



**The Impact of Parental Migration on Emotional Health of Left Behind Children:
A Study with Brazilian Immigrants in The United States**

DOCTORAL THESIS

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Universitat Jaume I Doctoral School

The Impact of Parental Migration on Emotional Health of Left Behind Children:

A Study with Brazilian Immigrants in The United States

DOCTORAL THESIS

Presented by Liliane Clark in Partial Fulfillment of the Requirements

for the Degree of Doctor of Philosophy

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ABSTRACT

Although immigration is part of the geopolitical landscape in the United States, there is little research investigating the harmful effects caