries set by their parents (Warsah et al., 2021). The child is also granted significant autonomy in determining their bedtime, when or whether to complete homework, and their screen time allowance with computers and television. However, such extensive freedom may potentially foster the development of other detrimental habits, as the parent may not offer sufficient guidance on practicing moderation (Langer et al., 2014; Sanvictores & Mendez, 2022).

The implications of permissive internet parenting styles in childhood can extend into adulthood. Research has indicated that permissive parenting styles are associated with higher levels of internet addiction in adolescents (Setiawati et al., 2021). Additionally, permissive parenting has been linked to negative outcomes such as anxiety, depression, substance misuse, and behavioural problems in school (Valcke et

al., 2010; Dornbusch et al., 2016). Furthermore, children raised under permissive parenting styles may develop poor social attitudes and have lower self-discipline due to the lack of demands and expectations placed upon them (Yasmeen, 2013; Rahimah & Sukiman, 2020).

Despite the negative outcomes associated with permissive internet parenting styles, there are also positive aspects to consider. For instance, permissive parenting styles have been found to be associated with higher levels of child physical activity when coupled with parental reinforcement or monitoring (Hennessy et al., 2010). Moreover, some studies suggest that permissive parenting styles may lead to less problematic internet use or compulsive use of social networking sites (Martínez-Ferrer, et al., 2018).

In conclusion, permissive internet parenting styles can have significant implications for children's internet use and behaviour. While this parenting style may lead to increased internet usage and potential negative outcomes, it is essential to consider the nuanced relationship between permissive parenting and its effects on children's development. Further research is needed to fully understand the long-term impact of permissive internet parenting styles on children as they transition into adulthood.

**2.10.4 Laissez-faire internet parenting style.** Laissez-faire or neglectful or uninvolved internet parenting style refers to a hands-off approach where parents exhibit minimal control and supervision over their children's online activities. This parenting style is characterized by few rules or restrictions regarding internet use (Lee & Kim, 2023). In general aspect, this parenting style reflects parents who are indifferent, do not provide support, and expect their children to handle problems alone (Cramer, 2015). Research indicates that as children grow older, parents tend to become more permissive and laissez-faire in their approach to internet parenting (Özgür, 2016).

Studies have shown that laissez-faire internet parenting can have both positive and negative outcomes. On the positive side, children from homes with a laissez-faire parenting style may develop friendships with more positive features compared to those from homes with other parenting styles (Allès-Jardel et al., 2002). However, on the negative side, laissez-faire parenting, especially in the context of internet use, has been

associated with higher levels of internet addiction among children (Bozkurt et al., 2018). Additionally, children with laissez-faire family patterns tend to have higher levels of internet use compared to those from families with other parenting styles (Tajalli & Zarnaghash, 2017).

Children of neglectful or uninvolved parents have demonstrated the least favourable outcomes among other parenting styles across various domains in studies, including deficits in self-regulation and social responsibility, limited self-reliance and social competence, inadequate school performance, engagement in antisocial behaviour and delinquency, as well as experiences of anxiety, depression, and somatic complaints, lacking guidance and emotional support (e.g., Baumrind, 1991; Hoeve et al., 2008; Lamborn et al., 1991; Steinberg et al., 1994; Garn et al., 2012; Qinhuu & Ompok, 2022). In conclusion, laissez-faire internet parenting style can impact children's internet use behaviours, friendships, and risk attitudes both in childhood and later in adulthood.

## **2.11 Internet Parenting Styles and Media Use of Children**

Parenting styles play a crucial role in influencing a child's internet usage. The most excessive child internet use tends to be associated with permissive parenting styles (low control-high warmth, while the least usage is observed when parents adopt an authoritarian internet parenting style (high control-low warmth) (Valcke, Bonte, De Wever & Rots, 2010). In addition, another study conducted by Ren & Zhu (2022) found that child-perceived authoritarian internet parenting was associated with the lowest level of internet use, while permissive internet parenting was linked to the highest level of internet use. These results indicate that internet parenting styles are associated with children's media use. However, there is also contradictory results in the field. There are studies that document no relation between parental control and internet use of children (Eastin et al., 2006; Lee & Chae 2007).

Livingstone (2003) examined the comprehensive utilization of the Internet by children, identifying three primary categories: (1) entertainment, (2) education, and (3) edutainment. Additionally, a fourth category was incorporated to encompass the consumer role of children through the Internet by Valcke, Bonte, De Wever and Rots (2010).

The influence of parenting styles, particularly democratic or in other terms authoritative parenting impacts children's media using habits. Research indicates that authoritative parenting, characterized by parental warmth, supervision, and rational explanation, can affect children's media usage patterns. Authoritative (democratic) parenting style has been consistently linked to lower levels of addictive smartphone use among children and adolescents (Bae, 2015). This style involves fostering open communication, providing guidance, and encouraging independence while maintaining boundaries. Considering the abovementioned aspects, authoritative (democratic) parenting can reduce the likelihood of smartphone overuse in children (Lee et al., 2022), protect them from problematic smartphone use (Chou et al., 2022).

Moreover, parents who adopt a democratic parenting style are more effective in guiding their children's media exposure and helping them avoid addiction to online games (Amaliah, 2022). Thus, it is clear to recognize that democratic parenting leads children to use media devices more critically and responsibly (Munawar et al., 2021).

Additionally, it has been found that authoritative parenting positively influences learning motivation (Zahara & Azwarni, 2022) and self-esteem (Windiani et al. 2019) in children. Research has shown that preschool children with authoritative parents exhibit higher social-emotional adjustment compared to children with other parenting styles (Agbaria & Mahamid, 2023).

Conversely, authoritarian parenting, characterized by strict rules and low warmth, has been linked to an increased risk of problematic smartphone use (Chou et al., 2022). On the other hand, permissive parenting, which involves high parental warmth but low parental control, has been associated with higher smartphone addiction tendencies (Nur et al., 2021).

Howe et al. (2017) found that mothers who adopted either permissive or authoritarian style tended to allow their kids to watch more TV. In a study with 5-year-old children, authoritarian parents were noticed to be less likely to let their kids use smartphones and game consoles, but how much TV the children watched didn't seem to be linked to their parents' style eventually (Veldhuis et al., 2014).

The neglectful or in other terms *laissez-faire* parenting style is characterized by low parental warmth and control, representing emotionally distant parents who are often unresponsive and disengaged from their children's lives. Neglectful parenting styles have been linked to children's screen time and habits related to dietary

behaviours and sedentary activities. Children of parents with neglectful parenting styles have been reported to consume fewer fruits and vegetables compared to children of parents with authoritative or indulgent styles (Franchini et al., 2011).

Additionally, neglectful parenting has been linked to an increased risk of overweight and obesity-inducing behaviours in children (Eastin et al. 2006). In addition, parents who exhibit neglectful behaviours are more likely to allow high levels of screen exposure for their children, potentially contributing to increased sedentary behaviours (Coyne et al., 2017 & Jago et al., 2011).

Permissive parenting styles, characterized by low demandingness and high responsiveness, have been associated with various aspects of children's development, including their media use habits. Permissive parents tend to be less controlling and more tolerant, allowing children greater freedom in decision-making and behaviour (Hosokawa & Katsura 2018). Studies have shown that permissive parenting styles are linked to children spending more time engaging in sedentary activities, including screen time (Johnson et al., 2012).

The lack of structure and limits in permissive parenting may contribute to children having unrestricted access to media devices and spending excessive time on screens (Kadoglou, 2023). Moreover, permissive parenting styles have been associated with children's behaviours related to obesogenic environments and sedentary behaviours. Research suggests that permissive parenting is linked to less healthy dietary behaviours and increased sedentary time in children (Innella et al., 2018).

Children of permissive parents may have fewer restrictions on screen time and engage in more sedentary activities, which can contribute to the development of unhealthy behaviours and obesity (Zena & Heeralal, 2021). In the context of social-emotional development, permissive parenting styles have been found to be associated with specific behavioural outcomes in children.

Permissive parents may allow children to regulate their own activities without providing necessary guidance, leading to potential negative impacts on children's social skills and emotional regulation (Neel et al., 2019). Additionally, permissive parenting has been linked to higher levels of internalization and behavioural problems in preschool children (Psi et al., 2021). The lack of structure and limits in permissive parenting may contribute to children's engagement in unhealthy behaviours, including excessive screen time and sedentary activities.

## **Chapter 3**

### **Methodology**

#### **3.1 Research Design**

Mixed methodology is a design for collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies to understand an evaluation problem (Creswell and Clark, 2007). This approach is used when a researcher seeks to understand a complex research question that cannot be fully answered through either quantitative or qualitative methods alone.

Mixed methods design typically involves collecting both numerical and narrative data from participants using various methods, such as surveys, interviews, focus groups, and observations. After data collection, both types of data are analysed separately using appropriate quantitative and qualitative methods. Finally, the results from both types of analysis are integrated and interpreted to provide a more comprehensive understanding of the research questions.

There are various types of mixed method design. In this study, sequential explanatory design was used which involves collecting and analysing quantitative and then qualitative data in two consecutive phases within one study (Creswell, 1999). The first phase of sequential explanatory design typically involves the collection of quantitative data using methods such as surveys or experiments. In the second phase, the qualitative data are collected and analysed to provide further explanation or understanding of the quantitative results. Qualitative data is collected using methods such as interviews, focus groups, or observation. Qualitative data are analysed using techniques such as content analysis. Content analysis requires a close examination of the obtained data and reaching conceptual and thematic categories that explain these data (Yıldırım & Şimşek, 2008: 89). The results of the qualitative analysis can be used to confirm, refuse, or expand upon the quantitative findings. The initial quantitative phase aimed to provide a general understanding of the research problem through statistical analysis, while the subsequent qualitative phase sought to delve deeper into the quantitative results by exploring participants' perspectives in more depth (Thornberg et al. 2022). The sequential explanatory design is recognized for its ability to integrate quantitative and qualitative data in a sequential manner, allowing researchers to triangulate findings, enhance the validity of results, and offer richer

interpretations of the research outcomes. This design was particularly valuable in providing a comprehensive and exhaustive analysis of research questions that may not be achievable through a single research method.

### **3.2 Participants**

#### **3.2.1 Participants for the Quantitative Study**

The research was conducted to the parents of the preschool children between ages 3-6. Accordingly, parents of the pre-school children in Turkey are considered as the target population. For quantitative research simple random sampling method, which is a probability sampling technique, was applied to contact a vast number of subjects (Büyüköztürk et al.,2008). The research was announced by the researcher online via social media, and email. The participants are not expected to be a member of an institution; yet any social, cultural, demographic, and ethnic oriented parent can be a participant. 228 pre-school parents are asked to participate in the study as the sample group of the research. In order to be included in the study parents are required to be the main caregiver of the child. Some of the characteristics of the participants are given in the Table 1. Participants were informed about the purpose of the research and their right to withdraw at any time. No personal identifying information was collected in the quantitative phase, and email addresses were optional for those willing to participate in the qualitative phase.

Table 1

*Descriptive Information of the Participants (Part 1)*

|                                                                      |                                                    | Frequency | Percent |
|----------------------------------------------------------------------|----------------------------------------------------|-----------|---------|
| The degree of closeness to the child                                 | Mother                                             | 199       | 87,3    |
|                                                                      | Father                                             | 29        | 12,7    |
| Child's year of birth                                                | 2016                                               | 34        | 14,9    |
|                                                                      | 2017                                               | 93        | 40,8    |
|                                                                      | 2018                                               | 53        | 23,2    |
|                                                                      | 2019                                               | 43        | 18,9    |
|                                                                      | 2020                                               | 5         | 2,2     |
| Does your child go to school?                                        | Yes                                                | 196       | 86,0    |
|                                                                      | No                                                 | 32        | 14,0    |
| If your child does not go to school, who does he spend the day with? | Mother                                             | 12        | 5,3     |
|                                                                      | Mother and father                                  | 7         | 3,1     |
|                                                                      | Grand Parents (Grandma, Grandmother, Grandpa etc.) | 13        | 5,7     |
|                                                                      | My child is going to school                        | 196       | 86,0    |
| Gender of the child                                                  | Male                                               | 121       | 53,1    |
|                                                                      | Female                                             | 107       | 46,9    |
| Mother's educational level                                           | Elementary School, Middle School                   | 5         | 2,2     |
|                                                                      | High school                                        | 12        | 5,3     |
|                                                                      | University                                         | 152       | 66,7    |
|                                                                      | MSc, PhD                                           | 59        | 25,9    |
| Father's educational level                                           | Elementary School, Middle School                   | 7         | 3,1     |
|                                                                      | High school                                        | 25        | 11,0    |
|                                                                      | University                                         | 149       | 65,4    |
|                                                                      | MSc, PhD                                           | 47        | 20,6    |

When the table is examined, it is understood that 87.3% of the participants are mothers and 12.7% are fathers. A large proportion of children (40.8%) were born in 2017. 96% of children go to school. 53.1% of the children are male, and 46.9% are female. Most of the mothers and fathers stated that they were university graduates.

Table 2

*Descriptive Information of the Participants (Part 2)*

|                                                                           |                       | Frequency | Percent |
|---------------------------------------------------------------------------|-----------------------|-----------|---------|
| Indicate your monthly income (TL) (Total monthly income of the household) | 0 - 8,000 TL          | 15        | 6,6     |
|                                                                           | 8,000 - 10,000 TL     | 14        | 6,1     |
|                                                                           | 10,000 - 20,000 TL    | 66        | 28,9    |
|                                                                           | 20,000 - 30,000 TL    | 58        | 25,4    |
|                                                                           | 30,000 TL and higher  | 52        | 22,8    |
| Mother's working status                                                   | I don't want to share | 23        | 10,1    |
|                                                                           | Not working           | 69        | 30,3    |
|                                                                           | working from home     | 15        | 6,6     |
|                                                                           | works full time       | 112       | 49,1    |
|                                                                           | works part time       | 32        | 14,0    |
| Father's Working Status                                                   | Not working           | 5         | 2,2     |
|                                                                           | working from home     | 20        | 8,8     |
|                                                                           | works full time       | 201       | 88,2    |
|                                                                           | works part time       | 2         | 0,9     |

When the table is examined, it is understood that the majority of the participants have a monthly income of 10.000 - 20.000 TL (28.9%), 20.000 - 30.000 TL (25.4%), and 30.000 TL and above (22.8%). Many mothers (49.1%) and fathers (88.2%) stated that they work full-time.

### **3.2.2 Participants for the Qualitative Study**

Purposeful sampling is a widely adopted technique in qualitative research for the identification and selection of information-rich cases, maximizing the functional use of limited resources (Patton, 2002). Within this framework, maximum variety sampling—a type of purposeful sampling—was employed to ensure a comprehensive and effective analysis by capturing a wide range of perspectives. After the initial quantitative phase of the study, the quantitative data was analysed. Out of all participants, 29 individuals shared their email addresses, indicating their willingness to participate in the qualitative part of the study. From these 29 volunteers, a subset was selected for further qualitative analysis. Specifically, 5 participants with the highest scores on the PMUM and 4 participants with the lowest scores on the PMUM were chosen. This selection aimed to capture a broad spectrum of experiences and insights related to children's media use. Consent was obtained from all participants involved in the qualitative part of the study, ensuring confidentiality and anonymity.

Table 3

*Participants' Characteristics for the Qualitative Study*

|                                           | P1                                   | P2                              | P3                             | P4                                  | P5                               | P6                                      | P7                                      | P8                              | P9                                      |
|-------------------------------------------|--------------------------------------|---------------------------------|--------------------------------|-------------------------------------|----------------------------------|-----------------------------------------|-----------------------------------------|---------------------------------|-----------------------------------------|
| Gender of the child                       | M                                    | M                               | F                              | F                                   | M                                | F                                       | M                                       | M                               | F                                       |
| Parent                                    | Father                               | Mother                          | Mother                         | Father                              | Father                           | Mother                                  | Mother                                  | Mother                          | Mother                                  |
| Education                                 | University                           | University                      | Master's Degree                | University                          | Master's Degree                  | High School                             | University                              | University                      | Master's Degree                         |
| Working Status                            | Full Time                            | Full Time                       | Part Time                      | Full Time                           | Full Time                        | Full Time                               | Full Time                               | Not working                     | Full Time                               |
| Number of Devices                         | 7                                    | 8                               | 5                              | 7                                   | 7                                | 5                                       | 6                                       | 4                               | 6                                       |
| Movie Number per week                     | 1                                    | 0                               | 0                              | 2                                   | 3 or more                        | 2                                       | 2                                       | 0                               | 3 or more                               |
| Min. Screen Time                          | 20-40 min.                           | 20-40 min.                      | 20-40 min.                     | 20-40 min.                          | 10-20 min                        | 20-40 min.                              | 20-40 min.                              | More than 60 min.               | More than 60 min.                       |
| Max. Screen Time                          | 120-180 min.                         | Less than 60 min.               | Less than 60 min.              | 60-120 min.                         | Less than 60 min.                | 60-120 min.                             | Less than 60 min.                       | 60-120 min.                     | 60-120 min.                             |
| Parent's Daily Screen Time                | 6-8 hours                            | 2-4 hours                       | 0-2 hours                      | 2-4 hours                           | 8 hours and more                 | 4-6 hours                               | 0-2 hours                               | 0-2 hours                       | 2-4 hours                               |
| Screen Time Activities of the Child       | Cartoons, short videos, games, music | Cartoons, short videos          | Cartoons                       | Short videos                        | Music, learning foreign language | Cartoons, music                         | Cartoons, games, painting, music        | Cartoons                        | Cartoons, learning foreign language     |
| Time between screentime and bedtime       | 30 min.                              | 2 hours                         | 1 hours                        | 30 min.                             | More than 2 hours                | 1 hour                                  | More than 2 hours                       | 1 hour                          | 1 hour                                  |
| Child's daily sleeping hours              | 10 hours or more                     | 8-10 hours                      | 10 hours or more               | 10 hours or more                    | 10 hours or more                 | 8-10 hours                              | 10 hours or more                        | 8-10 hours                      | 10 hours or more                        |
| Parent's opinion about child's screen use | Excessive                            | Excessive                       | Not excessive                  | Excessive                           | Not excessive                    | Not excessive                           | Not excessive                           | Excessive                       | Excessive                               |
| Reactions when ending screen time         | Asks for additional screen time      | Asks for additional screen time | Resists not to turn off screen | Challenging, non-negotiable process | Asks for additional screen time  | Turns off screen device when time is up | Turns off screen device when time is up | Asks for additional screen time | Turns off screen device when time is up |
| Screen time as positive reinforcement     | Yes                                  | No                              | No                             | No                                  | No                               | No                                      | No                                      | No                              | No                                      |
| Screen time as negative reinforcement     | Yes                                  | Yes                             | No                             | Yes                                 | Yes                              | No                                      | Yes                                     | Yes                             | No                                      |
| PMU Scores                                | 75                                   | 40                              | 32                             | 98                                  | 70                               | 29                                      | 28                                      | 114                             | 30                                      |
| IPS FC-FW                                 | 41-59                                | 39-70                           | 44-54                          | 36-49                               | 43-63                            | 49-69                                   | 51-70                                   | 47-70                           | 14- 12                                  |

### 3.3 Procedures

**3.3.1 Data collection instruments for the quantitative study.** In this study, a combination of quantitative and qualitative instruments was used to gather comprehensive data from participants. The initial phase of the study involved participants completing a series of quantitative instruments, including a demographic information form, the Problematic Media Use Measure (PMUM), and the Internet Parenting Styles Instrument. Detailed explanations for each of these instruments are provided below.

**3.3.1.1 Problematic media use measure (PMUM).** The Problematic Media Use Measure (PMUM), developed by Domoff and colleagues in 2017, is designed to assess problematic media use in young children. It stands out as a pioneering measure in the field. The items of the scale were created considering the criteria for Internet Gaming Disorder mentioned in DSM-5 (APA, 2013). With minor modifications to account for parents reporting on their child's media use compared to youth reporting on their own use, Domoff (2019) created items reflecting the following IGD criteria items (APA, 2013): preoccupation (5 items), withdrawal (11 items), tolerance (4 items), unsuccessful attempts by parent to control use (10 items), loss of interest in previous hobbies and entertainment (7 items), deceived others about use (5 items), use to escape or relieve a negative mood (4 items), jeopardized/lost a relationship or had compromised functioning in school due to use (4 items), and continued use despite psychosocial problems (10 items). (Domoff, 2019). In order to decrease redundancy among items measuring the same symptom, the decision was made to further reduce the items. The three highest loading items from each IGD symptom were retained for the PMUM full scale, and the highest loading item for the PMUM-SF was retained as well. This approach was based on prior measure development that utilized three items to assess each symptom (Lemmens et al., 2015; Van Den Eijnden et al., 2016). Both the 27-item long form and the 9-item short form of the scale have a one-factor structure. The items are scored on a Likert scale ranging from 1 (never) to 5 (always). The total score of the PMUM is obtained by calculating the average score of all the items. High scores on the scale indicate a higher level of problematic use. The scale, filled out by parents considering the child's behaviour, aims to assess problematic use of visual media tools in general (such as Tv, computer, tablet, phone) or, in other

words, screen addiction (Furuncu, 2019). The Cronbach's alpha values for the long and short forms of the scale were found to be .97 and .93, respectively (Domoff et al., 2017). The Turkish version of the PMUM, adapted by Furuncu in 2019 was used in the study.

**3.3.1.2 Internet parenting styles instrument.** The Internet Parenting Styles Instrument was originally developed by van Rooij and van den Eijnden (2007). The original of the scale is in Dutch. The scale was adapted to English by Valcke et al. in 2010. In this study, Internet Parenting Styles Scale was used which was adapted to Turkish by Ayas and Horzum (2013). The scale consists of 25 items and two factors with a Likert type of 5. The initial factor “Parental Control” includes 11 items and the second factor which is “Parental Warmth” has 14 items. Factor scores are calculated by taking the sum of the items in the factors (Ayas & Horzum, 2013; Horzum & Bektaş, 2014). Cronbach’s alpha was 0.86 for the parental control factor, and 0.92 for the parental warmth factor.

**3.3.1.3 Demographic information form.** The demographic information form designed by the with the contribution of two-subject matter experts. A pilot study for demographic questions was conducted with 10 participants with the aim of observing and interviewing their opinions about the form’s clarity, comprehensibility, and relevance of questions to their parenting. Form included 37 questions aimed at reaching information about both parents and children (see Appendix A). Child's gender, age, enrolment to a pre-school, minimum screen time, maximum screen time, requirement of screen in daily activities, owning a digital media device, sleeping hours, competence in using digital media devices, streaming service preferences, reactions when ending the screen time, influence of content on real life games and toy selection, YouTube preferences (cartoon, toy videos or experiment, how to videos). Form was also prepared to look for answers regarding what child prefers to do on screen, through what media channels parents follow the current events/ news, parents' knowing and implementation of control options, situations encountered by the child while having screen time or the type of content child prefers to watch on screen. Form also includes questions addressed to parents about and the caregiver with whom the child spends time with, the number of digital media devices in the household, number of movies

children watch with their parents in a week, parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities, time between the end of screen time and bedtime, parents' view regarding screen time is excessive or not, screen time as a positive reinforcer, screen time as a negative reinforcer. Detailed explanation of some of the questions are stated below.

Minimum screen time refers to the shortest duration a child engages with screen media. The options for this question ranged from "My child doesn't have screen time" to "60 minutes." The intermediate options included 1-5 minutes, 5-10 minutes, 10-20 minutes, 20-40 minutes, and 40-60 minutes. These options were established considering the typical durations of short videos, cartoons, and short movies. For the maximum screen time a child has, the options were categorized into less than 60 minutes, 60-120 minutes, and more than 120 minutes. This categorization allows for an understanding of the upper limits of children's screen time engagement.

The requirement of screen time in daily activities of preschool children refers to the frequency of their need for screen time during specific routines, such as mealtimes, falling asleep, traveling (public transport or car), and while their parents are busy. The same question was addressed to parents regarding their routines. The options for this question included the need for screen time during mealtimes, falling asleep, traveling (public transport or car), while doing chores, in the bathroom, and while socializing.

Additionally, a question was included to assess the competence of children in using media devices. The frequency options for this question addressed whether the child could perform certain tasks without support: making a call, reaching content on a smartphone or tablet, entering short video sites, downloading a game or app, and entering a password.

The streaming service preferences question aimed to determine the child's preferences for watching content. The options included traditional TV channels, subscription-based services such as Netflix or Prime, and platforms like YouTube. The YouTube preferences question further broke down into specific content types: cartoons, toy videos, and experiment or how-to videos. The questions concerning screen time activities for both children and parents were designed to encompass a wide range of digital interactions. For children, the options included watching cartoons, short videos, toy videos, and engaging in educational activities such as learning languages and watching documentaries. Parents were asked about activities such as

staying in touch with friends, navigation, online chatting, reading digital newspapers/books, playing games, and engaging in various online research and shopping activities. These questions aimed to capture the diverse ways in which screen media is utilized by both children and parents in their daily lives.

**3.3.2 Data collection instruments for the qualitative study.** Following the quantitative phase, the second and final phase of the study involved conducting semi-structured interviews with a subset of participants. These qualitative interviews aimed to explore participants' experiences and perspectives in greater depth.

**3.3.2.1 Semi-structured interview form..** Qualitative data was obtained through semi-structured interview form. Semi-structured interviews are a qualitative research method characterized by a flexible yet systematic approach to data collection (Jamshed, 2014). These interviews combine predetermined open-ended questions with the opportunity for interviewees to elaborate on their responses and introduce new topics. The semi-structured format allows researchers to maintain a certain level of consistency across interviews while also permitting the exploration of unanticipated avenues, ensuring a deeper understanding of participants' perspectives and experiences (Smith, 2015). The qualitative research aims to gain in-depth knowledge about children's problematic media usage habits and their parents' attitudes based on the results of quantitative research. Within the purpose of this study 10 interview questions were developed by the researcher and reviewed by the dissertation adviser and an expert of qualitative research. A pilot study was initially held. After the pilot study some questions were reorganized or excluded from the study. The final version of the questions aimed to find out the participants' opinions regarding their children's media using habits as well as their own use along with their shared time activities, how would their children or themselves do or feel on screen-free day. Additionally, participants were asked to share their opinions about their relationship with their children, household rules, or conflicts.

**3.3.3 Data collection procedures for the quantitative study.** The research data was collected online via "Google Form" that included three parts. 228 preschool parents participated in the study. The initial part of the data collection was the

demographic form which was developed by the researcher and consisted of 37 questions. After the demographic Problematic Media Use Measure which consisted of 27 Items and Internet Parenting Styles which included 25 items were applied. In order to provide the reliability and validity in measurement, participants were prevented from leaving the answers blank during the survey. Data was collected in approximately 2 months. Participants were asked to share their email addresses if they wanted to participate in the second part of the data collection.

**3.3.4 Data collection procedures for the qualitative study.** After the quantitative data was collected from 228 parents, 9 of the volunteered ones were purposefully selected for further qualitative data collection by the researcher. 5 of participants had higher mean scores of PMUM and the remaining four participants had lower mean scores of PMU than others. The researcher organized a face-to-face meeting with each participant individually for semi-structured interviews. The interviews lasted between 15-30 minutes. For qualitative data, semi-structured interviews were conducted by two researchers to prevent data loss and ensure alignment with research objectives.

**3.3.5 Data analysis procedures for the quantitative study.** The distribution of the scores obtained from the Problematic Media Use and Internet Parental Style scales was examined based on the Skewness and Kurtosis coefficients. It was found that the Skewness and Kurtosis coefficients calculated in this study were within the specified range (Table 3). Considering this result, parametric analyses were used.

Table 4

*Skewness and Kurtosis Coefficients*

| Variable              | Skewness  |            | Kurtosis  |            |
|-----------------------|-----------|------------|-----------|------------|
|                       | Statistic | Std. Error | Statistic | Std. Error |
| Problematic media use | 1,35      | 0,16       | 1,26      | 0,32       |
| Family control        | -1,12     | 0,16       | 1,38      | 0,32       |
| Family warmth         | -1,03     | 0,16       | 1,04      | 0,32       |

Percent-frequency analysis was applied to determine the distribution of the answers given by the participants to the survey questions. Independent groups t-test

was applied to compare the scores obtained from the Problematic Media Use Measure and Internet Parental Style Instrument according to two-category variables (children's school enrolment, etc.). One-way analysis of variance was applied to compare the scores obtained from the scales according to variables with more than two categories (Number of movies watched by family, etc.). The Scheffé Post-Hoc test was used to determine the source of the difference. This test is used when the number of people in the groups differs, and the variance is homogeneous (Scheffe, 1959).

When examining the data obtained from questions in the demographic information form used in the study, it was found that there were only few participants that selected certain options. When examining the research results, it was noted that due to the very low number of participants selecting certain options, some responses have been grouped for the accuracy of the analysis results. In order to analyse the relevant results, the responses to questions 12, 14 and 23 were grouped (see Tables 5-11; 24-45; 35-56; 27-48). Analyses were performed using the IBM SPDF 25.0 statistical package program.

**3.3.6 Data analysis procedures for the qualitative study.** For the qualitative analysis after the completion of 9 semi-structured interviews, the document set was read by researcher several times before the initial coding. In the initial coding process, the qualitative data was read multiple times and initial codes were generated. The computer software, MAXQDA Analytics Pro 2022, was used in the coding procedure. Coding is the process of organizing the material into chunks and segments of text and assigning a word or phrase to the segment in order to develop a general sense of it (Creswell, 2014). After the initial coding, categories and themes were formed respectively by both researchers.

Another researcher with expertise was asked to assist with the coding process. Two researchers conducted coding data separately and after the coding process they reviewed and confirmed the qualitative results.

**3.3.7 Reliability and validity.** The survey is aimed to collect data, which included two scales for problematic media use, and internet parenting styles. It also contains a demographic information form to obtain a deeper scope of information. The scales used in this research have a high level of reliability. Internet parenting styles

scale was originally in Dutch. The scale was translated into English by Valcke, Bonte, De Wever and Rots (2010) and adapted to Turkish by Ayas and Horzum (2013). The Internet Parenting Styles Instrument's average Cronbach's Alpha reliability coefficient is 0.94, with 0.86 for the parental control factor and 0.88 for the parental warmth factor (Ayas & Horzum, 2013). Problematic media use measure (PMUM) was developed by Domorff in 2019. PMUM consists of two versions. The final versions of the PMUM (27 items) and PMUM Short Form (PMUM-SF, 9 items) evidenced high internal consistency (Cronbach  $\alpha$  =.97 and  $\alpha$  =.93, respectively). The scale was adapted to Turkish by Furuncu in 2019. M. Cronbach's Alpha values of the PMUM and PMUM-SF were .97 and .93, respectively. The values obtained from analyses made within the scope of incremental and convergent validity were found to be sufficient and significant (Furuncu, 2019). Problematic Media Use Measure was originally developed in order to measure the level of problematic media use of children between the ages of 4-11. While the current study is about preschool children, two subject matter experts along with thesis advisor were consulted if the measure was applicable to parents with three-year-olds with the aim of ensuring the validity. After the positive responses it was decided to be used in the study.

**3.3.7.1 Credibility, transferability, dependability and confirmability** It has been stated that for a study to be expressed as scientific research, the findings and research process need to be transparent, consistent, and confirmed by different researchers (Yıldırım & Şimşek, 2013). For the qualitative data, semi-structured interviews were conducted by two researchers to prevent data loss and ensure alignment with research objectives. Through the inclusion of diverse participants, efforts were made to reach reality through multiple perspectives and thoughts. Parents of children with different media usage habits were consulted. In addition to diversifying data sources, the expert review method was also utilized (Lincoln & Guba, 1985). An expert with detailed knowledge of the research topic and experience in qualitative research evaluated the entire process from different angles. Throughout the research process, face-to-face meetings were conducted with the expert, and the researcher explained in detail the data collection, data analysis, and interpretation

processes carried out at each stage of the research, presenting the raw data and the conclusions reached, and receiving feedback.

To enhance the transferability of the research, a detailed description strategy was employed by establishing a detailed procedural outline (Erlandson et al., 1993). This included defining the research model, working group, data collection tools, data collection process, as well as the analysis and interpretation of findings. Findings were presented directly, and direct quotations from participants were incorporated to further increase the study's transferability. Furthermore, the entire research process was comprehensively outlined, particularly detailing the data collection instruments and procedures at each stage to illustrate how the data were collected. To ensure the transferability of the research, detailed descriptions of the research context and participants were provided. This allows readers to determine the applicability of the findings to other contexts.

Dependability was achieved through a clear and systematic approach to data collection and analysis, ensuring that the research process was logical, traceable, and documented. One of the recommended strategies to ensure the consistency of the research is to present the findings directly without interpretation. Another strategy is to involve an additional researcher in the data analysis process (LeCompte & Goetz, 1982). The researcher employed a descriptive approach when presenting the findings and frequently used direct quotations. The involvement of two researchers in the analysis process also contributed to consistency by maintaining the inter-coder agreement.

Finally, confirmability was addressed by maintaining a comprehensive audit trail, which includes detailed records of the research process, data collection, and analysis decisions. This ensures that the findings are based on the participants' responses rather than researcher biases or preferences. All data collection instruments used in the research, the raw data sets obtained from these instruments, the coding performed on the data sets, all analysis methods, and the inferences and interpretations based on the findings were documented and presented for expert evaluation. This allowed for a clear comparison between the raw data and the researcher's interpretations, providing a clear assessment of whether the researcher considered confirmability in the study.

### **3.4 Limitations**

The research had its weaknesses regarding the group of participants. Data was collected from the parents that had the google form invitation. The data collection could be applied to a larger group of parents. Participants from all over Turkey did not participate in the study. Parents who had internet access and the link invitation participated in the study. People who had internet access and the link invitation could be people who have a higher education level. One of the limitations of this research is the reliance on self-reported data provided by parents. Since these responses are in the form of self-assessment, they reflect the parents' perceptions and may not accurately represent the actual screen use behaviour of their children. Additionally, parents may have biased or incomplete knowledge about their children's media use, leading to potential inaccuracies in the data. Another limitation is the potential for social desirability bias, where parents may underreport their children's screen time or overreport their regulatory practices to align with perceived societal norms. This bias can affect the validity of the findings. PMUM scale had been applied to parents who had children between the ages of 4-11. Therefore, parents with 3-year-olds took part in the data collection for the first time. It is assumed that the participants answered the survey questions honestly. One of the limitations of this research is the sample size. Only 228 participants were included in the study, which may not be sufficient to generalize the findings to a larger population. A larger sample size could provide more robust and reliable results, enhancing the validity of the study. Future research should aim to include a broader and more diverse group of participants to better understand the media usage habits of preschool children and their parents' attitudes in different contexts. Moreover, there is a lack of existing research on the topic of problematic media use among preschool children conducted in Türkiye. This gap in the literature means that there are limited comparative studies to contextualize the findings within the specific cultural and social context of Türkiye.

## **Chapter 4**

### **Findings**

In this chapter the results of the Problematic Media Use Measure and Internet Parenting Styles Scale are presented along with demographic questions including all the research questions.

#### **4.1 Demographic Questions**

In this section, descriptive information is provided from participants in several key aspects related to screen media usage of preschool children and their parents. Firstly, the frequency of watching movies and spending time on the screen among participants is examined (see Table 5). The number of digital media devices present in participants' households is also explored (see Table 6). The distribution of screen time activities engaged in by preschool children is then presented (Table 7). Additionally, the frequency of parents' screen time activities along with preschool children's and parents' requirement of screen usage in daily activities are presented (see Table 8, Table 9, Table 10). Furthermore, descriptive information including children's ownership of digital media devices and their daily sleeping times are given (see Table 11). Participants' sources for following news related to current events are identified, along with their views on their children's media usage skills (see Table 12, Table 13). Moreover, children's streaming service preferences, parents' opinions on their children's screen time, and children's reactions when ending screen time are given along with whether screens serve as positive or negative reinforcers in their lives (see Table 14). Furthermore, parents' knowledge and implementation of control options are presented, as well as the situations encountered by children during screen time, such as advertisements, sexuality, cursing, slang conversations, and violent elements (see Table 15, Table 16). Finally, participants' opinions regarding the effects of screen time content on children are examined (see Table 17). For the mentioned questions participants were asked to respond to a demographic information form along with both five-point Likert scales.

Table 5

*Examining the Frequency of Watching Movies and Spending Time on the Screen of the Participants*

These demographic questions focus on the descriptive statistics of frequency of watching movies as a family along with minimum and maximum screen time of preschool children in addition to parents' daily screen time.

|                                                                                          |                    | Frequency | Percent |
|------------------------------------------------------------------------------------------|--------------------|-----------|---------|
| How many movies do you watch per week as a family?                                       | 1                  | 78        | 34,2    |
|                                                                                          | 2                  | 52        | 22,8    |
|                                                                                          | 3 and more         | 16        | 7,0     |
|                                                                                          | None               | 82        | 36,0    |
| How many minutes is the minimum screen time when your child spends time with the screen? | 0-5 min.           | 24        | 0,5     |
|                                                                                          | 5-10 min.          | 32        | 14,0    |
|                                                                                          | 10-20 min.         | 60        | 26,3    |
|                                                                                          | 20-40 min.         | 57        | 25,0    |
|                                                                                          | 40-60 min.         | 27        | 11,8    |
|                                                                                          | More than 60 min.  | 28        | 12,3    |
| What is the maximum screen time in minutes when your child spends time with the screen?  | Less than 60 min.  | 124       | 54,4    |
|                                                                                          | 60-120 min.        | 78        | 34,2    |
|                                                                                          | More than 120 min. | 26        | 11,4    |
| What is your average daily screen time? (TV, tablet, computer, phone, etc. in total)     | 0-2 hours          | 77        | 33,8    |
|                                                                                          | 2-4 hours          | 71        | 31,1    |
|                                                                                          | 4-6 hours          | 44        | 19,3    |
|                                                                                          | 6-8 hours          | 19        | 8,3     |
|                                                                                          | 8 hours or more    | 17        | 7,5     |

When the table is examined, it is understood that 36% of the participants have never watched a movie as a family, and 34.2% of them watch a movie once a week. Many participants stated that their children's minimum screen viewing time is 10-20 minutes. (26.3%) and 20-40 min. (25%). Many participants (54.4%) expect their

children to spend the maximum time looking at the screen less than 60 minutes. Many participants stated that their screen time was 0-2 (33.8%) and 2-4 hours (31.1%).

Table 6

*Examination of the Number of Digital Media Devices in the Household of the Participants*

| Variable                                                                                                                    | Minimum | Maximum | M    | Df   |
|-----------------------------------------------------------------------------------------------------------------------------|---------|---------|------|------|
| Total number of digital media devices in the house (Smartphone, Tablet, Laptop, Desktop Computer, Television, Game Console) | 0       | 12      | 5,94 | 1,98 |

When the table is examined, it is understood that the number of digital media devices in the participants' houses varies between 0 and 12. The average number of digital media devices at home was 5.94 (Df=1.98).

Table 7

*Distribution of Preschool Children's Screen Time Activities*

|                                                                               | Frequency                 | Percent |
|-------------------------------------------------------------------------------|---------------------------|---------|
| What does your child prefer to do when he or she spends time on the screen? * | Watching cartoons         | 202     |
|                                                                               | Play a game               | 103     |
|                                                                               | Watching Short Videos     | 82      |
|                                                                               | Listen to music           | 73      |
|                                                                               | Watching toy videos       | 54      |
|                                                                               | Drawing                   | 40      |
|                                                                               | Learning foreign language | 37      |
|                                                                               | Watching documentary      | 32      |

\*Multiple answers were given for this question.

When the table is examined, it is understood that children prefer watching cartoons, playing games, watching short videos, listening to music, and watching toy videos while spending time on the screen, respectively.

Table 8

*Examining the Frequency of Parents' Screen Time Activities*

| How much screen do you need for the following actions? |   | I never need a screen | I usually handle without a screen but sometimes I need a screen | I often need a screen | I always need a screen |
|--------------------------------------------------------|---|-----------------------|-----------------------------------------------------------------|-----------------------|------------------------|
| Staying in touch with friends                          | f | 21                    | 85                                                              | 89                    | 33                     |
|                                                        | % | 9,2                   | 37,3                                                            | 39,0                  | 14,5                   |
| Navigation                                             | f | 17                    | 73                                                              | 77                    | 61                     |
|                                                        | % | 7,5                   | 32,0                                                            | 33,8                  | 26,8                   |
| During a conversation                                  | f | 47                    | 114                                                             | 50                    | 17                     |
|                                                        | % | 20,6                  | 50,0                                                            | 21,9                  | 7,5                    |
| Reading a newspaper or a book                          | f | 78                    | 85                                                              | 48                    | 17                     |
|                                                        | % | 34,2                  | 37,3                                                            | 21,1                  | 7,5                    |
| Play a game                                            | f | 122                   | 63                                                              | 29                    | 14                     |
|                                                        | % | 53,5                  | 27,6                                                            | 12,7                  | 6,1                    |
| Doing sports                                           | f | 118                   | 74                                                              | 20                    | 16                     |
|                                                        | % | 51,8                  | 32,5                                                            | 8,8                   | 7,0                    |
| Doing research on travel/holiday/restaurant            | f | 9                     | 43                                                              | 97                    | 79                     |
|                                                        | % | 3,9                   | 18,9                                                            | 42,5                  | 34,6                   |
| Grocery shopping                                       | f | 37                    | 84                                                              | 75                    | 32                     |
|                                                        | % | 16,2                  | 36,8                                                            | 32,9                  | 14,0                   |
| Shopping                                               | f | 18                    | 75                                                              | 101                   | 34                     |
|                                                        | % | 7,9                   | 32,9                                                            | 44,3                  | 14,9                   |

When the table is examined, most of the participants stated that they often need to look at the screen to stay in touch with their friends (39%), use navigation (33.8%), do research travel/holiday/restaurant (42.5%), and shop (44.3%).

Most of the participants stated that they sometimes need to look at the screen to during a conversation (50%), read a newspaper or book (37.3%), and do grocery shopping (36.8%). Most participants said they never needed to look at the screen to play games (53.5%) and do sports (51.8%).

Table 9

*Examining the Frequency of the Preschool Children's Requirement of the Screen in Daily Activities*

| How often does your child need screen time while doing the following activities? |   | Never | Occasionally | Usually | Always |
|----------------------------------------------------------------------------------|---|-------|--------------|---------|--------|
| While eating                                                                     | f | 117   | 72           | 32      | 7      |
|                                                                                  | % | 51,3  | 31,6         | 14,0    | 3,1    |
| while falling asleep                                                             | f | 203   | 18           | 5       | 2      |
|                                                                                  | % | 89,0  | 7,9          | 2,2     | 0,9    |
| Airplane, car, public transport etc.                                             | f | 103   | 99           | 23      | 3      |
|                                                                                  | % | 45,2  | 43,4         | 10,1    | 1,3    |
| While the parent is busy with another job (at work, doing household chores)      | f | 29    | 126          | 61      | 12     |
|                                                                                  | % | 12,7  | 55,3         | 26,8    | 5,3    |

When the table is examined, it is understood that most children do not need to look at the screen while eating (51.2%) and falling asleep (89%). During travel, 45.2% of children do not need to look at the screen, while 43.4% occasionally need to look at the screen. Many children (55.3%) occasionally need to look at the screen while their parents are busy.

Table 10

*Examining the Frequency of the Parents' Requirement of the Screen in Daily Activities*

| How often do you need the screen while you do the following activities? |   | Never | Occasionally | Usually | Always |
|-------------------------------------------------------------------------|---|-------|--------------|---------|--------|
| While eating                                                            | f | 145   | 69           | 13      | 1      |
|                                                                         | % | 63,6  | 30,3         | 5,7     | 0,4    |
| While falling asleep                                                    | f | 153   | 47           | 19      | 9      |
|                                                                         | % | 67,1  | 20,6         | 8,3     | 3,9    |
| While traveling (Airplane, car, public transport etc.)                  | f | 106   | 91           | 30      | 1      |
|                                                                         | % | 46,5  | 39,9         | 13,2    | 0,4    |
| While doing chores                                                      | f | 148   | 57           | 20      | 3      |
|                                                                         | % | 64,9  | 25,0         | 8,8     | 1,3    |
| In the toilet                                                           | f | 122   | 71           | 25      | 10     |
|                                                                         | % | 53,5  | 31,1         | 11,0    | 4,4    |
| While socializing                                                       | f | 95    | 94           | 35      | 4      |
|                                                                         | % | 41,7  | 41,2         | 15,4    | 1,8    |

When the table is examined, it is understood that most of the participants do not need to look at the screen while eating (63.6%), falling asleep (67.1%), doing chores (64.9%), and toilet (53.5%). While 46.5% of the participants do not need to look at the screen during the trip, 39.9% of them occasionally need to look at the screen. While 41.7% of the participants do not need to look at the screen while socializing, 41.2% occasionally need to look at the screen.

Table 11

*Investigation of Children's Owning Digital Media Devices and Daily Sleeping Times*

|                                                                                                          |                | Frequency | Percent |
|----------------------------------------------------------------------------------------------------------|----------------|-----------|---------|
| Does your child own a digital media device (phone, tablet, computer, drawing tablet, smart watch, etc.)? | Yes            | 71        | 31,1    |
|                                                                                                          | No             | 157       | 68,9    |
|                                                                                                          | 30 min. before | 61        | 26,8    |
|                                                                                                          | 1 hour ago     | 61        | 26,8    |
| How long before going to bed/sleep does your child stop looking at the screen?                           | 2 hours ago    | 37        | 16,2    |
|                                                                                                          | More than 2    |           |         |
|                                                                                                          | hours ago      | 69        | 30,3    |
|                                                                                                          | 6-8 hours      | 17        | 7,5     |
| How many hours does your child sleep a day?                                                              | 8-10 hours     | 105       | 46,1    |
|                                                                                                          | 10 hours or    |           |         |
|                                                                                                          | more           | 106       | 46,5    |
|                                                                                                          |                |           |         |

When the table is examined, it is understood that 68.9% of the children do not have any digital media tools. It is understood that most children (30.3%) stopped looking at the screen for more than 2 hours before bed. Many children sleep 8-10 (46.1%) and 10+ hours (46.5%) daily.

Table 12

*Examining the Sources of the Participants to Follow the News Related to the Current Events*

| Through which channels do you follow the news about the current events? |   | Never | Sometimes | Occasionally | Usually | Always |
|-------------------------------------------------------------------------|---|-------|-----------|--------------|---------|--------|
| TV News                                                                 | f | 81    | 55        | 41           | 43      | 8      |
|                                                                         | % | 35,5  | 24,1      | 18,0         | 18,9    | 3,5    |
| News Sites                                                              | f | 34    | 52        | 64           | 65      | 13     |
|                                                                         | % | 14,9  | 22,8      | 28,1         | 28,5    | 5,7    |
| Social media                                                            | f | 14    | 19        | 50           | 120     | 25     |
|                                                                         | % | 6,1   | 8,3       | 21,9         | 52,6    | 11,0   |
| Newspaper                                                               | f | 111   | 58        | 38           | 18      | 3      |
|                                                                         | % | 48,7  | 25,4      | 16,7         | 7,9     | 1,3    |
| Friends / Relatives                                                     | f | 34    | 76        | 66           | 48      | 4      |
|                                                                         | % | 14,9  | 33,3      | 28,9         | 21,1    | 1,8    |

When the table is examined, it is understood that the participants mostly use social media resources to follow the news related to the current events. The rate of using newspapers and TV to follow the news is very low. News sites and friends /relatives are sometimes or occasionally used to follow the news about the agenda.

Table 13

*Examination of Participants' Views on Children's Media Using Skills*

| Choose the correct option for you according to the following statements         |   | Yes  | No   |
|---------------------------------------------------------------------------------|---|------|------|
| My child can call me or someone else on the smartphone without needing support. | f | 81   | 147  |
|                                                                                 | % | 35,5 | 64,5 |
| My child can access content on their smartphone or tablet alone.                | f | 120  | 108  |
|                                                                                 | % | 52,6 | 47,4 |
| My child can access video sites without the help of others.                     | f | 109  | 119  |
|                                                                                 | % | 47,8 | 52,2 |
| My child can research on the Internet alone.                                    | f | 37   | 191  |
|                                                                                 | % | 16,2 | 83,8 |
| My child can download apps or games without anyone else's help.                 | f | 58   | 170  |
|                                                                                 | % | 25,4 | 74,6 |
| My child can enter my smartphone's password alone.                              | f | 89   | 139  |
|                                                                                 | % | 39,0 | 61,0 |

When the table is examined, most of the participants stated that they disagreed with the propositions "My child can call me or someone else on the smart phone without the need for support", "My child can search on the internet alone", "My child can download an application or game without the help of anyone else" and "My child can enter my smartphone's password alone".

On the other hand, the percentages of the participants who found the options "My child can access content from a smartphone or tablet alone" and "My child can access video sites without the help of others" as correct and wrong were found to be quite close to each other.

Table 14

*Examining the Streaming Service Preferences of Children and their Screen Usage Habits*

|                                                                             |                                                                                                                                                                  | Frequency | Percent |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
| Which ones would your child prefer to watch?                                | A subscription-based streaming service (Netflix, Amazon Prime, BluTV etc.)                                                                                       | 80        | 35,1    |
|                                                                             | TV channels                                                                                                                                                      | 47        | 20,6    |
|                                                                             | Video sites like YouTube                                                                                                                                         | 101       | 44,3    |
| Do you think your child is using too much screen?                           | Yes                                                                                                                                                              | 109       | 47,8    |
|                                                                             | No                                                                                                                                                               | 119       | 52,2    |
| How does your child usually act when screen time is ending?                 | Wants to extend screen time by asking for additional time. If he is enthusiastic about the activity, he will quickly turn it off after the screen is turned off. | 51        | 22,4    |
|                                                                             | Resists not ending screen time                                                                                                                                   | 49        | 21,5    |
|                                                                             |                                                                                                                                                                  | 38        | 16,7    |
|                                                                             | When the time is up, it immediately turns off the screen without objection.                                                                                      | 90        | 39,5    |
| Do you extend screen time when your child displays a positive behaviour?    | Yes                                                                                                                                                              | 37        | 16,2    |
|                                                                             | No                                                                                                                                                               | 191       | 83,8    |
| Do you cut back on-screen time when your child exhibits negative behaviour? | Yes                                                                                                                                                              | 96        | 42,1    |
|                                                                             | No                                                                                                                                                               | 132       | 57,9    |

When the table is examined, it is understood that 44.3% of the children follow video sites such as YouTube, and 35.1% follow a subscription-based broadcast service. 47.8% of the participants think their children have too much screen time. Many

participants (39.5%) stated that their children turn off the screen immediately without objection when the time comes. 83.8% of the participants stated they did not extend their screen time when their children exhibited positive behaviour. The participants' rate that they reduce screen time when their child exhibits negative behaviour is 42.1%.

Table 15

*Examination of Parents' Knowing and Implementation of Control Options*

|                                             |                                                   | Frequency | Percent |
|---------------------------------------------|---------------------------------------------------|-----------|---------|
| Which of the control options do you know? * | I know smart signs (Rtük etc.)                    | 167       | 27,8    |
|                                             | I know the age restriction feature                | 163       | 27,1    |
|                                             | I know screen time restrictions                   | 142       | 23,6    |
|                                             | I know the restricted mode feature                | 122       | 20,3    |
|                                             | I don't know any of the specified control options | 7         | 1,2     |
| Which control options do you use? *         | I am using the age restriction feature            | 133       | 29,4    |
|                                             | I use smart signs (Rtük etc.)                     | 106       | 23,5    |
|                                             | I use screen time restrictions                    | 82        | 18,1    |
|                                             | I am using the restricted mode feature            | 76        | 16,8    |
|                                             | I am not using any of the features mentioned.     | 55        | 12,2    |

\*Multiple answers were given to this question.

When the table is examined, it is understood that parents know more about smart signs, age restriction, screen time restriction, and restricted mode, respectively. It has been determined that parents mostly use age restrictions, smart signs, screen time restrictions, and restricted mode options for control.

Table 16

*Examining the Situations Encountered by the Child During Screen Time**(Advertisements, Sexuality, Cursing and Slang Conversations, Violent Elements)*

| How often does<br>your child<br>encounter the<br>following options<br>during screen<br>time? |   | Don't know | Never | Occasionally | Usually | Always |
|----------------------------------------------------------------------------------------------|---|------------|-------|--------------|---------|--------|
| Ads                                                                                          | f | 1          | 54    | 69           | 79      | 25     |
|                                                                                              | % | 0,4        | 23,7  | 30,3         | 34,6    | 11,0   |
| Sexuality                                                                                    | f | 3          | 201   | 22           | 1       | 1      |
|                                                                                              | % | 1,3        | 88,2  | 9,6          | 0,4     | 0,4    |
| Cursing and Slang<br>Conversations                                                           | f | 2          | 151   | 64           | 6       | 5      |
|                                                                                              | % | 0,9        | 66,2  | 28,1         | 2,6     | 2,2    |
| Violent Elements                                                                             | f | 1          | 117   | 92           | 13      | 5      |
|                                                                                              | % | 0,4        | 51,3  | 40,4         | 5,7     | 2,2    |

When the table is examined, 30.3% of the participants said they occasionally encounter advertisements, while 34.6% usually see their children while watching the screen. Most of the participants stated that their children were never exposed to content related to sexuality (88.2%), profanity and slang (66.2%), and violent elements (51.3%) while watching the screen.

Table 17

*Examination of Participants' Opinions Regarding the Effects of Screen Time Content on Children*

|                                                                                 |                                                | Frequency | Percent |
|---------------------------------------------------------------------------------|------------------------------------------------|-----------|---------|
| Can you see the effect of screen content on your child while playing?           | Sometimes                                      | 105       | 46,1    |
|                                                                                 | Yes                                            | 100       | 43,9    |
|                                                                                 | No                                             | 23        | 10,1    |
| Can you see the influence of screen content on your child while choosing a toy? | Sometimes                                      | 72        | 31,6    |
|                                                                                 | Yes                                            | 113       | 49,6    |
|                                                                                 | No                                             | 43        | 18,9    |
| Which one does your child prefer?                                               | None                                           | 52        | 22,8    |
|                                                                                 | Watching cartoon games/toy videos on Youtube   | 140       | 61,4    |
|                                                                                 | Watching an experiment/how-to video on youtube | 36        | 15,8    |
| Which one does your child prefer?                                               | None                                           | 29        | 12,7    |
|                                                                                 | Drawing a picture on paper                     | 190       | 83,3    |
|                                                                                 | Drawing on tablet                              | 9         | 3,9     |
| Which one does your child prefer?                                               | Playing digital games with friends or alone    | 8         | 3,5     |
|                                                                                 | Play face-to-face games with friends           | 214       | 93,9    |
|                                                                                 | None                                           | 6         | 2,6     |

When the table was examined, 43.9% of the participants stated that they saw the effects of what they watched on the screen while their children were playing. 49.6% of the participants stated that they saw the effect of the contents they watched on the screen while their children chose toys. Many children (61.4%) preferred to watch cartoons and game/toy videos on YouTube. According to the participants' opinions, most children (83.3%) prefer drawing on paper more than drawing on a tablet. The

rate of children who prefer to play face-to-face games with their friends over digital games is 93.9%.

## 4.2 Research Questions

**4.2.1 Is there a relation between problematic media use and internet parenting styles?** This research question focuses on the relationship between problematic media use and internet parenting styles of preschool children. Participants were asked to respond to each item of both five-point rating scales. The results along with descriptive statistics about PMU of children and distribution of which internet parenting styles were adopted including the mean and standard deviation.

Table 18

*Investigation of Scores Obtained from Problematic Media Use and Internet Parenting Style Scales*

| Scale                                | Variable              | Minimum | Maximum | M     | M/n* | Df    |
|--------------------------------------|-----------------------|---------|---------|-------|------|-------|
| Problematic Media Use Measure        | Problematic media use | 27      | 114     | 42,25 | 1,56 | 16,86 |
| Internet Parenting Styles Instrument | Family control        | 11      | 55      | 42,94 | 3,90 | 10,50 |
|                                      | Family warmth         | 14      | 70      | 56,77 | 4,06 | 14,18 |

\*1.00-1.80 very low, 1.81-2.60 low, 2.61-3.40 medium, 3.41-4.20 high, 4.21-5.00 very high

When the table is examined, it is understood that the Problematic media use scores vary between 27 and 114, and the average score is calculated as 42.25 (Df=16.86). Family control scores ranged from 11 to 55; the mean score was 42.94 (Df=10.50). Family warmth scores ranged from 14 to 70; the mean score was 56.77 (Df=14.18). As a result of interval determination analyses applied to the scales, scores ranging from 1 to 5 have been assigned to the scale scores. As a result of this interval determination, the problematic media use scores of the children were found to be 1.56. When the average scores of the Internet Parenting Styles Scale are examined, family control scores were determined to be 3.90, while family warmth scores were determined to be 4.06.

Table 19  
*Distribution of Participants by Internet Parenting Styles*

|                           |               | Frequency | Percent |
|---------------------------|---------------|-----------|---------|
| Internet Parenting Styles | Laissez-faire | 20        | 8,8     |
|                           | Authoritarian | 6         | 2,6     |
|                           | Democratic    | 195       | 85,5    |
|                           | Permissive    | 7         | 3,1     |

When the table is examined, it is understood that 8.8% of the participants have laissez-faire, 2.6% authoritarian, 85.5% democratic, and 3.1% permissive Internet Parenting Style.

Table 20  
*Examining the Relationship Between Family Control, Warmth, and Problematic Media Use*

|                |   | Problematic media use |
|----------------|---|-----------------------|
| Family control | r | -0,047                |
|                | p | 0,482                 |
|                | N | 228                   |
| Family warmth  | r | -0,031                |
|                | p | 0,645                 |
|                | N | 228                   |

When the table is examined, it is understood that problematic media use showed a low level negative and non-significant relationship with family control ( $r=-0.047$ ;  $p>0.05$ ) and family warmth ( $r=-0.031$ ;  $p>0.05$ ). It means that family control and warmth were not associated with problematic media use.

**4.2.2 Does problematic media use of preschool children differ according to some demographics?** This research question focuses on whether children's problematic media use scores differ according to children's enrolment to a pre-school (See Table 21), minimum screen time, maximum screen time (See Table 22 and 23), requirement of screen in daily activities (Table 24), owning a digital media device (Table 25), child's daily sleeping hours (Table 26), digital media skills of children (Table 27), streaming service preferences (Table 28), reactions when ending the screen

time (Table 29), child's influence from the content they watch while playing, selecting a toy (Table 30 and 31), YouTube preferences (Table 32, number of movies children watch with their parents in a week (Table 33), parents' daily screen time (Table 34), parents' screen time activities (Table 35), parents' requirement of screen in daily activities (Table 36), time between the end of screen time and bedtime (Table 37), parents' view regarding their children's screen time (Table 38), screen time as a positive reinforcer, screen time as a negative reinforcer (Table 39 and 40). Participants were asked to respond to Problematic Media Use Measure in addition to a demographic information form including the variables that are given above.

Table 21

*Comparing Problematic Media Use Scores by Child's School Enrolment*

| Variables             | Does your child go to school? | N   | M     | Df    | t(226) | p    |
|-----------------------|-------------------------------|-----|-------|-------|--------|------|
| Problematic media use | Yes                           | 196 | 42,31 | 16,76 | 0,15   | 0,88 |
|                       | No                            | 32  | 41,84 | 17,72 |        |      |

When the table is examined, it is understood that there is no significant difference between the problematic media use average according to the child's school enrolment ( $p > 0.05$ ). It was found that problematic media use scores were similar between children who attend school and those who do not.

Table 22

*Comparing Problematic Media Use Scores by Minimum Screen Time*

| Variables             | How many minutes is the minimum screen time when your child spends time with the screen? | N  | M     | Df    | F(5;222) | p    | Scheffe Post-Hoc |
|-----------------------|------------------------------------------------------------------------------------------|----|-------|-------|----------|------|------------------|
| Problematic media use | 0-5 <sup>a</sup>                                                                         | 24 | 34,21 | 7,57  | 5,28     | 0,00 | f>a,<br>f>b      |
|                       | 5-10 <sup>b</sup>                                                                        | 32 | 34,69 | 8,05  |          |      |                  |
|                       | 10-20 <sup>c</sup>                                                                       | 60 | 44,83 | 19,72 |          |      |                  |
|                       | 20-40 <sup>d</sup>                                                                       | 57 | 43,28 | 15,63 |          |      |                  |
|                       | 40-60 <sup>e</sup>                                                                       | 27 | 39,93 | 12,51 |          |      |                  |
|                       | 60+ <sup>f</sup>                                                                         | 28 | 52,36 | 22,47 |          |      |                  |

When the table is examined, it is understood that there is a significant difference in the mean of problematic media use points according to the minimum time spent by the child on the screen ( $p<0,05$ ). The problematic media use mean scores of the children who spend a minimum of 60+ minutes on the screen is significantly higher than the mean scores of the children who spend a minimum of 0-5 and 5-10 minutes on the screen. It was found that problematic media use was more common in children with maximum minimum screen time.

Table 23

*Comparing Problematic Media Use Scores by Maximum Screen Time*

| Variables             | How many minutes is your child's maximum screen time? | N   | M     | Df    | F (2;225) | p    | Scheffe Post-Hoc    |
|-----------------------|-------------------------------------------------------|-----|-------|-------|-----------|------|---------------------|
| Problematic media use | Less than 60 <sup>a</sup>                             | 124 | 36,60 | 10,68 | 28,41     | 0,00 | c>a,<br>c>b,<br>b>a |
|                       | 60-120 <sup>b</sup>                                   | 78  | 45,26 | 18,76 |           |      |                     |
|                       | 120+ <sup>c</sup>                                     | 26  | 60,15 | 20,36 |           |      |                     |

When the table is examined, it is understood that there is a significant difference in the mean of problematic media use points according to the maximum time spent by the child on the screen ( $p<0,05$ ). The problematic media use mean score of the children who spend a maximum of 120+ minutes on the screen is significantly higher than the mean scores of the children who spend a minimum of less than 60 and 60-120 minutes on the screen. Moreover, the problematic media use mean score of the children who spend a maximum of 60-120 minutes on the screen is significantly higher than the mean scores of the children who spend a minimum of fewer than 60 minutes on the screen. As screen time increases, problematic media use also increases.

Table 24

*Comparing Problematic Media Use Scores by Requirement of Screen in Child's Daily Activities*

|                       | How often does your child need screen time while doing the following actions? |                     | N   | M     | Df    | F(2;225) | p    | Scheffe Post-Hoc |
|-----------------------|-------------------------------------------------------------------------------|---------------------|-----|-------|-------|----------|------|------------------|
| Problematic media use | While eating                                                                  | 1. None             | 117 | 40,59 | 15,40 | 1,18     | 0,31 | -                |
|                       |                                                                               | 2. Sometimes        | 72  | 43,75 | 18,39 |          |      |                  |
|                       |                                                                               | 3. Usually & always | 39  | 44,44 | 17,98 |          |      |                  |
|                       | While falling asleep                                                          | 1. None             | 203 | 41,83 | 16,83 | 0,99     | 0,38 | -                |
|                       |                                                                               | 2. Sometimes        | 18  | 43,72 | 15,53 |          |      |                  |
|                       |                                                                               | 3. Usually & always | 7   | 50,57 | 20,94 |          |      |                  |
|                       | During traveling (Airplane, car, public transport, etc.)                      | 1. None             | 103 | 42,02 | 17,63 | 4,39     | 0,01 | 3>1, 3>2,        |
|                       |                                                                               | 2. Sometimes        | 99  | 40,18 | 14,07 |          |      |                  |
|                       |                                                                               | 3. Usually & always | 26  | 51,00 | 20,95 |          |      |                  |
|                       | While the parent is busy with something. (working, doing chores)              | 1. None             | 29  | 38,31 | 15,60 | 17,92    | 0,00 | 3>1, 3>2,        |
|                       |                                                                               | 2. Sometimes        | 126 | 37,89 | 12,91 |          |      |                  |
|                       |                                                                               | 3. Usually & always | 73  | 51,33 | 19,71 |          |      |                  |

When the table is examined, the media usage scores of the child do not show a significant difference according to the frequency of looking at the screen while eating and falling asleep ( $p>0.05$ ). Problematic media use scores showed a significant difference according to the frequency of looking at the screen during the trip and while the parent is busy ( $p<0.05$ ). The problematic media use mean scores of the children who need to look at the screen usually & always while traveling and their parents are busy with another job are significantly higher than the mean scores of the children who never need the screen and need the screen occasionally.

Table 25

*Comparing Problematic Media Use Scores by The Child's Owning a Digital Media Device*

| Variables             | Does your child own a digital media device (phone, tablet, computer, drawing tablet, smart watch, etc.)? | N   | M     | Df    | t(226) | p    |
|-----------------------|----------------------------------------------------------------------------------------------------------|-----|-------|-------|--------|------|
| Problematic media use | Yes                                                                                                      | 71  | 44,06 | 16,26 | 1,09   | 0,28 |
|                       | No                                                                                                       | 157 | 41,43 | 17,11 |        |      |

When the table is examined, it is understood that there is no significant difference between the problematic media use average according to the child's possession of a digital media tool ( $p>0.05$ ). It has been found that problematic media use is similar between children with a digital media tool and those without it.

Table 26

*Comparing Problematic Media Use Scores by The Child's Daily Sleeping Hours*

| Variables             | How many hours does your child sleep a day? | N   | M     | Df    | F(2;225) | p    |
|-----------------------|---------------------------------------------|-----|-------|-------|----------|------|
| Problematic media use | 6-8                                         | 17  | 44,76 | 14,75 | 2,14     | 0,12 |
|                       | 8-10                                        | 105 | 44,32 | 18,87 |          |      |
|                       | 10+                                         | 106 | 39,78 | 14,73 |          |      |

When the table is examined, it is understood that there is no significant difference between the problematic media use average according to the child's daily sleep time ( $p>0.05$ ). It has been found that problematic media use is similar among children who sleep 6-8, 8-10, and 10+ hours a day.

Table 27

*Comparing Problematic Media Use Scores by The Child's Competence in Using Digital Media Devices*

| Please tick the correct option for you according to the following statements. |                                                                                      | N   | M   | Df    | t(224) | p          |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----|-----|-------|--------|------------|
| Problematic media use                                                         | My child can call me or someone else on the smartphone without the need for support. | Yes | 81  | 46,44 | 19,75  |            |
|                                                                               |                                                                                      | No  | 147 | 39,93 | 14,59  | 2,84 0,01  |
|                                                                               | My child can access content on their smartphone or tablet alone.                     | Yes | 120 | 45,21 | 18,27  |            |
|                                                                               |                                                                                      | No  | 108 | 38,95 | 14,52  | 2,84 0,01  |
|                                                                               | My child can access video sites without the help of others.                          | Yes | 109 | 45,34 | 18,33  |            |
|                                                                               |                                                                                      | No  | 119 | 39,41 | 14,90  | 2,69 0,01  |
|                                                                               | My child can do research on the Internet alone.                                      | Yes | 37  | 50,11 | 20,70  |            |
|                                                                               |                                                                                      | No  | 191 | 40,72 | 15,62  | 3,16 0,002 |
|                                                                               | My child can download apps or games without anyone else's help.                      | Yes | 58  | 45,64 | 17,79  |            |
|                                                                               |                                                                                      | No  | 170 | 41,09 | 16,42  | 1,78 0,08  |
|                                                                               | My child can enter my smartphone's password alone.                                   | Yes | 89  | 45,99 | 19,61  |            |
|                                                                               |                                                                                      | No  | 139 | 39,85 | 14,40  | 2,72 0,01  |

When the tablet was examined, it was found that there was no significant difference in the problematic media use scores of children whose parents indicated whether their child could download an application or game without the help of others or not ( $p > 0.05$ ). However, it was found that the average problematic media use scores of participants who did not see any problems with their child making phone calls from a smartphone without support, accessing content alone from a phone or tablet, entering video sites without supervision, conducting online research alone, and knowing the password of their smartphone were higher.

Table 28

*Comparing Problematic Media Use Scores by Child's Streaming Service Preferences*

| Variables             | Which of the following would your child prefer to watch?                                 | N   | M     | Df    | F(2;225) | p    | Scheffe Post-Hoc |
|-----------------------|------------------------------------------------------------------------------------------|-----|-------|-------|----------|------|------------------|
| Problematic media use | A subscription-based streaming service (Netflix, Amazon Prime, BluTV, etc.) <sup>a</sup> | 80  | 40,16 | 14,92 | 5,53     | 0,00 | c>b,<br>c>a      |
|                       | TV channels <sup>b</sup>                                                                 | 47  | 37,36 | 13,51 |          |      |                  |
|                       | Video sites like YouTube <sup>c</sup>                                                    | 101 | 46,17 | 18,84 |          |      |                  |

When the table is examined, it is understood that the problematic media usage scores show a significant difference according to the sources that the child prefers to watch ( $p < 0.05$ ). The mean score of problematic media use of children who prefer video sites such as YouTube is significantly higher than that of children who prefer television channels or subscription based streaming services.

Table 29

*Comparing Problematic Media Use Scores by Child's Reaction as Screen Time Ends*

| Variables             | How does your child usually act when screen time is ending?                                                           | N  | M     | Df    | F(3;224) | p    | Scheffe Post-Hoc             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------|----|-------|-------|----------|------|------------------------------|
| Problematic media use | Wants to extend screen time by asking for an additional time <sup>a</sup>                                             | 51 | 46,55 | 17,00 | 15,50    | 0,00 | c>d,<br>c>b,<br>a>d,<br>a>b, |
|                       | If he is enthusiastic about the activity, he will do it after the screen is turned off; he turns quickly <sup>b</sup> | 49 | 40,57 | 12,15 |          |      |                              |
|                       | Resists not ending screen time <sup>c</sup>                                                                           | 38 | 54,29 | 24,07 |          |      |                              |
|                       | When the time is up, he immediately turns off the screen without objection. <sup>d</sup>                              | 90 | 35,09 | 10,83 |          |      |                              |

When the table is examined, it is understood that the problematic media usage scores show a significant difference according to the type of child's behaviour as screen time ( $p<0.05$ ). The mean score of problematic media usage of children who resist not to end their screen time and who want to prolong their screen time by asking for additional time is significantly higher than the mean score of children who turn off the screen immediately without objecting when the time is up and turns off the screen quickly if he is enthusiastic about the upcoming activity.

Table 30

*Comparing Problematic Media Use Scores by the Status of Playing Game With The Effect of The Content Child Watches*

| Variables             | Do you see the effect of the content your child watches on the screen while playing? | N   | M     | Df    | F(2;225) | p    | Scheffe Post-Hoc |
|-----------------------|--------------------------------------------------------------------------------------|-----|-------|-------|----------|------|------------------|
| Problematic media use | Yes <sup>a</sup>                                                                     | 100 | 48,37 | 20,36 |          |      |                  |
|                       | Sometimes <sup>b</sup>                                                               | 105 | 38,18 | 11,70 | 13,66    | 0,00 | a>b,<br>a>c,     |
|                       | No <sup>c</sup>                                                                      | 23  | 34,17 | 10,08 |          |      |                  |

When the table is examined, it is understood that the problematic media usage scores show a significant difference according to the child's influence from the content they watch while playing ( $p<0.05$ ). According to the parents' opinions, the mean score of problematic media usage of the children who play games with the influence of the content they watched before is significantly higher than the mean score of the children who do not and sometimes reflects the content they watch in their games.

Table 31

*Comparing Problematic Media Use Scores by The Status of Choosing a Toy with the Effect of the Contents Watched by the Child on Screen*

| Variables             | Do you see the effect of the content your child watches on screen while choosing a toy? | N   | M     | Df    | F(2;225) | p    | Post-Hoc     |
|-----------------------|-----------------------------------------------------------------------------------------|-----|-------|-------|----------|------|--------------|
| Problematic media use | Yes <sup>a</sup>                                                                        | 113 | 47,96 | 19,86 |          |      |              |
|                       | Sometimes <sup>b</sup>                                                                  | 72  | 38,53 | 11,59 | 15,92    | 0,00 | a>b,<br>a>c, |
|                       | No <sup>c</sup>                                                                         | 43  | 33,47 | 8,18  |          |      |              |

When the table is examined, it is understood that the problematic media usage scores show a significant difference according to the status of choosing a toy with the effect of the contents watched by the child on the screen ( $p<0.05$ ). According to the

opinions of the parents, the mean score of problematic media use of children who act with the effect of the content they watch while choosing toys is significantly higher than the mean score of children who are not and sometimes under the influence of the content they watch while choosing toys.

Table 32

*Comparing Problematic Media Use Scores by Type of Content Child Prefers to Watch on YouTube*

| Variables             | Which one would your child prefer more?                     | N   | M     | Df    | F(2;225) | p    | Scheffe Post-Hoc |
|-----------------------|-------------------------------------------------------------|-----|-------|-------|----------|------|------------------|
| Problematic media use | Watching cartoon games/toy videos on Youtube <sup>a</sup>   | 140 | 44,34 | 18,60 | 7,28     | 0,00 | a>c,<br>b>c,     |
|                       | Watching an experiment/how-to video on youtube <sup>b</sup> | 36  | 45,11 | 15,58 |          |      |                  |
|                       | None <sup>c</sup>                                           | 52  | 34,63 | 8,88  |          |      |                  |

When the table is examined, it is understood that the problematic media usage scores show a significant difference according to the type of content child prefers to watch ( $p<0.05$ ). The mean score of problematic media usage of children who prefer watching cartoon games/toy videos and experiment/how-to videos on YouTube was significantly higher than that of children who do not prefer to watch videos on YouTube.

Table 33

*Comparing Problematic Media Use Scores by Number of Movies Watched Per Week as a Family*

| Variables             | How many movies do you watch per week as a family? | N  | M     | Df    | F(3;224) | p    |
|-----------------------|----------------------------------------------------|----|-------|-------|----------|------|
| Problematic media use | Never                                              | 82 | 41,85 | 19,60 | 0,09     | 0,97 |
|                       | 1                                                  | 78 | 43,04 | 14,98 |          |      |
|                       | 2                                                  | 52 | 41,73 | 15,85 |          |      |
|                       | 3+                                                 | 16 | 42,06 | 14,62 |          |      |

When the table is examined, it is understood that there is no significant difference in the mean scores of problematic media use according to the number of movie viewings per week ( $p>0.05$ ). It has been found that the problematic media use of children in families that watch one, two, and 3+ movies a week or do not watch any movies is similar.

Table 34

*Comparing Problematic Media Use Scores by Parent's Average Daily Screen Time*

| Variables             | What is your average daily screen time? | N  | M     | Df    | F(4;223) | p    | Scheffe Post-Hoc |
|-----------------------|-----------------------------------------|----|-------|-------|----------|------|------------------|
| Problematic media use | 0-2 <sup>a</sup>                        | 77 | 39,30 | 15,65 | 2,72     | 0,03 | c>a              |
|                       | 2-4 <sup>b</sup>                        | 71 | 41,21 | 15,97 |          |      |                  |
|                       | 4-6 <sup>c</sup>                        | 44 | 48,95 | 20,99 |          |      |                  |
|                       | 6-8 <sup>d</sup>                        | 19 | 39,79 | 12,92 |          |      |                  |
|                       | 8+ <sup>e</sup>                         | 17 | 45,29 | 13,83 |          |      |                  |

When the table is examined, it is understood that there is a significant difference in the mean scores of problematic media use according to the average screen time per day ( $p>0.05$ ). The problematic media use point average of the children of parents who have an average of 4-6 hours of screen time per day is significantly higher than the average score of the children of the participants who have an average of 0-2 hours of screen time per day.

Table 35

*Comparing Problematic Media Use Scores by The Rate of Parents' Screen Time Activities*

| Variable              | How much screen do you need for the following actions?          |                                                                 | N     | M     | Df    | F(3;224) | p     | Scheffe Post-Hoc |
|-----------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------|-------|-------|----------|-------|------------------|
| Problematic media use | Staying in touch with friends                                   | 1. I never need a screen                                        | 21    | 42,71 | 22,72 | 1,31     | 0,27  | -                |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 85    | 39,51 | 12,69 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 89    | 43,65 | 18,03 |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 33    | 45,21 | 18,49 |          |       |                  |
|                       | Navigation                                                      | 1. I never need a screen                                        | 17    | 42,59 | 23,94 | 1,4      | 0,24  | -                |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 73    | 39,22 | 15,42 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 77    | 42,78 | 15,53 |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 61    | 45,1  | 17,64 |          |       |                  |
|                       | During a conversation                                           | 1. I never need a screen                                        | 47    | 46,64 | 22,29 | 1,94     | 0,12  | -                |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 114   | 39,99 | 12,79 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 50    | 42,26 | 18,99 |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 17    | 45,18 | 15,52 |          |       |                  |
|                       | Reading a newspaper or a book                                   | 1. I never need a screen                                        | 78    | 43,49 | 16,93 | 2,23     | 0,09  | -                |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 85    | 39,18 | 15,66 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 48    | 43,06 | 18,1  |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 17    | 49,59 | 16,9  |          |       |                  |
|                       | Playing a game                                                  | 1. I never need a screen                                        | 122   | 42,44 | 16,67 | 0,41     | 0,75  | -                |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 63    | 41,9  | 18,67 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 29    | 40,24 | 13,74 |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 14    | 46,21 | 16,74 |          |       |                  |
|                       | Doing sport                                                     | 1. I never need a screen                                        | 118   | 41,48 | 15,83 | 5,46     | 0,001 | 4>1, 4>2, 4>3    |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 74    | 40,35 | 13,62 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 20    | 41,05 | 20,93 |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 16    | 58,13 | 24,35 |          |       |                  |
|                       | Doing research on travel/holiday/restaurant                     | 1. I never need a screen                                        | 9     | 36,67 | 14,59 | 5,09     | 0,002 | 4>1, 4>2, 4>3    |
|                       |                                                                 | 2. I usually do without a screen, but sometimes I need a screen | 43    | 38,63 | 12,62 |          |       |                  |
|                       |                                                                 | 3. I often need a screen                                        | 97    | 39,67 | 14,71 |          |       |                  |
|                       |                                                                 | 4. I always need the screen                                     | 79    | 48,01 | 20    |          |       |                  |
| Grocery shopping      | 1. I never need a screen                                        | 37                                                              | 37,68 | 11,56 | 1,39  | 0,25     | -     |                  |
|                       | 2. I usually do without a screen, but sometimes I need a screen | 84                                                              | 41,87 | 16,18 |       |          |       |                  |
|                       | 3. I often need a screen                                        | 75                                                              | 44,39 | 19,08 |       |          |       |                  |
|                       | 4. I always need the screen                                     | 32                                                              | 43,5  | 17,83 |       |          |       |                  |
| Shopping              | 1. I never need a screen                                        | 18                                                              | 40,72 | 15,89 | 0,75  | 0,52     | -     |                  |
|                       | 2. I usually do without a screen, but sometimes I need a screen | 75                                                              | 40,12 | 13,77 |       |          |       |                  |
|                       | 3. I often need a screen                                        | 101                                                             | 43,58 | 17,37 |       |          |       |                  |
|                       | 4. I always need the screen                                     | 34                                                              | 43,76 | 21,57 |       |          |       |                  |

When the table is examined, the mean scores of problematic media use do not show a significant difference according to the frequency of looking at the screen to

meet the needs such as staying in touch with friends, using navigation, During a conversation, reading a newspaper or book, playing games, doing grocery shopping and shopping ( $p>0.05$ ). On the other hand, the mean scores of problematic media use shows a significant difference according to the frequency of looking at the screen in order to meet the needs, such as doing sports and doing research on trips/holidays/restaurants ( $p<0.05$ ). The problematic media usage score averages of the children of the parents who stated that they always need a screen to do sports and to do research on travel/holiday/restaurant are significantly higher than the mean scores of the children of the parents who never need a screen, sometimes need a screen and often need a screen.

Table 36

*Comparing Problematic Media Use Scores by the Parents' Requirement of Screen in Daily Activities*

| How often do you need the screen while you do the following actions? |                                                          |                     | N   | M     | Df    | F(3;224) | p     | Scheffe Post-Hoc |
|----------------------------------------------------------------------|----------------------------------------------------------|---------------------|-----|-------|-------|----------|-------|------------------|
| Problematic media use                                                | While eating                                             | 1. Never            | 145 | 40,79 | 16,24 | 5,11     | 0,007 | 3>1, 3>2,        |
|                                                                      |                                                          | 2. Occasionally     | 69  | 42,61 | 16,26 |          |       |                  |
|                                                                      |                                                          | 3. Usually & always | 14  | 55,57 | 20,95 |          |       |                  |
|                                                                      | While falling asleep                                     | 1. Never            | 153 | 40,76 | 16,33 | 5,66     | 0,004 | 3>1, 3>2,        |
|                                                                      |                                                          | 2. Occasionally     | 47  | 41,23 | 14,03 |          |       |                  |
|                                                                      |                                                          | 3. Usually & always | 28  | 52,07 | 20,92 |          |       |                  |
|                                                                      | During traveling (Airplane, car, public transport, etc.) | 1. Never            | 106 | 39,74 | 14,74 | 3,17     | 0,04  | 3>1, 3>2,        |
|                                                                      |                                                          | 2. Occasionally     | 91  | 43,22 | 16,42 |          |       |                  |
|                                                                      |                                                          | 3. Usually & always | 31  | 47,97 | 22,84 |          |       |                  |
|                                                                      | While doing chores                                       | 1. Never            | 148 | 40,80 | 16,88 | 2,84     | 0,06  | -                |
|                                                                      |                                                          | 2. Occasionally     | 57  | 43,02 | 14,77 |          |       |                  |
|                                                                      |                                                          | 3. Usually & always | 23  | 49,61 | 20,00 |          |       |                  |
|                                                                      | In the toilet                                            | 1. Never            | 122 | 40,70 | 13,93 | 6,11     | 0,003 | 3>1, 3>2,        |
|                                                                      |                                                          | 2. Occasionally     | 71  | 40,49 | 14,05 |          |       |                  |
|                                                                      |                                                          | 3. Usually & always | 35  | 51,20 | 26,51 |          |       |                  |
|                                                                      | While socializing                                        | 1. Never            | 95  | 42,27 | 19,36 | 0,01     | 0,99  | -                |
|                                                                      |                                                          | 2. Occasionally     | 94  | 42,10 | 14,56 |          |       |                  |
|                                                                      |                                                          | 3. Usually & always | 39  | 42,54 | 15,84 |          |       |                  |

When the table is examined, it is understood that the scores of problematic media use do not show a significant difference according to the frequency of needing a screen while dealing with chores and socializing ( $p>0.05$ ). However, it was found that the problematic media use scores showed a significant difference according to the frequency of needing a screen while cooking, falling asleep, traveling, and in the bathroom ( $p<0.05$ ). The problematic media usage score averages of parents who usually & always need the screen while cooking, falling asleep, traveling, and in the bathroom are significantly higher than the mean scores of the children of parents who never need the screen and need it occasionally.

Table 37

*Comparing Problematic Media Use Scores by the Time Between the End of Screen Time and Bedtime*

| Variables             | How long before going to bed/sleep does your child stop looking at the screen? | N  | M     | Df    | F(3;224) | p    | Scheffe Post-Hoc     |
|-----------------------|--------------------------------------------------------------------------------|----|-------|-------|----------|------|----------------------|
| Problematic media use | 30 min ago <sup>a</sup>                                                        | 61 | 46,05 | 18,88 | 4,78     | 0,00 | a>d, a>c<br>b>d, b>c |
|                       | 1 hour ago <sup>b</sup>                                                        | 61 | 46,08 | 20,25 |          |      |                      |
|                       | 2 hours ago <sup>c</sup>                                                       | 37 | 38,78 | 12,57 |          |      |                      |
|                       | More than 2 hours ago <sup>d</sup>                                             | 69 | 37,35 | 11,46 |          |      |                      |

When the table is examined, it is understood that there is a significant difference in the mean of problematic media use according to the time when the child stops looking at the screen before going to bed ( $p<0.05$ ). The problematic media use mean scores of children who stopped looking at the screen 30 minutes before and 1 hour before bedtime were significantly higher than those of children who stopped looking at the screen before 2 hours and 2+ hours. Problematic media use is less common in children who stop peering longer before bedtime.

Table 38

*Comparing Problematic Media Use Scores by Parents' Views Regarding The Child's Screen Use*

| Variables             | Do you think your child is using too much screen? | N   | M     | Df    | t(226) | p    |
|-----------------------|---------------------------------------------------|-----|-------|-------|--------|------|
| Problematic media use | Yes                                               | 109 | 49,47 | 19,26 | 6,78   | 0,00 |
|                       | No                                                | 119 | 35,63 | 10,72 |        |      |

When the table is examined, it is understood that there is a significant difference in the mean of problematic media use according to the parents' thinking that the screen use is excessive ( $p < 0.05$ ). Parents were asked to share their opinions regarding if the screen time of their children is excessive or not. According to the opinions of the parents, the mean score of problematic media use of children who use the screen a lot is significantly higher than the mean score of the children who do not use the screen much.

Table 39

*Comparing Problematic Media Use Scores by Screentime as a Positive Reinforcer*

| Variables             | Do you extend screen time when your child displays positive behaviour? | N   | M     | Df    | t(226) | p    |
|-----------------------|------------------------------------------------------------------------|-----|-------|-------|--------|------|
| Problematic media use | Yes                                                                    | 37  | 45,49 | 14,98 | 1,28   | 0,20 |
|                       | No                                                                     | 191 | 41,62 | 17,16 |        |      |

When the table is examined, it is understood that the mean scores of problematic media use do not show a significant difference in whether or not to extend the screen time for the child's positive behaviour ( $p > 0.05$ ). It has been found that the problematic media use of the children of the parents who extended and did not extend the screen use time for positive behaviours was similar.

Table 40

*Comparing Problematic Media Use Scores by Screentime as a Negative Reinforcer*

| Variables                | Do you cut back on-screen time<br>when your child exhibits negative<br>behaviour? | N   | M     | Df    | t(226) | p    |
|--------------------------|-----------------------------------------------------------------------------------|-----|-------|-------|--------|------|
| Problematic<br>media use | Yes                                                                               | 96  | 43,29 | 16,24 | 0,80   | 0,43 |
|                          | No                                                                                | 132 | 41,48 | 17,31 |        |      |

When the table is examined, it is understood that the mean scores of problematic media use do not show a significant difference according to whether or not to shorten the screen time for the child's negative behaviour ( $p>0.05$ ). It has been found that the problematic media use of the children of the parents who shortened and did not shorten the screen use time for negative behaviours was similar.

**4.2.3 Do internet parenting styles of preschool children's parents differ according to some demographics?** This research question focuses on whether preschool parents' internet parenting styles scores differ according to children's enrolment to a pre-school (See Table 41), minimum screen time, maximum screen time (See Table 42 and 43), requirement of screen in daily activities (Table 44), owning a digital media device (Table 45), child's daily sleeping hours (Table 46), digital media skills of children (Table 47), streaming service preferences (Table 48), reactions when ending the screen time (Table 49), child's influence from the content they watch while playing, selecting a toy (Table 50 and 51), YouTube preferences (Table 52), number of movies children watch with their parents in a week (Table 53), parents' daily screen time (Table 54), parents' screen time activities (Table 55-56), parents' requirement of screen in daily activities (Table 57), time between the end of screen time and bedtime (Table 58), parents' view regarding their children's screen time (Table 59), screen time as a positive reinforcer, screen time as a negative reinforcer (Table 60 and 61). Participants were asked to respond to Internet Parenting Styles Scales in addition to a demographic information form including the variables that are given above.

Table 41

*Comparing Family Control and Warmth Scores by Child's School Enrolment*

| Variables      | Does your child go to school? | N   | M     | Df    | t(226) | p    |
|----------------|-------------------------------|-----|-------|-------|--------|------|
| Family control | Yes                           | 196 | 42,96 | 10,42 | 0,07   | 0,94 |
|                | No                            | 32  | 42,81 | 11,16 |        |      |
| Family warmth  | Yes                           | 196 | 57,23 | 14,04 | 1,22   | 0,22 |
|                | No                            | 32  | 53,94 | 14,90 |        |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the child's school enrolment ( $p>0.05$ ). It has been found that the level of family control and warmth of parents whose children go to school and those who do not are similar.

Table 42

*Comparing Family Control and Warmth Scores by Minimum Screen Time*

| Variables      | How many minutes is the minimum screen time when your child spends time with the screen? | N  | M     | Df    | F(5;222) | p    |
|----------------|------------------------------------------------------------------------------------------|----|-------|-------|----------|------|
| Family control | 0-5                                                                                      | 24 | 44,79 | 12,01 | 1,21     | 0,30 |
|                | 5-10                                                                                     | 32 | 42,59 | 12,14 |          |      |
|                | 10-20                                                                                    | 60 | 44,03 | 8,93  |          |      |
|                | 20-40                                                                                    | 57 | 42,89 | 9,46  |          |      |
|                | 40-60                                                                                    | 27 | 43,70 | 9,74  |          |      |
|                | 60+                                                                                      | 28 | 38,75 | 12,61 |          |      |
| Family warmth  | 0-5                                                                                      | 24 | 58,38 | 14,91 | 1,08     | 0,37 |
|                | 5-10                                                                                     | 32 | 55,38 | 16,23 |          |      |
|                | 10-20                                                                                    | 60 | 58,95 | 10,63 |          |      |
|                | 20-40                                                                                    | 57 | 56,51 | 13,92 |          |      |
|                | 40-60                                                                                    | 27 | 57,70 | 13,49 |          |      |
|                | 60+                                                                                      | 28 | 51,96 | 18,28 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the minimum

time spent by the child on the screen ( $p>0.05$ ). It has been found that the level of family control and warmth of parents of the children with different minimum screen usage times are similar.

Table 43

*Comparing Family Control and Warmth Scores by Maximum Screen Time*

| Variables      | What is the maximum screen time in minutes when your child spends time with the screen? | N   | M     | Df    | F(2;225) | p    |
|----------------|-----------------------------------------------------------------------------------------|-----|-------|-------|----------|------|
| Family control | Less than 60 min <sup>a</sup>                                                           | 124 | 42,52 | 10,50 | 1,30     | 0,28 |
|                | 60-120 <sup>b</sup>                                                                     | 78  | 41,27 | 10,90 |          |      |
|                | 120+ <sup>c</sup>                                                                       | 26  | 40,42 | 8,08  |          |      |
| Family warmth  | Less than 60 min                                                                        | 124 | 58,29 | 13,91 | 1,79     | 0,17 |
|                | 60-120                                                                                  | 78  | 55,49 | 15,21 |          |      |
|                | 120+                                                                                    | 26  | 53,38 | 11,53 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the maximum time spent by the child on the screen ( $p>0.05$ ). It has been found that the level of family control and warmth of parents of the children with different maximum screen usage times are similar.

Table 44

*Comparing Family Control and Warmth Scores by Requirement of Screen in Child's Daily Activities*

| How often does your child need a screen while doing the following actions? |                                                                      |                     | N   | M     | Df    | F(3;224) | p    | Scheffe Post-Hoc |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|-----|-------|-------|----------|------|------------------|
| Family control                                                             | While eating                                                         | 1. None             | 117 | 44,58 | 10,19 | 3,19     | 0,04 | 1>3,             |
|                                                                            |                                                                      | 2. Sometimes        | 72  | 41,65 | 10,98 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 39  | 40,38 | 9,89  |          |      |                  |
|                                                                            | While falling asleep                                                 | 1. None             | 203 | 43,35 | 10,48 | 2,09     | 0,13 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 18  | 38,11 | 11,21 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 7   | 43,29 | 6,58  |          |      |                  |
|                                                                            | During traveling (Airplane, car, public transport, etc.)             | 1. None             | 103 | 42,83 | 11,85 | 1,06     | 0,35 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 99  | 43,73 | 8,92  |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 26  | 40,38 | 10,33 |          |      |                  |
|                                                                            | While the parent is busy with another job (working, doing housework) | 1. None             | 29  | 45,83 | 8,81  | 1,27     | 0,28 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 126 | 42,43 | 11,79 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 73  | 42,67 | 8,50  |          |      |                  |
| Family warmth                                                              | While eating                                                         | 1. None             | 117 | 57,97 | 13,57 | 1,25     | 0,29 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 72  | 56,38 | 14,81 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 39  | 53,90 | 14,70 |          |      |                  |
|                                                                            | while falling asleep                                                 | 1. None             | 203 | 57,35 | 13,99 | 2,08     | 0,13 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 18  | 50,28 | 16,62 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 7   | 56,71 | 9,81  |          |      |                  |
|                                                                            | During the journey (Airplane, car, public transport, etc.)           | 1. None             | 103 | 55,40 | 15,78 | 1,86     | 0,16 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 99  | 58,81 | 12,09 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 26  | 54,46 | 14,36 |          |      |                  |
|                                                                            | While the parent is busy with another job (working, doing housework) | 1. None             | 29  | 59,79 | 12,58 | 1,12     | 0,33 | -                |
|                                                                            |                                                                      | 2. Sometimes        | 126 | 55,67 | 15,84 |          |      |                  |
|                                                                            |                                                                      | 3. Usually & always | 73  | 57,47 | 11,41 |          |      |                  |

When the table is examined, it is understood that the average family warmth score does not differ significantly according to the frequency of the child's need for a

screen while eating ( $p>0,05$ ). In addition, the average family control score differs significantly according to the frequency of the child's need for a screen while eating ( $p<0,05$ ). The family control average score of the parents who do not feel the need to look at the screen while their child is eating is significantly higher than the average score of the parents who usually and always look at the screen while their child eats. On the other hand, family control and warmth scores do not show a significant difference according to the frequency of looking at the screen while falling asleep, traveling, and while the parent is busy with another job ( $p>0.05$ ).

Table 45

*Comparing Family Control and Warmth Scores by The Child's Owning a Digital Media Tool*

| Variables      | Does your child own a digital media device (phone, tablet, computer, drawing tablet, smart watch, etc.)? | N   | M     | Df    | t(226) | p    |
|----------------|----------------------------------------------------------------------------------------------------------|-----|-------|-------|--------|------|
| Family control | Yes                                                                                                      | 71  | 38,93 | 11,77 | -4,00  | 0,00 |
|                | No                                                                                                       | 157 | 44,75 | 9,36  |        |      |
| Family warmth  | Yes                                                                                                      | 71  | 52,77 | 16,75 | -2,91  | 0,00 |
|                | No                                                                                                       | 157 | 58,58 | 12,49 |        |      |

When the table is examined, it is understood that there is a significant difference between the family control and warmth average according to the child's possession of a digital media tool ( $p<0.05$ ). Family control and warmth score averages of parents whose children do not have digital media tools were significantly higher.

Table 46

*Comparing Family Control and Warmth Scores by The Child's Daily Sleeping Hours*

| Variables         | How many hours<br>does your child<br>sleep a day? | N   | M     | Df    | F(2;225) | p    |
|-------------------|---------------------------------------------------|-----|-------|-------|----------|------|
| Family<br>control | 6-8                                               | 17  | 40,53 | 12,34 | 0,99     | 0,37 |
|                   | 8-10                                              | 105 | 42,40 | 9,53  |          |      |
|                   | 10+                                               | 106 | 43,86 | 11,09 |          |      |
| Family<br>warmth  | 6-8                                               | 17  | 51,47 | 17,61 | 1,30     | 0,28 |
|                   | 8-10                                              | 105 | 57,32 | 13,41 |          |      |
|                   | 10+                                               | 106 | 57,08 | 14,30 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the child's daily sleep time ( $p>0.05$ ). It has been found that family control and warmth are similar among children who sleep 6-8, 8-10, and 10+ hours a day.

Table 47

*Comparing Family Control and Warmth Scores by The Child's Competence in Using Digital Media Devices*

| Please tick the correct option/s for you according to the following statements. |                                                                                      | N   | M   | Df    | t(224) | p     |      |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----|-----|-------|--------|-------|------|
| Family control                                                                  | My child can call me or someone else on the smartphone without needing support.      | Yes | 81  | 41,38 | 11,67  | -1,67 | 0,09 |
|                                                                                 |                                                                                      | No  | 147 | 43,8  | 9,73   |       |      |
|                                                                                 | My child can access content on their smartphone or tablet alone                      | Yes | 120 | 41,53 | 10,44  | -2,15 | 0,03 |
|                                                                                 |                                                                                      | No  | 108 | 44,5  | 10,39  |       |      |
|                                                                                 | My child can access video sites without the help of others.                          | Yes | 109 | 41,51 | 10,02  | -1,97 | 0,05 |
|                                                                                 |                                                                                      | No  | 119 | 44,24 | 10,8   |       |      |
|                                                                                 | My child can research on the Internet alone.                                         | Yes | 37  | 40,59 | 10,69  | -1,49 | 0,14 |
|                                                                                 |                                                                                      | No  | 191 | 43,39 | 10,43  |       |      |
|                                                                                 | My child can download apps or games without anyone else's help.                      | Yes | 58  | 41,93 | 10,2   | -0,85 | 0,39 |
|                                                                                 |                                                                                      | No  | 170 | 43,28 | 10,61  |       |      |
|                                                                                 | My child can enter my smartphone's password alone.                                   | Yes | 89  | 41,71 | 10,38  | -1,42 | 0,16 |
|                                                                                 |                                                                                      | No  | 139 | 43,73 | 10,54  |       |      |
| Family warmth                                                                   | My child can call me or someone else on the smartphone without the need for support. | Yes | 81  | 55,89 | 15,72  | -0,69 | 0,49 |
|                                                                                 |                                                                                      | No  | 147 | 57,26 | 13,29  |       |      |
|                                                                                 | My child can access content on their smartphone or tablet alone                      | Yes | 120 | 56,09 | 14,42  | -0,76 | 0,45 |
|                                                                                 |                                                                                      | No  | 108 | 57,53 | 13,93  |       |      |
|                                                                                 | My child can access video sites without the help of others.                          | Yes | 109 | 56,42 | 13,98  | -0,36 | 0,72 |
|                                                                                 |                                                                                      | No  | 119 | 57,09 | 14,41  |       |      |
|                                                                                 | My child can research on the Internet alone.                                         | Yes | 37  | 55,03 | 15,97  | -0,82 | 0,42 |
|                                                                                 |                                                                                      | No  | 191 | 57,11 | 13,82  |       |      |
|                                                                                 | My child can download apps or games without anyone else's help.                      | Yes | 58  | 56,67 | 13,83  | -0,06 | 0,95 |
|                                                                                 |                                                                                      | No  | 170 | 56,81 | 14,34  |       |      |
|                                                                                 | My child can enter my smartphone's password alone.                                   | Yes | 89  | 56    | 14,22  | -0,66 | 0,51 |
|                                                                                 |                                                                                      | No  | 339 | 57,27 | 14,18  |       |      |

When the table is examined, the average family warmth score does not significantly differ depending on whether child can access content from a smartphone or tablet alone ( $p>0.05$ ). However, family control score averages showed a significant difference depending on whether child can access content from a smartphone or tablet

alone ( $p < 0.05$ ). The average family control score of parents whose children cannot access content from a smartphone or tablet alone was significantly higher.

There is no difference in the family control and warmth scores of the parents whose children can make calls on the smartphone without the need for support or enter the video sites without the help of others, or do online research alone, or download an application or game without the help of someone else or know and use the password of the smartphone.

Table 48

*Comparing Family Control and Warmth Scores by Child's Streaming Service Preferences*

| Variables      | Which of the following would your child prefer to watch?                    | N   | M     | Df    | F(2;225) | p    |
|----------------|-----------------------------------------------------------------------------|-----|-------|-------|----------|------|
| Family control | A subscription-based streaming service (Netflix, Amazon Prime, BluTV, etc.) | 80  | 41,24 | 11,68 | 1,71     | 0,18 |
|                | TV channels                                                                 | 47  | 44,38 | 11,56 |          |      |
|                | Video sites like YouTube                                                    | 101 | 43,61 | 8,79  |          |      |
| Family warmth  | A subscription-based streaming service (Netflix, Amazon Prime, BluTV, etc.) | 80  | 55,83 | 15,53 | 0,29     | 0,75 |
|                | TV channels                                                                 | 47  | 56,98 | 14,86 |          |      |
|                | Video sites like YouTube                                                    | 101 | 57,43 | 12,77 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the resources the child prefers to watch ( $p > 0.05$ ). It has been found that the family control and warmth levels of the parents of the children who prefer to watch different sources such as TV, Subscription-based streaming service, and YouTube are similar.

Table 49

*Comparing Family Control and Warmth Scores by Child's Reaction as Screen Time Ends*

| Variables      | How does your child usually act when screen time is ending?                                                    | N  | M     | Df    | F(3;224) | p    |
|----------------|----------------------------------------------------------------------------------------------------------------|----|-------|-------|----------|------|
| Family control | Wants to extend screen time by asking for additional time                                                      | 51 | 44,37 | 7,73  | 0,47     | 0,70 |
|                | If he is enthusiastic about the activity, he will do it after the screen is turned off; he turns it off easily | 49 | 42,59 | 10,58 |          |      |
|                | Resists not ending screen time                                                                                 | 38 | 41,87 | 10,20 |          |      |
|                | When the time is up, it immediately turns off the screen without objection.                                    | 90 | 42,77 | 11,93 |          |      |
| Family warmth  | Wants to extend screen time by asking for additional time                                                      | 51 | 59,06 | 11,30 | 0,66     | 0,58 |
|                | If he is enthusiastic about the activity, he will do it after the screen is turned off; he turns it off easily | 49 | 55,59 | 13,18 |          |      |
|                | Resists not ending screen time °                                                                               | 38 | 55,47 | 14,24 |          |      |
|                | When the time is up, it immediately turns off the screen without objection.                                    | 90 | 56,67 | 16,08 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the type of child's behaviour as screen time ends ( $p>0.05$ ). It has been determined that the family control and warmth levels of the parents whose children show positive and negative behaviours when the screen time is over are similar.

Table 50

*Comparing Family Control and Involvement Scores by the Status of Playing Game with The Effect of The Content Child Watches*

| Variables      | Do you see the effect of the content your child watches on the screen while playing | N   | M     | Df    | F(2;225) | p    |
|----------------|-------------------------------------------------------------------------------------|-----|-------|-------|----------|------|
| Family control | Yes                                                                                 | 100 | 42,28 | 10,05 | 2,22     | 0,11 |
|                | Sometimes                                                                           | 105 | 42,62 | 11,62 |          |      |
|                | No                                                                                  | 23  | 47,26 | 4,73  |          |      |
| Family warmth  | Yes                                                                                 | 100 | 56,01 | 13,99 | 0,51     | 0,60 |
|                | Sometimes                                                                           | 105 | 56,95 | 15,12 |          |      |
|                | No                                                                                  | 23  | 59,26 | 10,15 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the child's influence from the content they watch while playing ( $p>0.05$ ). It has been determined that the family control and warmth levels of parents who do not see and sometimes see the effect of what their child watches in their children's games are similar.

Table 51

*Comparing Family Control and Warmth Scores by The Status of Choosing a Toy with the Effect of the Contents Child Watches*

| Variables      | Can you see the effect of the content your child watches on screen while choosing a toy? | N   | M     | Df    | F(2;225) | p    |
|----------------|------------------------------------------------------------------------------------------|-----|-------|-------|----------|------|
| Family control | Yes                                                                                      | 113 | 41,68 | 10,85 | 2,77     | 0,06 |
|                | Sometimes                                                                                | 72  | 43,04 | 11,81 |          |      |
|                | No                                                                                       | 43  | 46,07 | 5,68  |          |      |
| Family warmth  | Yes                                                                                      | 113 | 55,42 | 14,80 | 1,27     | 0,28 |
|                | Sometimes                                                                                | 72  | 57,39 | 15,19 |          |      |
|                | No                                                                                       | 43  | 59,30 | 10,00 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the status of choosing a toy with the effect of the contents watched by the child on the screen ( $p>0.05$ ). It has been understood that the family control and warmth levels of the parents who see, cannot, and sometimes see the effect of what the child watches on the screen when choosing a toy are similar.

Table 52

*Comparing Family Control and Warmth Scores by Type of Content Child Prefers to Watch on YouTube*

| Variables      | Which one would your child prefer more?        | N   | M     | Df    | F(2;225) | p    |
|----------------|------------------------------------------------|-----|-------|-------|----------|------|
| Family control | Watching cartoon games/toy videos on Youtube   | 140 | 43,50 | 9,45  | 1,47     | 0,23 |
|                | Watching an experiment/how-to video on youtube | 36  | 40,19 | 12,26 |          |      |
|                | None                                           | 52  | 43,33 | 11,74 |          |      |
| Family warmth  | Watching cartoon games/toy videos on Youtube   | 140 | 57,98 | 12,76 | 2,66     | 0,07 |
|                | Watching an experiment/how-to video on youtube | 36  | 51,92 | 16,42 |          |      |
|                | None                                           | 52  | 56,88 | 15,66 |          |      |

When the table is examined, it is understood that there is no significant difference between the family control and warmth average according to the type of content child prefers to watch ( $p>0.05$ ). It has been found that the family control and warmth levels of parents whose children do not watch YouTube and who watch different content on YouTube are similar.

Table 53

*Comparing Family Control and Warmth Scores by Number of Movies Watched Per Week as a Family*

| Variables      | How many movies do you watch per week as a family? | N  | M     | Df    | F(3;224) | p    |
|----------------|----------------------------------------------------|----|-------|-------|----------|------|
| Family control | None                                               | 82 | 42,23 | 9,63  | 1,20     | 0,31 |
|                | 1                                                  | 78 | 44,03 | 11,31 |          |      |
|                | 2                                                  | 52 | 43,62 | 9,86  |          |      |
|                | 3+                                                 | 16 | 39,06 | 12,42 |          |      |
| Family warmth  | None                                               | 82 | 56,09 | 13,21 | 0,99     | 0,40 |
|                | 1                                                  | 78 | 57,32 | 14,78 |          |      |
|                | 2                                                  | 52 | 58,52 | 13,63 |          |      |
|                | 3+                                                 | 16 | 51,94 | 17,52 |          |      |

When the table is examined, it is understood that there is no significant difference in the mean scores of family control and warmth according to the number of movie viewings per week ( $p>0.05$ ). It has been found that family control and warmth in families that watch one, two, and 3+ movies a week or do not watch any movies are similar.

Table 54

*Comparing Family Control and Warmth Scores by Parent's Average Daily Screen Time*

| Variables      | What is your average daily screen time? (Hour) | N  | M     | Df    | F(4;223) | p    | Scheffe Post-Hoc     |
|----------------|------------------------------------------------|----|-------|-------|----------|------|----------------------|
| Family control | 0-2 <sup>a</sup>                               | 77 | 43,26 | 10,98 | 2,97     | 0,02 | a>e,<br>b>e,<br>c>e, |
|                | 2-4 <sup>b</sup>                               | 71 | 43,06 | 10,12 |          |      |                      |
|                | 4-6 <sup>c</sup>                               | 44 | 45,75 | 6,85  |          |      |                      |
|                | 6-8 <sup>d</sup>                               | 19 | 40,95 | 12,59 |          |      |                      |
|                | 8+ <sup>e</sup>                                | 17 | 35,94 | 12,62 |          |      |                      |
| Family warmth  | 0-2                                            | 77 | 58,43 | 14,81 | 1,85     | 0,12 | -                    |
|                | 2-4                                            | 71 | 57,27 | 13,19 |          |      |                      |
|                | 4-6                                            | 44 | 57,14 | 10,01 |          |      |                      |
|                | 6-8                                            | 19 | 54,74 | 18,55 |          |      |                      |
|                | 8+                                             | 17 | 48,53 | 17,36 |          |      |                      |

When the table is examined, it is understood that family warmth scores do not significantly differ according to daily screen usage time ( $p>0.05$ ). However, it was found that family control scores showed a significant difference according to daily screen usage time ( $p<0.05$ ). The average family control score of parents with a daily screen use time of 0-2 and 2-4 hours is significantly higher than the average score of parents with 8+ hours of daily screen use.

Table 55

*Comparing Family Control Scores by The Rate of Parents' Screen Time Activities*

| Variable       |                                                 |    |                                                              | N   | M     | Df    | F(3;224) | p     | Scheffe Post-Hoc |
|----------------|-------------------------------------------------|----|--------------------------------------------------------------|-----|-------|-------|----------|-------|------------------|
| Family control | Staying in touch with friends                   | 1. | I never need a screen                                        | 21  | 43,81 | 9,86  | 0,96     | 0,42  | -                |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 85  | 44,26 | 9,74  |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 89  | 41,67 | 11,56 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 33  | 42,39 | 9,74  |          |       |                  |
|                | Navigation                                      | 1. | I never need a screen                                        | 17  | 46,71 | 8,21  | 1,35     | 0,26  | -                |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 73  | 43,92 | 9,27  |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 77  | 41,96 | 11,03 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 61  | 41,95 | 11,59 |          |       |                  |
|                | During a conversation                           | 1. | I never need a screen                                        | 47  | 46,49 | 8,12  | 2,91     | 0,04  | 1>3, 1>4,        |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 114 | 42,8  | 10,72 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 50  | 40,6  | 10,77 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 17  | 40,94 | 12,24 |          |       |                  |
|                | Reading a newspaper or a book                   | 1. | I never need a screen                                        | 78  | 45,71 | 7,81  | 3,19     | 0,03  | 1>3, 1>4,        |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 85  | 42,13 | 12,26 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 48  | 41,15 | 10,29 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 17  | 39,35 | 10,34 |          |       |                  |
|                | Playing a game                                  | 1. | I never need a screen                                        | 122 | 45,27 | 8,1   | 4,68     | 0,003 | 1>3, 1>4,        |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 63  | 40,81 | 13,11 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 29  | 39,52 | 10,29 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 14  | 39,29 | 12,38 |          |       |                  |
|                | Doing sport                                     | 1. | I never need a screen                                        | 118 | 45,83 | 7,25  | 8,29     | 0,00  | 1>3, 1>4,        |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 74  | 44,15 | 12,91 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 20  | 38,95 | 11,58 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 16  | 38,56 | 10,55 |          |       |                  |
|                | Doing research on travel / holiday / restaurant | 1. | I never need a screen                                        | 9   | 48,89 | 4,23  | 1,60     | 0,19  | -                |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 43  | 40,93 | 12,38 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 97  | 43,48 | 10,14 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 79  | 42,68 | 10,16 |          |       |                  |
|                | Grocery shopping                                | 1. | I never need a screen                                        | 37  | 44,73 | 8,91  | 0,53     | 0,66  | -                |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 84  | 42,49 | 11,91 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 75  | 43,04 | 9,71  |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 32  | 41,81 | 10,24 |          |       |                  |
|                | Shopping                                        | 1. | I never need a screen                                        | 18  | 47,5  | 6,11  | 1,43     | 0,24  | -                |
|                |                                                 | 2. | I usually do without a screen, but sometimes I need a screen | 75  | 42,63 | 10,46 |          |       |                  |
|                |                                                 | 3. | I often need a screen                                        | 101 | 42,9  | 10,69 |          |       |                  |
|                |                                                 | 4. | I always need the screen                                     | 34  | 41,32 | 11,53 |          |       |                  |

When the table is examined, the average family control score does not show a significant difference according to the frequency of needing a screen to stay in touch with friends, use navigation, research travel/holiday/restaurant, grocery shopping, and shopping ( $p>0.05$ ). On the other hand, family control mean scores differed significantly according to the frequency of needing a screen to chat, read a newspaper or a book, play games, and do sports ( $p<0.05$ ). The family control score averages of the parents who stated that they never needed the screen to chat, read the newspaper or book, play games, and do sports are significantly higher than the average scores of the parents who stated that they often and always need the screen.



Table 56

*Comparing Family Warmth Scores by The Rate of Parents' Screen Time Activities*

|                  |                                                                    |                                                                    | N   | M     | Df    | F(3;224) | p     | Scheffe<br>Post-Hoc |
|------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|-----|-------|-------|----------|-------|---------------------|
| Variable         | How much<br>screen do you<br>need for the<br>following<br>actions? |                                                                    |     |       |       |          |       |                     |
| Family<br>warmth | Staying in touch<br>with friends                                   | 1. I never need a screen                                           | 21  | 55,14 | 14,06 | 1,55     | 0,21  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 85  | 58,68 | 12,94 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 89  | 54,58 | 15,38 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 33  | 58,79 | 13,54 |          |       |                     |
|                  | Navigation                                                         | 1. I never need a screen                                           | 17  | 61,65 | 10,66 | 1,19     | 0,32  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 73  | 57,63 | 12,8  |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 77  | 54,95 | 14,7  |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 61  | 56,69 | 15,75 |          |       |                     |
|                  | During a<br>conversation                                           | 1. I never need a screen                                           | 47  | 60,60 | 11,46 | 1,66     | 0,18  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 114 | 56,29 | 14,2  |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 50  | 55,38 | 14,33 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 17  | 53,53 | 18,97 |          |       |                     |
|                  | Reading a<br>newspaper or a<br>book                                | 1. I never need a screen                                           | 78  | 59,88 | 10,96 | 2,18     | 0,09  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 85  | 54,68 | 16,11 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 48  | 56,52 | 14,09 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 17  | 53,65 | 15,77 |          |       |                     |
|                  | Playing a game                                                     | 1. I never need a screen                                           | 122 | 59,99 | 11,06 | 5,16     | 0,002 | 1>2,                |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 63  | 51,95 | 17,81 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 29  | 54,07 | 13,43 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 14  | 56,00 | 15,6  |          |       |                     |
|                  | Doing sport                                                        | 1. I never need a screen                                           | 118 | 45,83 | 7,249 | 5,31     | 0,00  | 1>2,                |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 74  | 38,95 | 12,91 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 20  | 43,15 | 11,58 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 16  | 39,56 | 10,55 |          |       |                     |
|                  | Doing research<br>on travel /<br>holiday /<br>restaurant           | 1. I never need a screen                                           | 9   | 61,33 | 7,632 | 0,89     | 0,45  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 43  | 54,70 | 16,84 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 97  | 57,88 | 13,34 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 79  | 56,03 | 14,16 |          |       |                     |
|                  | Grocery<br>shopping                                                | 1. I never need a screen                                           | 37  | 60,24 | 10,77 | 1,49     | 0,22  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 84  | 54,95 | 15,95 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 75  | 57,81 | 12,94 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 32  | 55,09 | 15,09 |          |       |                     |
|                  | Shopping                                                           | 1. I never need a screen                                           | 18  | 63,00 | 7,677 | 1,27     | 0,29  | -                   |
|                  |                                                                    | 2. I usually do without a screen,<br>but sometimes I need a screen | 75  | 56,07 | 14,59 |          |       |                     |
|                  |                                                                    | 3. I often need a screen                                           | 101 | 56,36 | 13,71 |          |       |                     |
|                  |                                                                    | 4. I always need the screen                                        | 34  | 56,26 | 16,8  |          |       |                     |

When the table is examined, the average family warmth score does not differ significantly according to the frequency of needing the screen to stay in touch with friends, use navigation, chat, read newspapers or books, research trips/holidays/restaurants, grocery shopping and shopping ( $p>0.05$ ). However, family warmth mean scores differed significantly according to the frequency of needing a screen to play games and sports ( $p<0.05$ ). The average score of family warmth of

parents who stated that they never needed a screen to play games and do sports is significantly higher than the average score of parents who sometimes need a screen.

Table 57

*Comparing Family Control and Warmth Scores by Parents' Requirement of Screen in Daily Activities*

| How often do you need the screen while you do the following actions? |                                                       |                     | N   | M     | Df    | F(3;224) | p     | Scheffe Post-Hoc |
|----------------------------------------------------------------------|-------------------------------------------------------|---------------------|-----|-------|-------|----------|-------|------------------|
| Family control                                                       | While eating                                          | 1. Never            | 145 | 44,50 | 9,03  |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 69  | 39,62 | 13,07 | 5,23     | 0,01  | 1>2, 3>2,        |
|                                                                      |                                                       | 3. Usually & always | 14  | 43,14 | 6,44  |          |       |                  |
|                                                                      | While falling asleep                                  | 1. Never            | 153 | 43,44 | 10,25 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 47  | 40,79 | 12,87 | 1,26     | 0,29  | -                |
|                                                                      |                                                       | 3. Usually & always | 28  | 43,79 | 6,56  |          |       |                  |
|                                                                      | During the journey (Airplane, public transport, etc.) | 1. Never            | 106 | 43,41 | 10,87 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 91  | 42,84 | 10,69 | 0,34     | 0,71  | -                |
|                                                                      |                                                       | 3. Usually & always | 31  | 41,65 | 8,69  |          |       |                  |
|                                                                      | While doing housework                                 | 1. Never            | 148 | 42,87 | 10,67 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 57  | 43,96 | 9,45  | 0,74     | 0,48  | -                |
|                                                                      |                                                       | 3. Usually & always | 23  | 40,83 | 11,93 |          |       |                  |
|                                                                      | In the toilet                                         | 1. Never            | 122 | 42,97 | 10,74 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 71  | 42,52 | 11,71 | 0,14     | 0,87  | -                |
|                                                                      |                                                       | 3. Usually & always | 35  | 43,69 | 6,51  |          |       |                  |
|                                                                      | While socializing                                     | 1. Never            | 95  | 42,59 | 11,31 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 94  | 44,01 | 9,66  | 1,08     | 0,34  | -                |
|                                                                      |                                                       | 3. Usually & always | 39  | 41,21 | 10,38 |          |       |                  |
| Family warmth                                                        | While eating                                          | 1. Never            | 145 | 58,88 | 12,32 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 69  | 51,81 | 17,38 | 6,35     | 0,002 | 1>2, 3>2,        |
|                                                                      |                                                       | 3. Usually & always | 14  | 59,36 | 7,90  |          |       |                  |
|                                                                      | While falling asleep                                  | 1. Never            | 153 | 57,75 | 13,82 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 47  | 51,36 | 17,00 | 4,93     | 0,01  | 1>2, 3>2,        |
|                                                                      |                                                       | 3. Usually & always | 28  | 60,54 | 7,18  |          |       |                  |
|                                                                      | During the journey (Airplane, public transport, etc.) | 1. Never            | 106 | 57,42 | 14,91 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 91  | 56,33 | 14,19 | 0,21     | 0,81  | -                |
|                                                                      |                                                       | 3. Usually & always | 31  | 55,87 | 11,68 |          |       |                  |
|                                                                      | While doing housework                                 | 1. Never            | 148 | 57,13 | 14,30 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 57  | 56,70 | 13,15 | 0,31     | 0,74  | -                |
|                                                                      |                                                       | 3. Usually & always | 23  | 54,65 | 16,21 |          |       |                  |
|                                                                      | In the toilet                                         | 1. Never            | 122 | 56,73 | 14,51 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 71  | 55,38 | 15,50 | 1,11     | 0,33  | -                |
|                                                                      |                                                       | 3. Usually & always | 35  | 59,74 | 9,22  |          |       |                  |
|                                                                      | While socializing                                     | 1. Never            | 95  | 55,93 | 15,76 |          |       |                  |
|                                                                      |                                                       | 2. Occasionally     | 94  | 57,46 | 12,90 | 0,29     | 0,75  | -                |
|                                                                      |                                                       | 3. Usually & always | 39  | 57,18 | 13,28 |          |       |                  |

When the table is examined, family control scores do not show a significant difference according to the frequency of needing a screen while falling asleep, traveling, doing housework, on the toilet, or socializing ( $p>0.05$ ). On the other hand,

family control scores show a significant difference according to the frequency of needing a screen while eating ( $p<0.05$ ). The average family control of the parents who do not need a screen while eating and usually & always need it are significantly higher than the average score of the parents who need a screen occasionally while eating.

Family warmth scores do not differ according to the frequency of needing a screen while traveling, doing housework, in the toilet, and socializing ( $p>0.05$ ). On the other hand, family warmth scores show a significant difference according to the frequency of needing a screen while eating and falling asleep ( $p<0.05$ ). The average family warmth scores of parents who do not need a screen while eating and falling asleep and who usually & always need a screen are significantly higher than the average score of parents who need a screen occasionally while eating.

Table 58

*Comparing Family Control and Warmth Scores by The Time Between the End of Child's Screen Time and Bedtime*

| Variables      | How long before going to bed/sleep does your child stop looking at the screen? | N  | M     | Df    | F(3;224) | p    |
|----------------|--------------------------------------------------------------------------------|----|-------|-------|----------|------|
| Family control | 30 min ago                                                                     | 61 | 40,77 | 10,57 | 1,86     | 0,14 |
|                | 1 hour ago                                                                     | 61 | 42,25 | 10,35 |          |      |
|                | 2 hour ago                                                                     | 37 | 44,27 | 10,39 |          |      |
|                | More than 2 hours ago                                                          | 69 | 44,75 | 10,43 |          |      |
| Family warmth  | 30 min ago                                                                     | 61 | 55,03 | 14,82 | 0,57     | 0,64 |
|                | 1 hour ago                                                                     | 61 | 56,57 | 13,68 |          |      |
|                | 2 hour ago                                                                     | 37 | 58,57 | 12,82 |          |      |
|                | More than 2 hours ago                                                          | 69 | 57,52 | 14,84 |          |      |

When the table is examined, it is understood that family control and warmth scores do not differ significantly when the child stops looking at the screen before bed. It was found that the family control and warmth levels of the parents whose children stopped looking at the screen 30 min ago, 1 hour ago, 2 hours ago, and more than 2 hours ago were similar.

Table 59

*Comparing Family Control and Warmth Scores by The Views Regarding The Child's Screen Use*

| Variables      | Do you think your child is using too much screen? | N   | M     | Df    | t(226) | p    |
|----------------|---------------------------------------------------|-----|-------|-------|--------|------|
| Family control | Yes                                               | 109 | 40,94 | 10,60 | -2,78  | 0,01 |
|                | No                                                | 119 | 44,76 | 10,12 |        |      |
| Family warmth  | Yes                                               | 109 | 54,67 | 14,87 | -2,16  | 0,03 |
|                | No                                                | 119 | 58,70 | 13,28 |        |      |

When the table is examined, it is understood that there is a significant difference in the mean of family control and warmth according to the opinions about the child's screen use ( $p < 0.05$ ). The family control and warmth score averages of parents who find their child's screen use excessive are significantly lower.

Table 60

*Comparing Family Control and Warmth Scores by Screentime as a Positive Reinforcer*

| Variables      | Do you extend screen time when your child displays positive behaviour? | N   | M     | Df    | t(226) | p    |
|----------------|------------------------------------------------------------------------|-----|-------|-------|--------|------|
| Family control | Yes                                                                    | 37  | 43,27 | 10,07 | 0,21   | 0,83 |
|                | No                                                                     | 191 | 42,87 | 10,61 |        |      |
| Family warmth  | Yes                                                                    | 37  | 57,89 | 12,71 | 0,52   | 0,60 |
|                | No                                                                     | 191 | 56,55 | 14,47 |        |      |

When the table is examined, it is understood that the mean scores of family control and warmth do not show a significant difference in whether or not to extend the screen time for the child's positive behaviour ( $p > 0.05$ ). It has been found that the family control and warmth of the parents who extended and did not extend the screen use time for positive behaviours were similar.

Table 61

*Comparing Family Control and Warmth Scores by Screentime as a Negative Reinforcer*

| Variables      | Do you cut back on screen time when your child exhibits negative behaviour? | N   | M     | Df    | t(226) | p    |
|----------------|-----------------------------------------------------------------------------|-----|-------|-------|--------|------|
| Family control | Yes                                                                         | 96  | 43,46 | 9,57  | 0,64   | 0,53 |
|                | No                                                                          | 132 | 42,56 | 11,15 |        |      |
| Family warmth  | Yes                                                                         | 96  | 57,65 | 13,29 | 0,79   | 0,43 |
|                | No                                                                          | 132 | 56,14 | 14,81 |        |      |

When the table is examined, it is understood that the mean scores of family control and warmth do not show a significant difference according to whether to shorten the screen time for the child's negative behaviour ( $p > 0.05$ ). It has been found that the family control and warmth of the parents who shortened and did not shorten the screen use time for negative behaviours were similar.

**4.2.4 How do parents describe their views regarding problematic media use and internet parenting styles?** This research question focuses on determining the parents' views on problematic media use and their internet parenting styles. Through conducting semi structured interviews and content analysis, five main themes were derived from the participants' statements which are Benefits and Challenges, Underlying Reasons of Screen Use, Limitations and Restrictions, Parents' Screen Use Patterns, Parenting Styles. The findings related to the themes are presented in this section.

**4.2.4.1 Benefits and challenges.** This theme identifies potential positive impacts or benefits associated with controlled or monitored screen time, such as educational gains or skill development. In addition, it represents the challenging outcomes of excessive screen time on children's behaviour or social interactions.

Table 62

*Benefits and Challenges of Screen Time*

| Theme                   | Category   | Codes                                                                       |
|-------------------------|------------|-----------------------------------------------------------------------------|
| Benefits and Challenges | Benefits   | Educational gains (2),<br>Skills development-<br>English (2)                |
|                         | Challenges | Excessive screen time<br>(11), Less Play Time (2),<br>Lack of attention (3) |

*4.2.4.1.1 Benefits.* Most participants shared their perspectives on their children's screen use. While the majority discussed the challenges associated with screen use, P1, P5, and P7 highlighted the benefits. Among those considering screen use advantageous, P1 stated, *"Screen helps the child with keeping up with our day."* whereas P5 mentioned, *"I think digital educational tools can be used more swiftly."* Participant 2 identified English language proficiency as beneficial. Participant 7 noted, *"Reconnecting through video calls can be considered as an advantage."*

*4.2.4.1.2 Challenges.* The participating parents all expressed their viewpoints regarding their children's use of technology. Despite expressing positive views on screen usage, most participants acknowledging the benefits also discussed encountering difficulties. P5 stated, *"When engrossed in games on the screen, he sometimes wants to skip the activities we could do together."* Regarding their child's screen use, P4 expressed, *"Frankly, I don't believe anything she gains from the screen is beneficial to her."* Participant 7 added, *"Although screen time isn't excessive, once he starts something, even if the time limit is up, he might want to continue, which could be a disadvantage for us in the future."* Participant 9 expressed *"Unfortunately, we lose the time we could spend playing together. We get caught up in digital devices."* Although P3 mentioned that although they generally do not have screen time for their child and only allow watching one cartoon per day, she stated *"If I let her, she might want to be exposed to the screen until she feels sleepy. I don't believe there is even the*

*slightest advantage to turning on the screen. As a disadvantage, I observe that when the screen turns off, my child's creativity is negatively impacted, and she can't break away from the screen's influence. For example, after the screen is turned off, I observe behaviours in my child such as continuing to sit where she watched the screen for a certain period, not knowing what to do, and drifting off."*

P1 also mentioned the following as a disadvantage: *"There's no problem when he doesn't start the screen time, but once he gets hold of the screen, he makes an effort not to let go."*

Most parents indicated an excessive amount of screen time for their children. For instance, P1, P3, P4, P5, P8, and P9 mentioned that their children often wished to remain on screens whenever possible. Additionally, P1 and P4 specifically noted challenges in terminating screen time. P2, P6, and P7, while not reporting any issues concerning their children's screen usage, P2 mentioned the possible upcoming challenge saying *"Previously, he used to say it's finished now, let's turn it off. I didn't see any disadvantage at that time. As an advantage, he gained English language proficiency. Sometimes, he used to give examples from the content he watched. Now, he can request more extended periods on the screen. He has become more selective about the content. Also, he learned to play games on the screen and thinks it's amazing. He wants to extend the time."*

**4.2.4.2 Underlying Reasons of Screen Use.** This theme aims to explore the patterns, motivations and circumstances leading to screen use. Based on the perspectives shared by parents, it became evident that children turn to screens for entertainment such as cartoons, when the child is bored, and because the screen time is more appealing according to the real-life entertainment. They also mentioned the following reasons as when parents needed a break, and during times when the parent was occupied with work or chores in terms of relaxation.

Table 63

*Underlying Reasons of Screen Use*

| Theme                            | Category      | Codes                                    |
|----------------------------------|---------------|------------------------------------------|
| Underlying Reasons of Screen Use | Entertainment | Cartoons (5), Boredom (4), Appealing (2) |
|                                  |               | When parents needed a break (7), During  |
|                                  | Relaxation    | work/chores (6)                          |

*4.2.4.2.1 Entertainment.* While examining the underlying reasons for children's screen usage, parents discussed the circumstances under which children feel the need for screen time. It was mentioned that children require screen usage due to boredom, inability to play alone, or due to the allure of screens as stated by the parents. Almost all of the parents mentioned that there is a designated time for cartoons in their daily routines. In some statements there are win-win situations. Some parents, like P4, noted instances where both parents and children required screen usage for child's entertainment. For example, P4 mentioned that while they socialize with friends, their child gets bored, and she gives her child her phone or tablet. Despite certain parents expressing discomfort with their children using screens while eating, they highlighted that their children would not eat without screen time. P4 talked about her own social needs as a parent and said *"When we go out, especially in social gatherings or places where we adults spend a considerable amount of time, children tend to get bored. When my child says, 'Mom, I'm bored,' as a solution, reluctantly, I say, 'Okay, take this and keep yourself occupied for a bit.' It's not the right thing to do, but considering the limited time we, as adults, have for socializing, especially during weekends when we go out to spend time with our friends, and the fact that children can't sit at the table for long hours in those places, eventually, I resort to screen time. I've had to use screens for my own daughter when she was younger during mealtimes just to make her*

*sit at the table for an extended period. Unfortunately, using screens became necessary to keep her seated.”*

P6 mentioned instances when her child uses screen and expressed *“Usually, when she is sick, or when she is extremely bored and not interested in engaging in activities, that's when I let her have screen time. Typically, when I have a lot of work or need to complete something urgently, that's when I allow screen time.”*

P2 explained the reasons for their child's screen usage from the child's perspective and said *“Why wouldn't they want to? The screen is so appealing and makes life easier for all of us. I can conduct business on my device, manage my banking, reach out to loved ones, check the traffic, even do shopping from there. .... Everything seems possible there. You can either fly or become invisible in a cartoon universe. Isn't that amazing from a child's perspective? Moreover, it's more effortless. Digital tools take on a significant portion of the effort that a child would otherwise exert.”*

P9 mentioned their child's difficulty in engaging in solitary play and said *“Despite her age, she still struggles to entertain herself or play alone. Therefore, when she gets bored, she wants to spend time on the tablet.”*

**4.2.4.2.2 Relaxation.** According to the interviews, nearly half of the interviewed parents expressed dissatisfaction with their children's prolonged use of media on one hand, while on the other hand, they either direct their children to use digital devices or do not interfere when their children use screen. Furthermore, all the parents use their child's screen time as their own benefit either by working or relaxing and seeing the screen time useful as a babysitter. Some parents indicated that they themselves directed their children towards the use of media. For instance, P2 explained, *“After coming home from school, he eats something and watches cartoons for a bit, then we turn it off. Sometimes, if I have urgent tasks at home, I remind [my child] if he would like to watch a cartoon for a while.”* P5, who is a single parent, mentioned *“When I'm tired, whether from work or regular social life, during times of exhaustion, I allow my child to have screen time.”*

P9 similarly stated, *“When I'm tired and genuinely don't have the physical or mental capacity to engage in play, I direct [my child] to the tablet.”*

P1 mentioned that spending the entire day with the child during holidays can be challenging and added *“In order to facilitate both parent’s relaxation and ability to have personal time, we sometimes allow our child longer screen times, even if it means to bend the screen time rules.”*

**4.2.4.3 Limitations and restrictions.** Participants discussed how they and their children would feel on a day without any type of digital media. Additionally, they shared their perspectives on intervening in and limiting screen time and content. Parents also shared their experiences regarding reactions of their children when screen time ends.

Most participants stated that staying screen-free might be easier when spending time outdoors. A parent (P2), indicating that their family doesn't require screen time, mentioned going out with her child twice on some days.

Table 64

*Limitations and Restrictions for Screen Time*

| Theme                        | Category                             | Codes                                                                                  |
|------------------------------|--------------------------------------|----------------------------------------------------------------------------------------|
| Limitations and Restrictions | Screen free time of parent and child | Feelings& Activities of the child (21), Feelings& Activities of the parent (17)        |
|                              | Limitations                          | Content Limitations (30), Time Limitations (12), Reactions when ending screen time (3) |
|                              | Ideal Use                            | Ideal Screen Use (16)                                                                  |

**4.2.4.3.1 Screen free time of parent and child.** When the researcher asked about their feelings of a screen-free day, two participants mentioned that they already have screen-free days. Participant 9 mentioned regarding this issue, *" We're having screen-free days. We try this from time to time. On those days, I hear my child saying around*

*the afternoon, 'Should we give up on the screen-free day?' Because despite her age, she still struggles to entertain herself or play alone."*

P1 expressed about his child, *"He would feel quite good. There are times in our family when we especially try to do this. When we set aside the screen and engage in something different, if that activity becomes a regular thing, the child doesn't think about the screen."* On the other hand, he described the idea of being without a screen as being *"stranded on an island"* for himself and added, *"How I spend that screen-free day is important; for instance, I'm someone who enjoys sleeping. I could spend half of the day sleeping, but when I wake up and find myself alone, although reading books may seem appealing, I'm not someone who reads a lot of books, so I'd like to engage in an activity. .... However, if I'm in a house, in a room, I still think the phone will accompany me for half of the day."*

P5, while discussing their screen-free times, used the following statement: *"As a single parent, removing this aspect would create a space for more activities. In this sense, it would certainly have a positive impact. In fact, very recently, we tried this no-tablet time. For approximately 10 days, .... we tried not to use the tablet at all, meaning there would be no tablet used at home during that time. I thought I would have a hard time beforehand, but we actually went through it smoothly and managed it without any issues, to be honest. .... Consequently, I described the earlier screen-time as a bit of an easier escape. So, I think I will have a harder time than my child when it comes to removing screen from my life."*

P4, when discussing their screen-free days, mentioned, *"There are times when I leave my phone at home and go out. There are days when I go to work without my phone. During those times, I feel like I've lost a limb, as if I don't have something very important with me. I feel the urge to return home immediately and get my phone. When I think of my own child, after a screen-free day, she proudly boasts about not using screens and asks, 'Mom, did you notice I didn't have any screen-time today?' but then she still wants screen time as a reward."*

P2 mentioned the screen-free day, *"It depends on what we replace it with. If it's a day where we're so entertained that we don't even think about the screen, then it's not much of an issue. But if we're alone at home, we might struggle a bit. We live so much in the realm of screens. For instance, even when we go out, we check for traffic*

*from there, do our shopping, and work, it's all from there anyway. My child seems to cope more easily. Unfortunately, I might feel a bit more restricted."*

Some participants indicated that they believed they wouldn't struggle much if they didn't have screen time for a day. Accordingly, P3 added *"When I think about my child, there might have been a small challenge, especially in the evenings when I'm tired; I would allow her to watch cartoons to relax. But I would ensure she forgot about it by reading books or engaging in another activity. Therefore, it can be said that screen-time doesn't hold a significant place in our lives."*

P7 indicated that her child wouldn't have any issues and said, *"I don't think it would be a big change for my child because he hasn't developed a screen addiction yet."* However, she stated that she would have a hard time herself and said *"I might feel as if I've lost one of my hands or arms, or perhaps as if I've stepped outside without wearing my coat in winter. It would be a huge void for me."* P6 also mentioned that she would struggle more than her child, stating, *"It might be bad for me because I'm quite addicted, but I don't think it would affect my child."*

**4.2.4.3.2 Limitations.** Participants conveyed their viewpoints on intervening in and setting boundaries for screen time as well as regulating the content being accessed. Moreover, participants recounted their observations concerning their children's responses upon the conclusion of screen exposure. Nearly all parents stated that they try to impose limitations on their children's screen time, either by regulating the time or the type of content accessed. P2, P3, P6, P7 said that they set screen time limitations. P6 also added that they have no screen time policies on weekdays. P1 indicated his intervention in screen content and emphasized deciding on content by viewing it together with his child. He highlighted, *"Content varies based on age-related factors. Despite being labeled as suitable for children, some content could significantly impact a child's psychology, even intruding into his dreams while he sleeps. Hence, selecting content should be personalized for each child, an essential responsibility for every parent."*

Almost all participants stated that they do not allow their children to watch YouTube. For example, P4 stated *"I try to intervene in screen content because I believe that internet is very dangerous; YouTube is not allowed."* When talking about how they decide on content, P2 said, *"We consider the age-factor. Where he watches*

*it from is also important. I try to make him watch from ad-free platforms. The same goes for the games he plays."*

P3 stated *"She cannot open and watch inappropriate content on her own anyway. There are certain things she watches, we never go beyond that because if she sees content that is dangerous or inappropriate for her age, I cannot turn back time. I don't her to be exposed to that."*

P9 said *"I try to get her to watch things with less violent content. I don't want her to watch something that could mislead the perception of beauty, such as Barbie etc. I want to direct my child to educational content, but somehow, she gets away from educational games and goes to YouTube Kids"* P6, when discussing screen content, mentioned, *"When I give her the phone or the tablet, I put on my smartwatch. If I'm cooking or not around at that time, I check what she is watching on my smartwatch. If what she is watching is not appropriate, because sometimes out of curiosity, she may open something, I intervene at that moment. I explain that she shouldn't watch it, it should be age-appropriate, and that it could lead to behavioural issues. Even if she doesn't want to, I intervene and turn it off. By turning it off I mean, I let her watch something else."*

**4.2.4.3.3 Ideal screen use.** The opinions of the participants regarding the ideal screen usage for children vary. Most parents suggest that it should be limited to a specific duration or content. While some participants do not find complete avoidance of screens realistic, others believe that access should be highly restricted, such as limited to only watching cartoons.

P9 stated, *"They were born into technology. Therefore, I'm not okay with zero screen time."* P4 mentioned, *"I'm not even close to the ideal. In fact, my child should be someone who never holds a phone, only occasionally watches cartoons within certain limits."* P2 expressed, *"Complete absence doesn't seem realistic to me. Living without screens is impossible right now. However, what matters is the purpose. It should be a short-term or need-based tool, not the goal for the child. If the child dreams of playing games on a tablet after coming home from school all day, then there's a problem. But I don't see any harm if it relaxes them to watch cartoons with pleasure."*

P8 shared, *"I believe there should be specific rules for screen time. It should not always be available, and the child should be aware of these rules. Parents should also become more conscious about this. We made significant mistakes in our home. Now, we are paying the price. We are literally trying to overcome addiction."*

P3 added, *"I can't decide if it's ideal or not, maybe I'm wrong by allowing only half an hour of screen time a day because the real world is not like that at the moment. We are in an era of innovation, and every child is exposed to screens excessively, which saddens me because I observe that as children stare at screens, they become soulless and aggressive."*

**4.2.4.4 Parents' screen use patterns.** This theme aims to explore reasons behind parental technology use, including factors such as the need for relaxation, work-related usage, and how parents perceive technology as a tool for rest or leisure. It also aims to emphasize understanding how parents view their own technology use as a model for their children, the conscious efforts made by parents to set examples regarding screen time limitations or responsible use.

Table 65

*Parents' Screen Using Patterns*

| Theme                         | Category                                   | Codes                                                          |
|-------------------------------|--------------------------------------------|----------------------------------------------------------------|
| Parents' Screen Use Patterns. | Reasons for Parents' Screen Use            | Rest and Leisure (7), Social media (10), Work-related use (9)  |
|                               | Children's thoughts of parents' screen use | Excessive Use (11), No Screen around child (4), Role model (4) |

**4.2.4.4.1 Reasons for Parents' Screen Use.** The participants highlighted those factors such as work intensity, job responsibilities, email correspondence, and social media engagement require more screen time in their own lives than their children. P7 expressed, *"Sometimes even in unnecessary moments, we tend to spend a lot of time*

on Instagram, Twitter, or in certain games. When we get in to look at something, we can easily end up wandering from one place to another." Similarly, P1 and P4 mentioned their difficulty in putting down their phones once they start using them. P1 said, *"Despite trying to stop, once you pick it up, you can't put it down. Even when I want to sleep at night and I say let me check something, when I look at the clock, an hour has passed with my phone in hand."* P4 added, *"My spouse and I frequently pick up our phones every 5 or 10 minutes to check. Sometimes, we get lost in it for longer periods, and at times, I receive some negative feedback from my own child."*

P8 shared, *"I feel bored when I don't look at my phone because I'm on social media, I'm curious about what my friends are doing, where other people are. When I don't watch TV, I feel something missing. Because when the screen is on, there's a presence in the house."*

4.2.4.4.2 *Children's thoughts of parent's screen use.* When asked about their children's thoughts on their parents' screen use, except for P2 and P3, all parents mentioned that their children would likely say they use screens a lot. P2 said *"He sees me using the phone for its intended purpose. However, I don't pick it up in his presence for social media or other reasons. I try not to look at it too much unless necessary. The fun begins after he's asleep. So, I assume he wouldn't think I use it excessively."* On the other hand, P7 explained, *"He would respond that I use screen a lot because I work on the computer, sometimes working from home. Unfortunately, when he wants to play with me, I'm working on my screen, and this situation is very upsetting."* P8 also stated *"My child would say that I never put the phone away and I always have it in my hand. He would add that I'm texting all the time or talking to my friends."*

Regarding their own screen use, P4 mentioned that her child asked her once, *"Are you addicted to screen?"* P9 shared that her child remarked, *"Parents, you say you're listening to us and playing with us, but during that time, you're looking at your phone or the television. I think this is lying."*

P5 expressed, *"We find ourselves doing things that we tell our children not to do."* P4 mentioned feeling embarrassed about this and added, *"Honestly, if I need to evaluate myself openly, I don't think I can be a good role model in this regard for my child."*

**4.2.4.5 Internet parenting styles.** This theme focuses on parent-child interactions, shared activities, and parents' relationship with their own parents. It also emphasizes the establishment of household rules, the decision-making process behind them including times where rules might be flexible or bent along with parent-child conflicts with their reasons and resolutions.

Table 66

*Parenting Styles*

| Theme                     | Category                         | Codes                                                                                                                            |
|---------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Internet Parenting Styles | Parent-child interactions        | Shared activities (32),<br>Parents' relationship with their own parents (15),<br>Parental screen use during childhood (9)        |
|                           | Establishment of household rules | Decision-making process behind them (7), Where rules might be flexible or bent (15), Screen-time rules (14), Self-care rules (7) |
|                           | Parent-child conflicts           | Reasons (22), Resolutions (7)                                                                                                    |

**4.2.4.5.1 Parent-Child interactions.** Under the title of 'Parent-Child Interaction,' participants discussed shared activities, parents' relationships with their own parents, and parental screen use during childhood.

All participants mentioned that spending screen-free time at home is challenging. Those who didn't have issues with screen time mentioned that they go out with their children every day. P3 described a typical day spent together: *"After breakfast, we engage in active outdoor activities. Later, she takes her nap, and then we have our meal together. After that, we usually go out again or do puzzles, draw,*

*dance—whatever my daughter wants at that moment. Sometimes, we go to the theater, other times we stay at home."*

P9 stated that they make joint decisions regarding activities with her child and elaborated on their routine. *"We wake up in the morning and have breakfast at home. Or if we feel like having breakfast outside, we take our chairs and head to the beach. We have breakfast by the shore. Then, we usually decide on what to do—one choice from her and one from me. Sometimes we go to the park or do something else. We might take a tour of Istanbul, ride on ferries, or just stay at home. Occasionally, we have a pizza or movie night. Overall, we try to spend enjoyable, quality time together by making decisions collectively."*

P1, P5, and P7 mentioned that they try to facilitate interaction between their children and their peers as much as possible. P7 emphasized this by stating, *"I make an effort to let him interact with his peers. So, we usually arrange programs with his cousins or try to plan activities with our friends' children."* Participants shared various activities they engaged in with their children. Some of these activities include making mandalas (P2), drawing pictures (P3), watching movies together (P2, P5), baking or spending time in the kitchen (P4, P8, P7, P2), doing puzzles (P3, P8), playing games (P2, P3, P7) and going to the cinema (P6, P9).

P4 stated *"I am a very busy person, and even in my free time, I have to bring work home. In the past, during periods when I worked less intensively, we were able to spend more quality time together. Now, that time has been reduced because I have my own work to do. On days when I'm relaxed, we love doing something together like baking a cake, doing some painting together, or reading a book. She generally goes out with her father; they love going out together. She does sports like gymnastics and volleyball on weekends. In order to reduce her screen exposure, we try to go out a lot and do outdoor activities."*

Participants also discussed their relationships with their own parents during childhood and habits such as screen usage. Some participants generally recalled a positive image of their parental figures from childhood, despite spending limited time with their families. The majority noted minimal playtime with their parents during childhood, spending most of their time playing with friends outside. Participant P8 mentioned, *"I had a great relationship with my parents; I grew up playing outside and had a very active childhood. I feel lucky in that regard."* Regarding childhood screen

use, P8 said, *“We used to watch shows like Sesame Street. I loved watching it, for instance. I had a loving childhood with my parents and siblings.”* Similarly, P1 remarked, *“We mostly spent time outdoors.”* P6 recalled not seeing their parents much due to their work: *“I couldn't see my mom and dad a lot. They were working. Mostly my grandmother and aunt took care of me. I would see my parents close to bedtime. We would usually spend weekends together.”* P6 also mentioned their childhood screen us, *“Did we watch TV? Not too much because we were three siblings. We usually spent time indoors, playing games together.”*

P4 stated, *“Screen time for us already had set limits because we used to watch cartoons, and there were designated times. I couldn't continue beyond those hours as it wasn't in my control.”* P9, growing up in a busy street, expressed, *“Unfortunately, I didn't have much chance to play outside as I grew up on Bağdat Avenue. It was a place with heavy traffic. I mostly grew up playing at home with friends. I don't have that neighborhood culture.”* P2 highlighted differences in the parent-child relationship from their childhood compared to now, saying, *“Our relationship with our child is different. It was stricter back then. We didn't spend a lot of time together, and I don't remember discussing feelings or such. Another difference was more freedom in many areas, like screen access. I could watch things that I wasn't supposed to watch with them, from soap operas to news broadcasts. There wasn't any content filtering back then. It was probably different for many of my peers too: everything was very different. Our parents were younger in age compared to today's averages but seemed more distant and authoritative. For example, we set rules together now, but in the past, there were more prohibitions and rewards. Something would suddenly be taken out of our lives.”*

*4.2.4.5.2 Establishment of household rules.* Participants discussed the rules in their families in terms of decision-making process behind them, where rules might be flexible or bent, types of rules they have in the household such as screen-time rules, self-care rules. Among the shared rules there were brushing teeth, changing clothes, and washing hands when coming home, mealtime, bedtime, and screen time rules. When sharing how they established rules, P1, P2, P4, P7, and P9 mentioned that they decide on the rules together with their children. P1 mentioned that they hold family meetings to establish rules, saying, *“We usually decide with a family meeting. For*

*example, rules about mealtime, screen time, bedtime for school, and other such things, we usually decide through family meetings." P5 mentioned, "There are rules I set. There are also rules we discussed together; actually, they are all separate rules."*

P6 stated that she mostly set the rules herself, stating *"I usually decide. It comes from me. We talk together: 'From now on, it will be like this, you shouldn't do this.' I feel sad sometimes. I don't want to restrict her."* P4 described setting rules, *"She says 'Okay' when we establish the rule. She thinks she can do it, but when it comes to applying the rule, she tries to convince me that it doesn't quite work for her."*

Participants discussed the relaxation of household rules, specifically referencing the flexibility observed within the rules governing screen time. Participants mentioned that the screen-time rules are more flexible during holidays or when spending time with caregivers other than parents, such as grandparents, or when the children are with their peers. P4 stated, *"When her grandparents come over, she takes their phones. When I'm not at home, they don't keep the control."* Similarly, P3 mentioned, *"When she is with her grandfather and aunt, they sometimes go against my rules. I try not to intervene too much to avoid overwhelming my child."* P9 clarified that both she and her partner were firm on this matter, stating, *"If she exceeds that time, she will use the next hour of her upcoming screen time. Therefore, we establish our rules together. We are clear. Neither I nor his father bend those rules."* P9 added, *"However, sometimes when he goes to his grandparents', even if it's only 30 minutes a day, the time limit can be exceeded."*

P1 stated *"During holidays, due to the difficulty of spending the whole day together with activities, we allow our son longer periods, even if he doesn't comply with the rules, for both parental rest and for the parent to have some personal time."* P8 mentioned *"During vacations or when we are outside, rules can be flexible at times. Currently, the screen rule has not flexed yet. But it's a bit painful going through it."* P5 expressed, *"We try not to bend them, but rules can sometimes be flexible."*

P6 expressed *"She wants to test my boundaries. When I repeat the instructions once or twice, she refrains from doing things I don't want or avoids opening or engaging in those activities."*

**4.2.4.5.3 Parent-Child conflict.** Participants shared their opinions and views regarding the conflicts they have with their children as well as the reasons and how

they resolve their conflicts. Generally expressed that there are conflicts between them and their children when they refuse to comply with children's requests or when screen time comes to an end, during getting ready for something, or when ending screen-time throughout the day.

P8 expressed this by stating, *"We've had conflicts regarding turning off cartoons. When I switch off the screen, my child starts yelling. This is because there wasn't a set rule for screen usage. We've lost control. Now, we are gradually setting new screen time rules."* Additionally, she added, *"Sometimes my child understands, sometimes not. He still struggles with turning off the screen. He yells and hits pillows."*

P4 shared, *"Our biggest conflict revolves around screen time. I only want her to do her activities, play with their toys, and not ask for screen time. Unfortunately, we end up in conflicts when I make this request."* P6 mentioned, *"When it comes to tidying up the room or when I'm busy and can't provide enough attention, or when she feels I've given inadequate responses, conflicts arise."*

P3 stated, *"Especially towards the end of the day when fatigue sets in, we have our arguments. These usually stem from conflicts between my child and their sibling."* P1 mentioned, *"Our conflicts usually arise when I can't meet his demands due to work. He says, 'Finish up and come here, I need some of your time'."* P2 explained, *"Sometimes, my voice gets louder. When I feel he isn't paying enough attention, I end up raising my voice. It seems I get irritated about his slowness. I think I want him to move at my pace. Both of us feel upset when we conflict, and then we try to talk and understand each other afterward."*

## Chapter 5

### Discussion, Conclusion and Recommendations

#### 5.1 Discussion of Findings for Research Questions

In this chapter, the findings obtained from the research are presented considering the research questions and compared with the literature. Additionally, recommendations are separately provided under a different heading.

Within this research, the problematic media use and internet parenting styles of preschool-aged children were examined, investigating their relationship along with various demographic variables. The quantitative part of the study, which involved 228 participants, included additional variables among the findings. These variables encompass children's enrolment at a preschool, minimum and maximum screen time, the necessity of screens in daily activities, ownership of digital media devices, sleep duration, proficiency in using digital devices, preferences for streaming services, responses when screen time ends, the impact of content on the child during play, toy preferences, YouTube preferences, the number of movies watched by children with their parents per week, parents' daily screen time, activities during parents' screen time, parents' perception of excessive screen time, the use of screen time as a positive or negative reinforcer, and the time gap between the end of screen time and bedtime.

Additionally, the discussions regarding the findings from the interviews conducted in the qualitative part of the research are presented under the relevant research question.

**5.1.1 Is there a relation between problematic media use and internet parenting styles?** According to the results it is understood that there is no significant relationship between the problematic media use of children and their parent's internet parenting styles. In contrast to the expectations, it has been found that problematic media use is similar between parents with authoritative and other internet parenting styles. Furthermore, the study indicates that problematic media use showed a low level negative and non-significant relationship with family control and family warmth. It means that family control and warmth were not associated with problematic media use. A significant relationship couldn't be found between authoritative parenting style and problematic media use compared to other parenting styles. In addition, research

findings indicate that 85,5% of the participants had an authoritative parenting style, which also did not have a significant relationship with problematic media use. According to Bae (2015) authoritative parenting style was associated with less addictive smartphone use. Moreover, effective parental oversight contributes to the overall welfare of children, furnishing them with suitable behavioural guidelines and aiding in the regulation of their smartphone usage (Kim & Kim, 2004). Additionally, there are also other factors associated with healthier media using habits in the literature. Some of them are found to be parental guidance and monitoring (Radesky & Christakis, 2016), child's age (Rideout & Robb, 2020), alternative activities (Rideout et al., 2010), parental role modelling (Holloway et al., 2013; Domorff et al., 2020).

Active parental warmth and strict monitoring of media usage have been correlated with problematic media use in children. Parents who set and enforce rules regarding screen time tend to cultivate healthier media habits in their children (Radesky & Christakis, 2016). Furthermore, aligned with previous research by Vandewater and Lee (2009) and Gentile et al. (2014), the current study's findings corroborate the notion that thoughtful parental monitoring and guidance play pivotal roles in fostering healthy media habits among young children. The data highlights a deviation from the alarming narratives often associated with excessive screen time in early childhood, proposing a nuanced understanding of media use in this age group.

Young children often have restricted access to certain types of media content due to parental control or restrictions, resulting in reduced exposure to potentially problematic material. In line with prior studies, the child's age was discovered to have a significant association with parental guidance, albeit with varying degrees. There was a higher inclination to apply restrictive guidance to younger children as opposed to their older counterparts (Bybee et al., 1982).

Young children might exhibit a natural inclination toward age-appropriate content and activities, engaging with media in ways that align more with educational or developmental interests rather than prolonged, potentially problematic use. Studies indicate that older children are inclined to engage in higher levels of screen media usage, potentially experiencing a more pronounced surge in screen media consumption (Eales, et al., 2021).

Research focusing on the impact of parent-child relationships on children's problematic mobile device use (PMU) has revealed significant findings. Holmgren et al. (2022) discovered a correlation between dysfunctional communication between mothers and young children and the prevalence of PMU among children. Similarly, Shawcroft et al. (2023) established a link between stronger attachment security between primary caregivers and children and reduced instances of PMU. Moreover, Radesky et al. (2016) demonstrated associations between lower parental control over child behaviour and development and increased utilization of mobile technology to pacify or silence the child, behaviours indicative of PMU.

According to the research results, the participating parents' internet parenting styles are as follows: 8% have a laissez-faire style, 2.6% follow an authoritarian approach, 85.5% adopt a democratic style, and 3.1% exhibit a permissive style. Research also indicate that the authoritative internet parenting style is the most observed parenting style, followed by the permissive and authoritarian parenting styles, with the neglectful parenting style being observed the least (Ihmeideh & Shawareb, 2014; Kaufmann et al., 2000; Rosen, 2008). The characteristics of the authoritative parenting style manifest in parents establishing explicit guidelines and expectations. Rather than explicitly restricting behaviour, these parents anticipate their children to demonstrate responsibility and exhibit self-regulation. Their approach primarily involves setting specific guidelines, such as those related to managing internet usage durations (Valcke et al., 2010).

The authoritative internet parenting style, characterized by its emphasis on open communication, collaboration, and negotiated boundaries, emerges as a prevalent approach among participating parents (Baumrind 1971, Berg, 2011). This style underscores the significance of mutual respect, active warmth, and shared decision-making between parents and children concerning online activities. Research suggests that this approach fosters a conducive environment for children to develop critical thinking skills (Deng et al., 2023), responsible online behaviours, and a sense of autonomy while still receiving necessary guidance and support from parents in navigating the digital landscape (Valcke et al., 2010; Chou, & Lee, 2017; Özgür, 2016).

Parental perceptions commonly suggest that younger children necessitate greater protection compared to their older counterparts. Specifically concerning media

exposure, parents express heightened apprehension regarding inappropriate content among younger children and often exhibit a perceived ability to supervise their media engagement more effectively in comparison to older children. As evidenced by research, there is a consistent trend wherein parents demonstrate a higher tendency to monitor television and video game usage among younger children as opposed to their older counterparts (Hoffner & Buchanan, 2002; Nikken & Jansz, 2006).

**5.1.2 Do problematic media use scores differ according to some demographics** (1. Children's enrolment to a pre-school, 2 Minimum screen time, maximum screen time, 3. Requirement of screen in daily activities, 4. Owning a digital media device 5. Sleeping hours and time between the end of screen time and bedtime, 6. Competence in using digital media devices, 7. Streaming service preferences, 8. Reactions when ending the screen time, 9. Child's influence from the content they watch while playing or selecting a toy, 10. YouTube preferences, 11. Number of movies children watch with their parents in a week, 12. Parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities, 13. Parents' view regarding screen time is excessive or not, 14. Screen time as a positive or negative reinforcer)?

**5.1.2.1 Children's enrolment to preschool.** The findings indicated that problematic media use scores did not show difference according to child's enrolment to a preschool. The lack of significant difference in problematic media use between preschool children attending kindergarten versus those who do not could be influenced by various factors. One possibility is that the impact of kindergarten attendance on media habits may be overshadowed by other factors such as parental supervision, household media rules, or individual child preferences (Flynn & Richert, 2015). Additionally, societal trends and technological advancements may contribute to the normalization of media use among preschoolers, irrespective of their kindergarten status (Horiuchi et al., 2020). Moreover, the non-significant difference could suggest that the influence of kindergarten attendance on media habits is context-dependent, influenced by factors like the specific curriculum, teacher practices, and peer interactions within the kindergarten setting (Moffett et al., 2023). Parental factors play a crucial role in shaping preschool children's media habits. Studies have highlighted

the impact of parenting styles on children's behaviours, including eating habits and social-emotional development (Rasheed et al., 2020; Sukumaran & Balakrishna, 2021). Furthermore, the amount of screen time preschoolers engages in, regardless of kindergarten attendance, has been a topic of interest, especially during the COVID-19 pandemic (Susilowati et al., 2021). The comparison of sleep habits and electronic media usage among preschool children attending different care arrangements, such as nursery schools, kindergartens, or staying at home, can provide insights into how media habits vary across different settings (Horiuchi et al., 2020).

When reviewing the literature, it is possible to see the benefits of enrolling in a preschool. For instance, going to a preschool is associated with a higher possibility of going to a college (Gray-Lobe et al., 2023). Additionally, for specific age groups, attending preschool appears to positively impact the total years of education obtained (Borraz & Cid, 2013). There is an increasing recognition that the effects of early learning continue to influence various aspects of children's lives throughout their entire lifespan, influencing educational success, adult income, and even criminal behaviour and delinquency (Barnett & Yarosz, 2007). The primary influence on preschool children's media use might be their home environment rather than their preschool enrolment. Parental attitudes, rules regarding media use, and the availability of media devices at home could play a more significant role on their media use rather than going to a preschool. Parental role modelling is considered important in helping preschoolers establish appropriate screen-viewing habits (De Decker et al., 2012).

**5.1.2.2 Minimum screen time, maximum screen time.** The findings indicate that both minimum and maximum time children have on screen make a difference in terms of problematic media use. According to the results if a child spends minimum 60 minutes on screen, the problematic media use score is higher than the ones spend less. It is known that excessive screen time is not the sole factor contributing to problematic media usage (Domorff et al., 2019a). However, there is alignment with other research findings in the literature indicating an increase in problematic media usage as the minimum or maximum time a child spends on screens increases (Radesky et al., 2020). Although there are reliable recommendations regarding limiting screen time of young children, studies indicate that screen time has already been increasing

for a long time. As Rideout et al. (2003) discovered through survey data that children aged 4 to 6 typically dedicated an average of two hours per day to screen media activities, with a marginally higher portion of this duration allocated to television viewing. According to World Health Organization (2019), “Sedentary screen time should be no more than 1 hour; less is better for ages 3-4. When sedentary, engaging in reading and storytelling with a caregiver is encouraged.”

Research indicated that excessive duration of screen exposure has many negative effects beside media use being problematic. Some of the harmful consequences are anxiety, learning problems, hyperactivity/impulsivity, and psychosomatic problems (Zoromba et al., 2023) obesity, aggressive behaviour (Radesky & Christakis, 2016). Duration of screen time however displays no indication as a problematic media use factor solemnly (Domorff et al., 2020). Designs of the applications or websites are based on user’s tendency to come back repeatedly or not leave the content quite easily (Gray et al., 2018).

**5.1.2.3 Requirement of screen in daily activities.** Majority of participants reflected that their children never require screen time while eating and before falling asleep. The results showed no significant relation between problematic media use and screen time while eating and before falling asleep. These results were unexpected considering that there are various studies in the field regarding sleep and eating habits are influenced by media using habits (Hill et al., 2016). These specific times (eating and sleeping) might be when parents consistently allow screen time as part of a daily routine to keep children occupied or calm. As such, the habit of using screens during these times might not vary significantly among children. These times of the day often have more structure and routine compared to other parts of the day, leading to more uniform practices among different families. Structured times might lead to consistent screen time practices irrespective of overall media use.

However, the results also showed that there is a relationship between problematic media use and the requirement of screen time during traveling or when the parents are busy. These results align with the literature in terms of media use being used as a babysitter or a pacifier (Radesky et al, 2016; Domorff, et al., 2020). Additionally, as highlighted by Chiong and Schuler (2010), the foremost location where parents frequently let their children use their phone is in the car followed by

home, general waiting situations, and traveling (not in a car), underscoring the widespread accessibility of mobile devices.

**5.1.2.4 *Owning a digital media device.*** The research results indicate that there is no relationship between children owning their own digital media device and problematic media use. One reason for this result could be parental mediation and strategies. Parents may impose similar rules and restrictions on screen time. Effective mediation strategies, such as setting limits on screen time and monitoring the content their child access, can mitigate problematic media use regardless of whether their child owns a device. Moreover, children who do not have their own device may still have access to the shared media devices like their parents' smartphones, tablets or TV. The level of exposure and usage to those personal devices, leading to similar media use issues. Although there are no studies regarding problematic media use and owning a personal device some research suggests that the accessibility and variety of media devices in the home influence how children establish their routines for increased digital media use (Paudel et al., 2017; Merdin & Şahin 2023). Another study shows that almost 15% of their participant's children use their own smartphones or tablets in average of more than 4 hours a day (Radesky et al., 2020). However, there is variability in literature concerning children's access to televisions, alongside diverse sets of regulations and their enforcement methods within household settings (Bittman & Siphthorp, 2011). According to Comstock and Scharrer (2012), easiness of access is one of the principal variables that determine media use. In contrast, according to Cillero and Jago (2010), number of TVs in the household was not associated with children's screen time behaviour.

**5.1.2.5 *Sleeping hours and time between the end of screen time and bedtime.*** Although no significant relationship was found between a child's daily sleep duration and problematic media use, it was observed that the duration between a child's bedtime and screen shutdown time was significant concerning problematic media usage. The utilization of screen media in the evening correlates with reduced sleep durations among children due to the light emission from electronic devices in proximity to bedtime (LeBourgeois et al., 2017). Preschoolers who engage in increased screen time and experience shorter nighttime sleep durations exhibit a significantly higher

likelihood of developing behavioural issues (Garrison, & Christakis, 2012). It is recommended that young individuals receive guidance to restrict or decrease their exposure to screens, particularly before or during bedtime, in order to mitigate potential adverse impacts on sleep (Hale & Guan, 2015). These findings offer insights that could aid in developing improved strategies for preventing and intervening in psychosocial problems among children (Wu, et al., 2017).

**5.1.2.6 Competence in using digital media devices.** Participants reporting no concerns about their child's autonomous activities, such as making phone calls, accessing content, entering video sites, conducting online research without supervision, and possessing the smartphone password, displayed higher average scores of problematic media use. Children displaying higher proficiency in using mobile screen media devices tended to have increased accessibility to these devices within their bedrooms, consequently spending more extended periods utilizing them compared to less proficient children (Nikken & Schols, 2015). The observed link between higher problematic media use scores and children engaging in autonomous digital behaviours suggests a potential relationship between early independence in digital activities and problematic media use tendencies (Rocha & Nunes, 2020). This association raises critical questions regarding the impact of early exposure and independence in navigating digital environments on children's media behaviours.

Touchscreens facilitate autonomy, enabling extremely young children to engage in self-guided and autonomous play (Verenikina & Kervin, 2011). Over the years, there has been a decline in computer and console gaming, while there has been a rise in mobile gaming, notably on smartphones or tablets. (Rideout & Robb, 2020). An expanding array of applications tailored for toddlers and preschoolers, often boasting educational advantages, is available. Once these applications are installed on the tablet, younger users can easily recognize icons and initiate their preferred activities (Holloway et al., 2013).

These findings suggest that even at a young age, a child's ability to comprehend the functioning of media is a crucial factor. Additionally, this understanding may not be only influenced by the child's own media exposure but is also connected to the extent to which their parents engage with media. (Nikken, 2017).

**5.1.2.7 Streaming service preferences.** Analysis of the data highlights a significant relationship between problematic media use scores and preferred sources of media consumption among children. Notably, the average score for problematic media use among children who turn to video platforms such as YouTube is significantly higher than among children who prefer traditional television channels.

This finding aligns with prior research emphasizing the impact of digital media platforms on children's behaviour (Hasan et al., 2018). Studies by Rideout and Robb (2020) and Livingstone and Helsper (2008) have highlighted the immersive and personalized nature of video-sharing platforms, suggesting that the tailored content delivery algorithms employed by these platforms may inadvertently promote increased and unregulated media use among children. The interactive features and continuous content availability on platforms like YouTube could contribute to increased engagement, potentially leading to heightened problematic media habits as observed in this study.

Contrastingly, children who favour traditional television channels exhibit lower problematic media usage scores. The constrained nature of television scheduling and limited interactive elements may act as self-regulating factors, as suggested by Gentile et al. (2012). Their work posits that the passive nature of television viewing, with predetermined programming and fewer user-driven features, inherently limits excessive media consumption and subsequent problematic behaviours among children. Platforms like YouTube gives children autonomy and decreases the requirement of parent-child co-use which is a parental mediation style (Radesky, et al., 2020).

**5.1.2.8 Reactions when ending the screen time.** The problematic media use scores of children who resist not to finish their screen time and want to extend their screen time by asking for additional time are significantly higher than the average score averages of children who immediately turn off the screen without objecting when the time comes or are enthusiastic about the next activity they will do. The current study shows that some children resist ending screen time and ask for additional screen time. The process of moving away from screen-based activities is generally challenging, and certain factors can anticipate the difficulty of this transition. Technology-based transitions prove to be notably more effective than those led solely by parents (Hiniker et al., 2016). Technology-based limitations such as time

restrictions appear to be quite beneficial for setting limits in terms of restrictive mediation (Wu, et al., 2014). These results are not unpredictable considering the easiness in designs that children and even adults are experiencing all day long. Numerous media platforms are intentionally crafted to augment users' screen time (Burroughs, 2017). They achieve this by incorporating features like autoplay and suggested videos, which pose challenges in enforcing screen-time limits (Hiniker et al., 2016). As per the findings by Vandewater et al. (2005), parents who implemented time restrictions reported reduced television viewing among their children.

Additionally, these findings overlap with other research results in the literature. Difficulties in self-regulation during early childhood show a connection with slightly higher media exposure, even when considering other influential factors (Radesky et al., 2014). Exploring this correlation could offer valuable guidance for parents in managing and decreasing their children's screen time.

There are many studies on the effect of alternative activities on less need for media use (Gentile & Walsh, 2002; Jordan et al., 2006). Time spent away from screens holds significant importance for children and their caregivers, facilitating the development of crucial life skills like self-regulation, fostering creativity, and enabling learning through physical and imaginative play (Force & Canadian Pediatric Society., 2017).

**5.1.2.9 Child's influence from the content they watch while playing or selecting a toy.** The examination of problematic media usage scores among preschool children reveals significant differences based on the influence of content observed during play and toy selection. Notably, children reported to be influenced by content they watched before engaging in play activities displayed significantly higher problematic media usage scores compared to those not influenced or sometimes influenced by prior content during play. This aligns with previous studies emphasizing the impact of content exposure on children's behaviours. Children's behaviours during play can reflect the content they have previously viewed, potentially influencing their media usage habits, and even their learning patterns (Subrahmanyam and Renukarya 2015). Studies conducted in the past have compellingly highlighted the impact of advertising media on the attitudes of young children and adolescents, which in turn can shape their behaviours in later stages of life. (Villani, 2001). Additionally,

Verenikina and Kervin's research study suggests that children in the 3 to 5 age group encounter favourable instances with digitally facilitated imaginative play (2011). In addition, evidence suggests that excessive screen time, especially in the duration of mealtimes leads to purchase requests by children (Robinson et al., 2017).

Similarly, significant differences in problematic media usage scores were evident concerning children's tendencies to incorporate content influence into their toy choices. Children reported to be influenced by content while selecting toys exhibited notably higher problematic media usage scores compared to those less affected or sometimes influenced by content during toy selection. This finding resonates with research by Priya, Kanti, and Sharma (2010) indicating that children's preferences for toy shopping could be influenced by media content. Another research indicates children's buying behaviour is influenced by media. (Thaichon, 2017). The substantially elevated problematic media usage scores among children affected by content during toy selection underscore the potential impact of media content assimilation on behavioural patterns during early childhood. Furthermore, research conducted by Kirdar in 2007 indicates a direct correlation between extended television exposure and the shopping choices of children aged 3 to 6 years, particularly in their decision-making regarding product selection while accompanying their families.

**5.1.2.10 YouTube preferences.** Current study reveals that preschoolers favouring content such as cartoon games/toy videos and experiment/how-to videos on YouTube exhibited significantly higher mean scores in problematic media usage compared to those ones that do not prefer neither of them. These results seem predictable considering the increasingly rapid and captivating nature of YouTube's structure that retains the audience (Burroughs, 2017). Young children are transitioning from traditional broadcast to streaming video consumption, primarily through platforms like YouTube that offer a vast range of content designed for a younger audience (Papadamou et al., 2020). Although a significant portion of this content is suitable for their age, there's also a concerning availability of inappropriate material (Subedar & Yates, 2017).

Results also indicate the relationship between problematic media use and toy reviewing videos on YouTube. According to Associated Press (2014) the rising influence of children who review toys on YouTube is noticeable. Toy manufacturers

are actively engaging with them due to their capacity to resonate with a particular generation. Such problematic content appears to be seen on YouTube. Studies document that YouTube's recommendation system could lead users to problematic content. (Yesilada & Lewandowsky, 2022).

**5.1.2.11 Number of movies children watch with their parents in a week.** The findings suggest that the frequency of watching movies with parents as a family activity within a week does not appear to significantly impact problematic media usage among children. Notably, there is a similarity observed in the problematic media use among children across families who watch one, two, or 3+ movies weekly, as well as those avoiding movie watching. These results are unexpected in terms of the importance of co-use as parental mediation. Various studies highlight the benefits of shared media experiences between parents and children, especially when the interactions are purposeful, interactive, and involve high-quality, educational content (Connell et al., 2015; Livingstone & Helsper, 2008; Nikken & Jansz, 2006; Valkenburg et al., 1999). However, the study's limitation lies in its sole inquiry into the number of movies watched together, neglecting potential exposure to other types of content that preschool children might encounter in shared media experiences. Considering the diverse range of content available, exploring various forms of co-viewed content beyond movies could provide a more comprehensive understanding of the joint media experiences of preschool-aged children. Being present together in front of the computer while the child accesses the internet, or even being in the same room, makes co-use more dynamic. This setting encourages conversation regarding the online activity, potentially involving interpretive discussions, evaluative comments, or guidance, which is more probable in such situations (Livingstone & Helsper, 2008).

**5.1.2.12 Parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities.** The average problematic media use score among children whose parents averagely engage in 4-6 hours of screen time per day is significantly higher than the score among children whose parents maintain an average of 0-2 hours of screen time per day.

The significantly elevated problematic media use scores among children whose parents spend more time on screens suggest a plausible influence of parental behaviour

on their children's media habits. The results align with various studies. According to Rideout and Hamel (2006), children whose parents exceed 2 hours of daily screen media use tend to spend an additional average of 28 minutes per day watching TV in contrast to children whose parent consume less than 2 hours daily. The media consumption habits of parents stand as one of the most influential predictors of their children's media usage patterns. (Bleakley et al., 2013; Cingel & Krcmar, 2013; Jago et al., 2012; Lauricella et al., 2015).

The majority of participants indicated a frequent need for digital media when staying connected with friends, navigating, conducting research on restaurants or vacations, or during shopping. Additionally, most participants mentioned that they never felt the need for screens while playing games or engaging in sports. Furthermore, a significant number of participants expressed occasional reliance on screens when chatting, reading books or newspapers, and grocery shopping.

When examining the data collected from parents in relation to their children's problematic media usage, it was observed that the problematic media usage rates were significantly higher among children whose parents always needed screens while engaging in sports or researching topics like restaurants and vacations. In contrast to parents of older children and teenagers, parents of younger children retain substantial control over their children's activities within their home. Consequently, their own perspectives on technology may create significant influence over the extent of their children's use of digital media (Lauricella et al., 2015).

In relation to parental attributes, families with minimal media use significantly diverge from other family groups. As anticipated, within families characterized by higher media consumption, parents exhibit notably lower resistance to media and demonstrate a significantly stronger belief in the positive impacts of media on children's learning (Nikken, 2017). Results also align with Bronfenbrenner's bioecological model (1979) and Bandura's social cognitive learning theory (1977). According to Bronfenbrenner (1979), parental attitudes can directly impact a child's technology usage within the microsystem. Parents harbouring positive perspectives toward technology may actively encourage or permit their children to participate in more media activities. Conversely, those with negative attitudes might establish and enforce stricter rules to regulate or limit such usage (Bronfenbrenner, 1979). Bandura (1977) asserts that learning and behaviour manifest through the observation of

behaviours. For example, the simultaneous actions of a parent using a smartphone to search for a dinner recipe while a child imitates this behaviour on a tablet exemplify the diverse and individualized nature of media, showcasing how children observe their parents using various media in different situations throughout the day Lauricella et al., 2015).

Further findings regarding parents' requirement of digital media devices in their daily activities indicate that the average scores for problematic media usage among parents who frequently or consistently require screens during eating, falling asleep, traveling, and in bathroom scenarios were considerably higher than the mean scores of children whose parents infrequently or rarely require screens in these situations. This observation highlights a significant correlation between parental screen dependency in specific daily activities and their children's problematic media usage. It suggests that when parents frequently resort to screens in daily routines like eating, bedtime, travel, and bathroom moments, their children tend to exhibit higher rates of problematic media use. This finding aligns with the theory proposed by Bronfenbrenner (1979), emphasizing the influential role of parental behaviour within the microsystem on children's habits and practices along with various studies (Bleakley et al., 2013; Carlson, et al., 2010; Lauricella et al., 2015;).

Children's television viewing habits are additionally influenced by various factors such as co-viewing practices, the habit of eating meals while watching television, and the implementation of household regulations and guidelines regarding media usage, including restrictions on the duration of television viewing (Carlson, et al., 2010; Wiecha et al., 2001). No significant association in problematic media use of children and requirement of screen while parents' doing chores or having social interactions is found. This current result regarding chores and social interactions suggests that the influence of parental screen dependency might be more salient in certain contexts. While there isn't a significant association concerning these variables, previous studies indicate that doing chores is among the reasons prompting parents to direct their children to watch TV (Cingel & Krcmar, 2013). It is essential to consider that these findings represent a correlation, not causation, and other unexplored factors may contribute to this relationship.

**5.1.2.13 Parents' view regarding screen time is excessive or not.** Based on parental perspectives, children who extensively use screen time exhibit a notably higher mean score for problematic media use compared to those who think their child has less screen time. Numerous studies have highlighted the potential ramifications of excessive screen time on children, including associations with decreased physical activity, disrupted sleep patterns, and challenges in social interactions (De Decker et al., 2012; LeBourgeois et al., 2017; Rideout & Robb, 2020). Moreover, parental perceptions of their child's screen time habits may be influenced by their own observations and concerns regarding the impact of media use on their child's development and well-being. Parents who observe their child spending significant amounts of time on screens may be more aware of potential negative consequences and thus perceive their child's media use as more problematic.

The parental perception of higher problematic media use among children heavily engaged with screens underscores the need for a nuanced approach to managing and regulating screen time among children (Sigman, 2012; Domorff, et al., 2020).

**5.1.2.14 Screen time as a positive or negative reinforcer.** Current findings suggest that parental actions to extend or shorten screen time concerning positive or negative behaviours do not significantly influence children's problematic media use. This do and do not contradict at the same time to some expectations rooted in the assumption that parental interventions related to screen time adjustments could directly impact children's media behaviours. Reinforcement of media consumption is defined as a maintaining factor of problematic media use along with using media as a self-regulation tool, and peer influences that encourage gaming and online engagement (Domorff et al., 2020). Positive reinforcement was hypothesized to be parents' regulation tool and eventually was not found to have an association with problematic media use. (Eales et al., 2021).

**5.1.3 Do parental control and warmth (internet parenting styles) differ according to some demographics?** (1. Children's enrolment to a pre-school, 2. Minimum screen time, maximum screen time, 3. Requirement of screen in daily activities, 4. Owning a digital media device and the number of digital media devices

in the household, 5. Sleeping hours and time between the end of screen time and bedtime, 6. Competence in using digital media devices, 7. Streaming service preferences, 8. Reactions when ending the screen time, 9. Child's influence from the content they watch while playing or selecting a toy, 10. YouTube preferences, 11. Number of movies children watch with their parents in a week, 12. Parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities, 13. Parents' view regarding screen time is excessive or not, 14. Screen time as a positive or negative reinforcer)

**5.1.3.1 Children's enrolment to a pre-school.** The absence of a significant relationship between children's enrolment to a preschool and the aspects of family control or family warmth reveals intriguing insights into early childhood development.

These findings challenge conventional assumptions that children's engagement in preschool education might necessarily correspond to distinct patterns of family control or warmth. While preschool enrolment often correlates with various aspects of child development, such as academic readiness (Chen, et al., 1997; Huntsinger & Jose, 2009) and less stress level in primary school (Correia-Zanini et al., 2018) the lack of a significant association with family control or warmth suggests that other factors might contribute more substantially to these familial dynamics. While preschool can contribute to children's social and academic development, it may not directly alter the levels of parental control and warmth, as parents can still exhibit these behaviors outside of school hours. Additionally, parents might adapt their strategies when their children start preschool, granting more independence without necessarily reducing warmth or control. However, studies support that parental warmth plays a crucial role in determining preschool enrolment among young children (Susman-Stillman et al., 2018).

**5.1.3.2 Minimum screen time, maximum screen time.** The current study outlines no significant evidence regarding preschool children's minimum or maximum screen time and family control or warmth. Although no relation has been found, there are studies that document less screen time with authoritative parenting styles which require high family control or warmth (Schary et al., 2012; Veldhuis, van Grieken et al., 2014). These former results remain contradictory considering the complex relation

between screen time and internet parenting styles (Barkin et al., 2006). Parents across different screen time categories might exhibit similar levels of control and warmth. This could indicate that the general parenting approach does not vary significantly with the amount of screen time the children are exposed to. Parental control and warmth might be consistent traits in these families, unaffected by how much time children spend on screens. Barkin et al. (2006) also documented that restrictive mediation which involves setting rules, imposing restrictions, or implementing guidelines to regulate and limit the type or amount of media content that children can access or engage with (Bybee et al., 1982; Valkenburg et al., 1999) with increased awareness about negative media effects.

**5.1.3.3 Requirement of screen in daily activities.** Within the scope of the research, participants were asked about their children's screen time needs during activities like eating, falling asleep, traveling, or when parents are occupied. The analysis revealed no significant correlation between these factors and family control or family warmth, except for the instance of eating. Although several daily routines and activities remain relatively under-researched in terms of internet parenting styles, positive parent-child relationships have been linked to more effective routine establishment in contexts like mealtime and bedtime (Barkin et al., 2006; Ren & Fan, 2019). In contrary, the lack of association between eating habits, sleep routines, and parent-child relationships has also been observed (Marsh et al., 2020). This observation indicates that there is no coherent relationship between mealtimes, sleep schedules, and the quality of the parent-child relationship in this context.

Current study's findings however might demonstrate how crucial children's eating habits during the preschool period are for their parents (Frosch, Schoppe-Sullivan & O'Banion, 2021). In a study, it was revealed that mothers prioritize their children's healthy eating habits and associate eating meals in front of the television with 'bad eating' habits (Campbell et al., 2010).

**5.1.3.4 Owning a digital media device.** The averages for family control and warmth scores were notably higher among parents whose children did not have own a digital media device of their own. This suggests a potential correlation between the absence of digital media tools in children's possession and increased family control

and parental participation. The observed higher family control and warmth scores in the absence of children's owning digital media tools signify the importance of considering technological access when examining family dynamics and parental roles (Goh, Bay & Chen 2015; Livingstone et al., 2015).

Children's owning a digital media device may enable accessibility which would lead children to have more excessive screen time along with less family control. This aligns with previous studies that have highlighted the challenges families face in regulating and managing screen time when multiple digital devices are accessible (Domoff, et al., 2019).

#### ***5.1.3.5 Sleeping hours and time between the end of screen time and bedtime.***

The current study aimed to explore the relationship between family control, parental warmth, and children's sleep patterns, screen time and bedtime associations. The findings revealed non-significant differences between family control and warmth concerning the child's daily sleep time. Contrary to initial expectations, family control and warmth remained consistent across varying sleep durations (6-8, 8-10, and 10+ hours per day). This suggests that parental strategies for establishing control and warmth within the family context may not be significantly influenced by the duration of a child's sleep.

According to these results, internet parental styles related to family control and warmth might be independent of sleep patterns. However, Oliveira et al. (2022) propose that children raised under authoritarian parenting styles experience higher levels of stress and sleep disturbances compared to children raised under authoritative parenting styles. Parenting styles are recognized as substantial factors that affects quality of sleep of children (Brand et al., 2009; Philbrook & Teti, 2016). Specifically, in younger children, increased parental warmth was associated with longer weekday sleep hours, while in adolescents, stricter household regulations appeared to be protective (Adam, Snell, & Pendry, 2007).

Similarly, no significant differences were found in family control and warmth concerning the time between the end of screen time and bedtime. Regardless of whether children ended screen time 30 minutes, 1 hour, 2 hours, or more than 2 hours before bedtime, parental control strategies and warmth levels remained consistent. This finding contradicts the assumption that closer proximity of screen time to bedtime

might influence parental behaviours. There are findings suggesting that exposure to screens just before sleep may lead to nightmares and feelings of anxiety regarding sleep (Owens et al., 1999; Van den Bulck, 2000). Moreover, research has demonstrated that children observed using screens before bedtime tend to have later sleep schedules and experience less consolidated sleep compared to those not engaged with screens during this period (Staples et al., 2021).

However, further investigation into the nature of parental control strategies and warmth regarding screen time could provide additional insights into these non-significant findings.

**5.1.3.6 Competence in using digital media devices.** Currents study's results suggest that while there are notable distinctions in parental control concerning a child's independent access to digital content (such as accessing content or video sites alone), these variations don't seem to impact the perceived warmth within the family. This could imply that, despite differences in perceived control related to digital autonomy, parental feelings of warmth toward their child remain relatively stable across these digital competencies. Van Deursen et al. (2011) discovered a direct link between the length of time children spent using the internet and the advancement of their internet-related skills. This finding suggests that the more children engage with the internet, the more their abilities in using online tools and resources tend to grow. In addition, the development of digital competencies is notably influenced by the home environment, family dynamics, interactions with peers, and how children use their free time (Zounek et al., 2022). In the contemporary era of mobile media, parents accept supervision as norm of mediation by monitoring their children while they use digital technology on their own (Livingstone & Helsper 2008; Nikken & Schols, 2015; Valkenburg et al., 1999). It's interesting to note the potential disparity in parental perceptions of control versus warmth concerning a child's digital independence. Further research could reveal the reasons behind this divergence and how it influences parenting behaviours and family dynamics in the context of digital media use by preschool children.

**5.1.3.7 Streaming service preferences.** The analysis of family control indicates that parents' control within the family environment do not significantly differ based on

their child's preference for a specific streaming service such as subscription-based services like Netflix, TV channels, or video sites like YouTube. This suggests that, irrespective of the type of streaming service preferred by the child, parents seem to maintain relatively consistent levels of control in guiding their child's media use. Similarly, in terms of family warmth, the data indicates no statistically significant variation in parental warmth concerning their child's preferred streaming service. Whether the child prefers subscription-based services, TV channels, or video sites, parents seem to perceive their warmth in their child's media choices consistently across these preferences. Various research indicates that strategies for parental mediation differs by age (Fidan, 2021) or parents' views on effects of media content on the child (Nikken & Schols, 2015). Parents with younger children often engage in co-viewing and apply restrictive mediation, whereas parents of older teenagers either cease all mediation (known as *laissez-faire*) or persist with instructive mediation if that was their approach during their children's younger years (Uhls & Robb 2017). In addition, Parents concerned about potential risks tend to utilize monitoring, restrictions, supervision, and critical discussions about media content to safeguard their children, while those perceiving media as offering educational or entertainment opportunities are more inclined to engage in co-use or active discussions about content with their children (Sonck et al., 2013; Valkenburg et al., 1999; Warren, 2003). However, it's crucial to note that while statistically no significant relation was found, the qualitative part of the current study is going to provide wider and deeper understanding regarding family control and restrictive mediation which aims to pose restrictions on time and content (Valkenburg et al., 1999; Nikken & Schols, 2015) approach regarding YouTube, Netflix, or other types of streaming services.

**5.1.3.8 Reactions when ending the screen time.** The findings indicate no significant difference in family control and warmth average based on the type of child's behaviour as screen time ends. This finding supports the notion that parental mediation and family warmth do not significantly dictate children's negative behaviour (Fowler et al., 2009). These results suggest that factors beyond family control and warmth may play a more significant role in influencing children's behaviour after screen time, highlighting the need for a more comprehensive understanding of the determinants of children's behaviour in this context. The existing literature provides insights into the

variant nature of parental mediation and family dynamics in influencing children's behaviour. For instance, studies have emphasized the importance of understanding the role of parental warmth and warmth in shaping children's behaviour (Taylor et al. 2001; Linares et al., 2001; Lee et al., 2013). Additionally, the influence of family cohesiveness, marital adjustment, and child temperament in predicting child behaviour has been explored, indicating the diverse influences on children's behaviour (Shigeto et al., 2013).

These references provide a broader context for understanding the complexities of family dynamics and their potential impact on children's behaviour. Moreover, the influence of family rituals and maternal depressive symptoms on child externalizing behaviours has been examined, shedding light on the broader impact of family dynamics on children's behaviour (Bao et al., 2019). Additionally, the association of fathers' parental warmth and parenting stress to child behaviour problems has been studied, offering valuable perspectives on the role of fathers in influencing children's behaviour (Lee et al., 2018).

Parents are also inclined to intervene when they observe concerning behaviours in their young children's interactions with digital devices, such as spending excessive time on one activity, prolonged screen staring, or displaying disruptive behaviour when the device is removed (Livingstone et al., 2015).

These studies offer insights into the diverse influences on children's behaviour and the potential role of family dynamics in shaping children's behaviour in various contexts. In conclusion, complexity of parental warmth and external influences emphasizes the necessity for a more thorough approach to comprehend parental attitudes to children's behaviour they finish using screens.

**5.1.3.9 Child's influence from the content they watch while playing or selecting a toy.** The evidence suggests that preschool children's toy selection and imitation of media content are influenced by a complex interplay of factors beyond family control and warmth. Previous literature has highlighted the importance of family environments characterized by conflict, which may be related to low family warmth, in influencing the risk for alcohol use among adolescents (Schick et al., 2022). Additionally, the impact of neighbourhood poverty, residential stability, public services, social networks, and danger on parental behaviours has been shown to shape

child problem behaviours and parental warmth (Pinderhughes et al., 2001). However, the influence of family, peers, and media on children's participation in the family buying process has been highlighted, shedding light on the various sources of knowledge about new products for children between age of 8-12 (Muhammad, 2022). Radesky et al., 2020) highlight the substantial impact of television advertisements on children's knowledge and preferences regarding new products. The study on human imitation compared with enculturated apes emphasized the role of rearing history and imitation-specific training, shedding light on the experience-dependent nature of imitation (Subiaul, 2016). Furthermore, the integral role of media in the lives of preschool children has been highlighted, indicating that media messages play a significant role in children's lives (Šramová & Pavelka, 2017). The validation of the Preschool Imitation and Praxis Scale (PIPS) for measuring procedural imitation in children also supports the idea that children's imitation behaviours may be influenced by factors beyond family control or warmth (Vanvuchelen et al., 2011). In conclusion, the multifaceted nature of family dynamics, the role of rearing history, and the integral role of media in children's lives suggest that children's behaviours are influenced by a complex interplay of factors beyond family control and warmth.

**5.1.3.10 YouTube preferences.** The findings indicating no significant difference in family control and warmth average based on the type of content children prefer to watch, particularly in relation to YouTube content, challenge traditional assumptions about the direct influence of family dynamics on children's media preferences. These results suggest that the impact of family control and warmth levels may not be as pronounced in shaping children's media choices, especially in the context of YouTube content. The absence of a significant difference in family control and warmth average between children who do not watch YouTube and those who watch different content on YouTube raises questions about the extent of parental influence on children's media preferences. It challenges the conventional understanding of parental mediation and warmth in shaping children's media choices, particularly in the digital age. These results suggest that factors beyond family control and warmth may play a more substantial role in influencing children's media preferences, highlighting the need for a more comprehensive understanding of the determinants of children's media consumption. The existing literature provides insights into the multifaceted nature of

parental mediation and family dynamics in influencing children's media consumption. For instance, studies have emphasized the importance of understanding the role of parental warmth and warmth in shaping children's media preferences (Coyne et al., 2017; McGuire et al., 1996; Smith et al., 2014). Furthermore, the cultural emphasis on nurturance and instrumental support in family dynamics has been explored, indicating the diverse cultural influences on parental warmth and warmth (Cheah et al., 2015). Moreover, the influence of media on children's behaviour and development has been extensively studied, with research highlighting the role of video games in influencing children's aggression, prosocial behaviour, and academic performance (Boxer et al., 2015). Additionally, the perceptions and adoption of smart toys in homes with young children have been explored, providing insights into how digital practices are perceived and domesticated within families (Brito et al., 2018). These references offer valuable perspectives on the broader impact of media and technology on children's experiences, suggesting that children's media preferences may be influenced by a wide range of factors beyond family control and warmth. In conclusion, the findings indicating no significant difference in family control and warmth average based on children's media preferences challenge traditional assumptions about the direct influence of family dynamics on children's media choices. These results underscore the need for a more comprehensive understanding of the determinants of children's media consumption, considering the multifaceted nature of parental mediation and the diverse influences on children's media preferences.

**5.1.3.11 Number of movies children watch with their parents in a week.** The current research indicates that the number of movies watched as a family together does not have a significant relation with family control and warmth of preschool. This result suggests that the frequency of watching movies together as a family may not significantly influence the overall family control and warmth experienced by preschool children. This finding contradicts the notion that shared family activities, such as watching movies together, are associated with parental warmth and control (Xu et al., 2015), highlighting the need for a more nuanced understanding of the factors that contribute to family dynamics and children's experiences. The literature provides valuable insights into the parenting styles and family dynamics in influencing children's behaviours and experiences. For instance, the associations of parenting style

and young children's screen time have been explored, indicating that the magnitude of the association between parenting style and screen time of young children may be relatively modest Veldhuis et al. (2014). Additionally, the influence of parental warmth and stress on children's reading through approaches to learning has been investigated, offering perspectives on the potential impact of parenting styles on children's behaviours and cognitive development (Hill & Palacios, 2020). These references underscore the need for a comprehensive understanding of the complex interrelation between parenting styles, family activities, and children's experiences. Moreover, the longitudinal associations among temperament, parenting, and children's prosocial behaviours have been studied, emphasizing on the potential influence of parenting styles on children's social behaviours (Laible et al., 2017). Additionally, the influence of parental happiness on the co-occurrence of preschool-aged children's healthy energy balance-related behaviours has been examined, providing insights into the potential impact of parental well-being on children's behaviours (Engberg et al., 2021). These studies offer valuable perspectives on the potential influence of parenting styles on children's behaviours and highlight the requirement for further research to illuminate the complex relation of parenting styles and children's experiences. To conclude, these findings highlight the critical importance of gaining a deeper and more comprehensive understanding of the intricate elements within parenting styles and family dynamics. This comprehension is essential for unravelling the impact of these factors on shaping children's experiences and behaviours.

**5.1.3.12 Parents' daily screen time, parents' screen time activities, parents' requirement of screen in daily activities.** The study identified that parents' daily screen time didn't significantly relate to family warmth scores. However, variation in daily screen use among parents significantly affected family control scores. Higher family control correlated with lower daily screen time among parents. Furthermore, family control scores varied significantly based on the frequency of needing a screen for various activities like chatting, reading, gaming, and sports. Parents who reported never requiring a screen for these activities had notably higher family control scores than those needing screen time more frequently.

Similarly, family warmth scores significantly differed based on screen necessity for playing games and sports. Parents that do not need screen time for these activities

had higher scores compared to those occasionally requiring screen time. Interestingly, while family control scores were significantly related to screen use during eating, it didn't affect scores in other activities like falling asleep, traveling, doing housework, or socializing. This suggests that screen use during mealtimes might influence family control dynamics, potentially affecting children's socio-emotional development (Owenz, and Fowers, 2020). These findings resonate with prior studies indicating smartphones disrupting family interactions during meals (Nelson, 2016). Accordingly, the presence of digital devices during family bonding moments could divert parental attention away from children's needs (McDaniel & Radesky, 2018). Another research reveals that regarding the motivations behind smartphone usage in the presence of children, parents with younger kids frequently mentioned using their phones to engage with others or simply due to boredom (Knitter & Zemp, 2020). Extensive research emphasizes the impact of parental behaviour, including screen time, on children's well-being and development (Harkness et al., 2020; Nicklas et al., 2009). These findings underscore the need for comprehensive research to understand the influence of parental screen use and its role in specific activities on family dynamics and children's experiences.

**5.1.3.13 Parents' view regarding screen time is excessive or not.** The link between parental perceptions of excessive screen time in children and reduced family control and warmth aligns with established research findings. For instance, studies have highlighted the implications of excessive screen time on family dynamics, emphasizing its adverse effects on parental control and warmth (Valcke et al., 2010). The observed correlation between parental perceptions of excessive screen use and lower family control underscores the intricate relationship between parental concerns about media consumption and their capacity to maintain appropriate boundaries and guidance within the family environment (Cillero & Jago, 2010; Konok et al., 2020). Moreover, less family warmth among parents perceiving excessive screen time in their children may reflect increased tension or reduced emotional closeness, which could be attributed to concerns or conflicts arising from managing screen use (Berg, 2011; Lauricella et al., 2015). Crucial contextual aspects include how often and how long smartphones are used, the reasons behind their use, the timing of usage (whether during meaningful moments or randomly), and parents' attitudes toward smartphones.

A prevalent interpretation of these findings suggests that smartphones might not directly cause difficulties in parent-child interactions; instead, they could act as an extension of pre-existing relationship issues present in offline interactions (Radesky et al., 2018).

**5.1.3.14 Screen time as a positive or negative reinforcer.** Based on the provided findings, family control or warmth scores did not differ according to whether screen time was used as positive or negative reinforcement. The lack of association between family control or family warmth and screen as a positive or negative reinforcement can be supported through a comprehensive discussion. The references provide insights into the complex relation between parenting styles and children's screen time behaviours, highlighting the potential factors that may not directly align with the reinforcement aspect of screen time. Firstly, the study by Nikken & Schols (2015) highlighted the diverse strategies employed by parents, such as co-use, supervision, active mediation, restrictive mediation, and monitoring, which may not distinctly align with the concept of positive or negative reinforcement of screen time. Additionally, the research by Fujioka & Austin (2002) conceptualized parental mediation styles to include positive reinforcement, negative reinforcement, or a combination of both, emphasizing the complexity of parental mediation beyond a simple reinforcement framework. This complexity in mediation strategies suggests that the relationship between parenting styles and screen time may not be solely affected by reinforcement dynamics, contributing to the lack of association between family control or warmth and screen time reinforcement.

**5.1.4 How do parents describe their views regarding problematic media use and internet parenting styles?** This research question focuses on determining the parents' views on problematic media use and their internet parenting styles. Through conducting semi structured interviews and content analysis, five main themes were derived from the participants' statements: 1) Benefits and Challenges, 2) Underlying Reasons of Screen Use, 3) Limitations and Restrictions 4) Parents' Screen Use Patterns, 5) Parenting Styles

**5.1.4.1 Benefits and challenges.** Although there are sources in the literature indicating that children begin to use screens at an earlier age over the years, the number of parents who are aware of problematic media use is also increasing. In addition, parents who participated in the qualitative part of the research talked about the challenges of the screen in this context. Parents who credit digital media with positive impacts tend to participate alongside their children and actively guide their media consumption. Conversely, those expressing concerns about adverse effects are inclined to impose limitations on their child's media usage (Nikken & Jansz, 2006; Nikken & Schols, 2015). Even though reliable sources such as WHO (2019) recommend limited time and content regarding screen use based on scientific results, these recommendations may not be applicable in every family environment. Discussions often centered on the challenges and potential or real harms associated with screen usage, such as excessive screen time, reduced attention, and decreased playtime.

While some parents highlighted benefits, P2 and P7 mentioning that their children watched English cartoons, contributing to their English language proficiency, the efficacy of media in preschoolers' vocabulary acquisition remains unclear. The literature provides insights into the complexities of parental mediation of screen media use and its impact on language development in preschool children (Başöz, & Can, 2016). Studies have explored the association of screen time use with language development in young children, indicating that children spend a considerable amount of time engaged with screen media (Duch et al., 2013). Additionally, research has examined the impact of verbal interactions during screen media exposure on language development in infants and toddlers, highlighting the potential mitigating effects of parental interactions on language development (Mendelsohn et al., 2010). Furthermore, the use of technology, such as conversational user interfaces, has been investigated to support bilingual language acquisition in young children, demonstrating the potential role of screen media in language learning (Bhatti et al., 2021). Some participants mentioned the video calls with extended family and friends are beneficiary for their children. Accordingly, Verenikina and Kervin's research study suggests that children's utilization of iPads within household settings such as video call frequently entails direct social engagement with family members (2011). Moreover, in terms of the benefits, some parents suggested that their children's screen usage might potentially confer academic advantages in the future, a sentiment echoed

in other studies discussing the development of screen use skills. Notably, parents commonly praised screen use concerning academic outcomes and learning within the educational setting (Francis, et al., 2021).

However, it is essential to consider the potential risks associated with excessive screen time, as studies have indicated negative associations between high media usage and children's cognition and language outcomes, particularly related to high TV screen time (Schwarzer et al., 2021). Accordingly, P1, P3, P4, P5, P8, and P9 mentioned that their children often wished to spend time on screen whenever possible. Some of the worries about the screen time of young children revolve around the replacement of time allocated for other activities like play and social interaction, both of which are crucial for children's cognitive, social, and physical growth (Linn, 2010).

Moreover, the prevalence of electronic screen media use among children under 3 years has raised concerns about its potential impact on language delay and autistic-like symptoms (Hermawati et al., 2018). P3 stated that after turning off the TV, she observes behaviours in her child such as continuing to sit where she watched the screen for a certain period, not knowing what to do, and drifting off.

Additionally, P1 and P4 specifically noted challenges in terminating screen time. The challenges of negotiating screen use limits between parents and children have also been identified, highlighting the need for effective strategies to manage screen time in early childhood (Domoff et al., 2021).

In conclusion, while screen media may offer potential benefits for language acquisition, such as exposure to English language content, it is crucial to consider the broader implications and challenges associated with excessive screen time in preschool children.

**5.1.4.2 Underlying Reasons of Screen Use.** The exploration of patterns, motivations, and contextual circumstances shaping screen use among children revealed insightful perspectives from parents. The findings highlighted several recurring reasons driving children's engagement with screens. Primarily, screens served as a source of entertainment, particularly for watching cartoons, satisfying the child's entertainment needs, and coping with boredom.

Some of the participants mentioned the appeal of screen time through its association with real-life entertainment, emphasizing that it's full of possibilities and

charming to children. Additionally, participants mentioned that children have screen time for relaxation when parents need a break or when again parents are occupied with work or chores. These findings are consistent with previous research on children's screen time and parental perspectives (Eales et al., 2021; Määttä et al., 2017; Lampard et al., 2013; Andriyani et al., 2021). Eales et al. (2021) highlighted the influence of distal, proximal, and maintaining factors, including the COVID-19 pandemic, on children's screen time and problematic media use. Määttä et al. (2017) emphasized the importance of parental attitudes and self-efficacy in limiting children's screen time. Lampard et al. (2013) identified demographic, family, and community contextual factors associated with low-income parents' restriction of child screen time. Andriyani et al. (2021) discussed the psychological, behavioural, and physiological effects of excessive screen time and the benefits of physical activity. Moreover, studies exist that provide insights into the impact of screen time on various aspects of children's well-being. Accordingly, a study conducted by Radesky et al. (2015) investigated the utilization of mobile and interactive media among young children, delving into various aspects related to screen dependency and the role of technology. It examines how technology influences relaxation, social interactions, and entertainment in the context of young children's usage patterns. Through this exploration, it attempts to provide insights into both the positive and negative impacts of screen engagement on this demographic.

Furthermore, Zhang et al. (2022) highlighted the transmission of psychological distress and lifestyles from parents to children during the COVID-19 pandemic, including the influence of parents' depression and anxiety on children's screen time. These findings underscore the reasons for children's screen use, influenced by various factors such as parental attitudes, contextual circumstances, and the broader social environment. Understanding these patterns and motivations is important for developing effective strategies to promote healthy screen habits among children.

**5.1.4.3 Limitations and Restrictions of Screen Time.** The qualitative study examines the perspectives of parents regarding screen use, encompassing their experiences, emotions, limitations, and idealized perceptions related to digital media engagement for children. The findings highlighted versatile viewpoints encompassing the feelings associated with screen-free days, strategies for imposing limitations and

restrictions, and conceptualizations of ideal screen use within familial settings. These findings are consistent with previous research on parental influences on children's screen time and the home environment's role in shaping children's screen habits (Birken et al., 2011; Gordon-Hacker & Gueron-Sela, 2020; Holloway et al., 2013; Määttä et al., 2017; López-Gil et al., 2020; Oflu et al., 2021; Rabbani et al., 2022; Rai et al., 2022; Xu et al., 2015; Zhang et al., 2022).

The discussions surrounding screen-free days revealed varied sentiments among participants, reflecting the complex emotional landscape of managing children's screen time. Some parents expressed ease in managing screen-free days, emphasizing positive experiences where alternative activities effectively replaced screen time, aligning with previous findings on the impact of the home environment on children's screen time (Määttä et al., 2017; Rai et al., 2022; López-Gil et al., 2020). However, contrasting emotions surfaced, as parents articulated personal challenges and feelings of disconnection, symbolizing dependence on screens, which is consistent with studies linking excessive screen time to emotional variability in preschool children (Oflu et al., 2021).

Participants commonly outlined strategies for regulating screen time and content, emphasizing the importance of parental attention and active intervention in managing children's screen interactions. This aligns with previous research highlighting the influence of parental attitudes and behaviours on children's screen time (Birken et al., 2011; Xu et al., 2015; Zhang et al., 2022; Rabbani et al., 2022). The avoidance of platforms like YouTube and the imposition of time restrictions and content screening underscored the proactive stance of parents in shaping their children's media exposure, consistent with studies emphasizing the impact of parental influences on children's screen time (Burroughs, 2017; Xu et al., 2015; Zhang et al., 2022; Rabbani et al., 2022).

The perspectives on ideal screen usage for children exhibited a spectrum of opinions among participants, reflecting the nuanced understanding of the evolving technological landscape and its impact on children. These diverse viewpoints align with previous research emphasizing the need for tailored strategies to address children's screen time and the complex interplay of parental, environmental, and behavioural factors influencing children's screen habits (Xu et al., 2015; Määttä et al.,

2017; Zhang et al., 2022; Rai et al., 2022; Gordon-Hacker & Gueron-Sela, 2020; López-Gil et al., 2020; Rabbani et al., 2022).

The qualitative findings underscored the complexity and diversity of parental perspectives on screen use, emphasizing the need for tailored strategies to navigate screen interactions effectively. These findings contribute to the existing body of literature and quantitative research results on parental influences on children's screen time and the variable nature of children's digital media engagement within family settings.

**5.1.4.4 Parents' screen use patterns.** The qualitative exploration into parental technology use uncovered insights into the reasons driving their screen engagements and the perceptions of children regarding their parents' screen use. The findings highlighted various motivations behind parental screen time, emphasizing factors such as leisure, work-related demands, and the struggle to manage technology use within their own lives as well as its impact on children's perceptions.

The discussions underscored the multifaceted nature of parents' screen engagements, highlighting a convergence of factors driving their technology use. Participants articulated instances where social media browsing, leisure activities, and the appeal of digital content often led to prolonged screen sessions. This habitual engagement with screens, described vividly by several participants, highlighted the challenge of disengaging once engrossed in digital platforms (P1, P4, P7, P8). The opinions reflected a sense of dependency on screens, where technology served as an avenue for relaxation, social connection, and entertainment, contributing to prolonged screen time.

Furthermore, the study by Rieger et al. (2014) shared that relaxation and entertainment needs significantly predicted life satisfaction, indicating the importance of these motivations in influencing screen use (Bente & Feist 2000; Rubin, 1983). Similarly, Elias & Sulkin (2019) highlighted the relationship between toddlers' screen time and parents' use of media as a parenting tool, emphasizing the role of screens in providing entertainment and relaxation for both parents and children.

Overall, the studies support the notion that parents use screens for entertainment and relaxation, seeking relief from stress and enjoying leisure activities.

Participants provided insights into their children's perspectives on parental screen use, revealing a recurring theme wherein children viewed their parents as frequent users of screens. The children's perceptions centered around the consistent presence of screens in their parents' activities, often leading to feelings of neglect or being second to the screens. Parents acknowledged their children's observations, recognizing instances where their own screen use contradicted the instructions they imparted to their children. This discrepancy between parental actions and guidance creates a sense of disillusionment in children, leading them to question the authenticity of parental engagement (P4, P5, P8, P9). Regarding this issue, some parents expressed that they chose to avoid using their smartphones in the presence of their child and this decision could be influenced by their level of attachment to their mobile devices. Parents with a strong attachment to their mobile devices may find it challenging or may be unwilling to regulate their mobile usage in front of their child. This observation may clarify why the association with a child's media use is linked to parental mobile attachment rather than their actual mobile usage (Konok et al., 2020). The discussions unveiled an awareness among parents regarding the significance of modelling screen use behaviour for their children (Birken et al., 2011; Holloway et al., 2013; Domorff et al., 2020). While some parents acknowledged their struggle to serve as positive models due to their own screen dependency, others reflected on the need to align their actions with the directives given to their children. Participants recognized the inherent contradiction between advising moderation in screen use and their own challenges in adhering to similar principles, expressing concerns about failing to set an adequate example for their children (P4, P5, P9).

The qualitative findings highlighted the intricate relationship between parental screen use motivations, children's perceptions of parental engagements, and the challenges in demonstrating consistent behavioural models. The discrepancies observed between parental guidance and personal screen engagements underscored the complexity of balancing technological engagements while attempting to establish responsible screen use models for children. This emphasizes the imperative need for parental reflection and proactive measures to align their own screen use behaviours with the desired examples they aim to set for their children.

**5.1.4.5 Internet Parenting Styles.** The qualitative results regarding preschool children's use of technology and internet parenting styles provide valuable insights into the dynamics of parent-child interactions, establishment of household rules, and parent-child conflicts. These findings shed light on the various aspects of parenting styles and their impact on children's technology use.

The theme of parent-child interactions encompasses shared activities, parents' relationship with their own parents, and parental screen use during childhood. The findings reveal that parents engage in a variety of activities with their children, including outdoor activities, creative pursuits, and social interactions. This aligns with the concept of "positive parenting," which emphasizes the importance of spending quality time with children and fostering positive parent-child relationships (Sanders, 2012). The participants' emphasis on joint decision-making and shared activities reflects the principles of authoritative parenting, which is associated with positive child outcomes (Baumrind, 1991). Furthermore, the participants' recollections of their own childhood experiences and screen usage highlight the intergenerational transmission of parenting practices. Research has shown that parents' own experiences during childhood can influence their parenting styles and attitudes toward technology use (McDaniel & Radesky, 2018). The positive memories shared by some participants regarding their relationships with their parents and limited screen time during childhood resonate with the concept of "childhood nostalgia" and its impact on parenting practices (Merrill & Fivush, 2016).

The establishment of household rules emerged as a significant aspect of internet parenting styles, encompassing the decision-making process behind rules, flexibility within rules, and specific rules related to screen time and self-care. The participants' discussions regarding the collaborative establishment of rules align with the principles of democratic parenting, which emphasizes open communication and mutual decision-making between parents and children (Baumrind 1991; Dix, 1993). This approach has been associated with positive child outcomes and the development of self-regulation skills (Dix, 1993). The flexibility observed within screen-time rules, particularly during holidays and when children are with caregivers other than parents, reflects the challenges of maintaining consistent rules across different contexts. This resonates with the concept of "domain-specific approach of parenting" (Arim et al., 2010; Smetana, 2017) which emphasizes the need to adapt parenting practices to different

environments while maintaining a sense of consistency (Larzelere & Kuhn, 2005). The participants' experiences highlight the complexities of rule enforcement and the need for flexibility within parenting approaches.

The subject of parent-child conflict highlights the challenges and resolutions associated with conflicts related to technology use and other daily routines. The conflicts described by the participants, such as disagreements over screen time and struggles with compliance, reflect the inherent tensions within parent-child relationships. These conflicts align with the broader literature on parent-child interactions and the complexities of setting and enforcing rules within the family context (Kuczynski, 2003). The participants' strategies for resolving conflicts, such as communication and understanding, resonate with the principles of positive discipline and effective conflict resolution within the parent-child relationship (Nelsen, 2011). The acknowledgment of conflicts and the subsequent efforts to address them reflect the importance of promoting healthy communication and problem-solving skills within the family dynamic. In conclusion, the qualitative results provide valuable insights into the multifaceted nature of internet parenting styles and their impact on preschool children's technology use.

## **5.2 Conclusion**

In conclusion, this research aimed to identify and understand the current situation of screen media use of preschool children, its tendency to problematic media use and its relations to internet parenting styles. Firstly, the researcher sought to determine whether problematic media use of children is associated with their parents' internet parenting styles. The findings indicated that parental styles do not serve as predictors for children's problematic media use. Moreover, no significant correlations were found between children's problematic media use and the level of parental control or warmth within the family dynamic. The study found that as the minimum or maximum time spent by the child on screen increased, differences in problematic media use scores were observed. These differences were evident in children who used screen time while their parents were busy, during travel, preferred watching YouTube, used digital media devices alone, resisted turning off the screen, reflected screen content in their games and toy choices, and had less time between bedtime and the end of screen time. The research also highlighted the importance of parental attitudes

towards screen media use, indicating that as parents' daily screen time increased, their children were more likely to have problematic media use tendencies. Additionally, despite imposing restrictions and supervision on their children's media use, some parents admitted to having excessive screen time themselves, thus failing to serve as good role models for their children. Regarding internet parenting styles, the study examined the results under two sub-factors: family control and family warmth. The findings revealed that family control scores decreased when children felt the need to look at screens while eating. Similarly, the ability of children to access content independently while using screens was associated with lower family control scores. Furthermore, the study found that as parents' daily screen time increased, family control decreased. Additionally, both family control and family warmth scores decreased if parents believed their children used screen excessively, aligning with qualitative findings that highlighted conflicts arising from screen time regulations within families. In conclusion, the study's findings suggest that parents and children rely less on screen time when alternative activities are available. Moreover, the research illuminates the significant influence of parental screen time on children's media use habits and the importance of parental warmth in regulating and monitoring screen time. The study also highlights the challenges faced by parents in setting and enforcing screen time rules, as well as their perceptions of the evolving nature of parent-child relationships in the context of screen media use. Looking ahead, many parents expressed concerns about the potential escalation of conflicts over screen time as their children grow older. Despite acknowledging the negative impacts of excessive screen time, some parents remained hopeful about finding a balance. It's evident that today's parents navigate a vastly different landscape of screen media compared to their own childhoods, which were characterized by more limited screen exposure and greater opportunities for outdoor play and parental interaction.

These findings contribute to a deeper understanding of the complex dynamics between screen media use, parenting styles, and children's behaviours, providing valuable insights for educators, policymakers, and parents in promoting healthy screen media use among preschool children.

## **5.3 Recommendations**

### **5.3.1 Recommendations for Researchers**

- Acknowledging that each parent may prioritize different issues, future research should explore how this variability contributes to the adoption of various parenting styles. This could involve investigating the impact of inconsistent parenting on children's media use behaviours and the development of problematic media use.
- There is a need for further studies to examine the combined impact of both parents' internet parenting styles, aiming to understand the concept of 'family styles'. This research could provide valuable insights into the dynamics of dual parenting styles and their influence on children's media use habits.
- Exploring cultural and geographical variations in parenting styles and their influence on problematic media use is essential. Comparative studies across different cultural and geographical contexts can shed light on the diverse factors shaping internet parenting styles and their impact on children's media use behaviours.
- Conducting longitudinal studies to investigate the lasting impact of early exposure to media and parental screen time on cognitive, social, and emotional development in children is crucial. Long-term assessments can provide valuable insights into the enduring effects of internet parenting styles on children's overall development.
- A further and wider study could be conducted to examine socio-cultural and regional differences in media use and their implications for children's digital behaviour. This research could contribute to a comprehensive understanding of the contextual factors influencing media use of children.
- Future research could explore different aspects of how preschool children interact with media, with a particular focus on understanding the roles of parents and the surrounding context. This could involve studying how parents engage with their children during media viewing compared to when children view media alone. Additionally, researchers could investigate the specific situations that prompt screen time and consider other contextual factors that might influence children's media usage patterns.

- Future studies may narrow down on the specific types of content that have a significant impact on children. This may involve discerning between educational and non-educational content to understand which genre resonates more profoundly with children.
- Future research may focus on the relationship between parental stress and children's screen time in order to examine possible reasons for parents to navigate their children to screen time.
- Future research may focus on parental overprotection and screen time habits of preschool children in order to see the possible positive or negative effects of parental attitudes.
- A qualitative study may be conducted in order to observe children's screen time activities and reactions after the screen time ends.

### **5.3.2 Recommendations for Parents**

- Providing parents with educational resources on the potential risks of excessive screen time and strategies to create a balanced media environment at home is essential. This could involve the development of educational materials and workshops aimed at raising awareness about healthy media use practices for preschool children.
- Parents should be encouraged to engage in co-using or co-playing activities with their preschoolers. This can involve promoting joint media activities that facilitate parental guidance and active participation in children's digital experiences, thereby promoting a balanced and supportive media environment.
- Parents should be informed about the importance of digital role modelling. By raising awareness about the impact of parental digital behaviours on children's media use patterns and attitudes towards technology, parents can be empowered to serve as positive role models in managing screen time and fostering healthy digital habits within the family. Providing guidance on responsible digital use, setting clear boundaries around screen time, and modelling balanced screen habits themselves can help parents effectively demonstrate healthy digital behaviours to their children.
- Parents should be informed about screen control options. By educating parents about tools and strategies for managing screen time, they can effectively guide

their children towards healthier and balanced use of technology.

- Parents should be informed about the significance of physical activity for children. This can be achieved by developing educational initiatives aimed at informing parents about the benefits of physical activity and providing practical guidance on how to incorporate it into their children's daily routines. Additionally, exploring the effectiveness of various communication channels and strategies for disseminating this information to parents, such as workshops, informational materials, and digital platforms, could help tailor interventions to better meet the needs of diverse parental populations.
- Spending time outdoors together as a family encourages children to rely less on screen time. By organizing activities such as outdoor adventures, park visits, or game nights, parents can reduce their children's screen dependency. This way, children are encouraged to explore natural interactions and outside world while strengthening family bonds.
- Parents should be informed about the significance of social learning during family mealtimes. By emphasizing the value of shared meals as opportunities for communication, bonding, and modelling healthy eating behaviours, parents can be encouraged to prioritize regular family mealtimes as a means of promoting positive social interactions and reinforcing healthy dietary and screen time habits among children.
- Families allowing children to use devices unsupervised often experience higher levels of problematic media use. To address this issue, implementing structured screen time guidelines and fostering open communication about media consumption within the family are recommended. Encouraging parents to set clear boundaries on device usage, regularly monitor their children's online activities, and engage in conversations about responsible media consumption can help mitigate the risks associated with excessive screen time.
- Parents should establish clear house rules for screen time. They should set specific guidelines for duration, content quality, and designated screen-free zones. Consistently they should apply these rules and prioritize alternative activities like outdoor play and family bonding. Additionally, they should stay informed about evolving technology and adjust rules accordingly.
- Parents should ensure that the content their preschool-aged children access is

age-appropriate and educational. They can utilize platforms or apps specifically designed for children, which often offer curated content with minimal or no advertisements. When allowing access to platforms like YouTube, they should use parental controls to restrict access to inappropriate content and minimize exposure to ads. Additionally, they may consider subscribing to ad-free versions of streaming services or utilizing ad blockers on web browsers to create a more child-friendly online environment.

- Parents should also consider co-viewing strategies when their preschool-aged children access platforms like YouTube if avoiding them is impossible. By watching content together, they can monitor the material their children are exposed to, discuss any potential concerns or questions, and reinforce positive behaviours and values. Co-viewing allows parents to actively engage with their children's media consumption, promoting a safer and more educational viewing experience.

### **5.3.3 Recommendations for Educators**

- Educational institutions can play a crucial role in promoting awareness about the impact of excessive screen time and encouraging balanced media use in both home and school environments. Collaborative efforts between parents and educational institutions can foster a supportive environment for promoting healthy media habits in preschool children.
- Educators should integrate digital literacy skills into their curriculum, teaching students how to critically evaluate online content, recognize advertising tactics, and make responsible choices about screen media usage.
- Educators should provide students with access to high-quality, age-appropriate educational content and digital resources. They can collaborate with librarians and educational technology specialists to curate a collection of digital materials that align with curriculum objectives and promote meaningful learning experiences.
- Educators should integrate media literacy lessons into the curriculum to help students develop critical thinking skills and become discerning consumers of media. They can teach them how to analyze and deconstruct media messages,

identify bias and misinformation, and navigate digital spaces safely and responsibly.

- Educators can serve as role models by demonstrating balanced screen media usage themselves. They should also encourage breaks from screens during classroom activities and incorporate offline learning experiences whenever possible especially for preschool aged children.
- They should educate students about their rights and responsibilities as digital citizens, emphasizing the importance of respecting others online and protecting their privacy.
- Educators should stay up-to-date with the latest research and best practices in digital citizenship and screen media usage. They should be willing to adapt teaching strategies and policies in response to emerging technologies and changing societal norms.

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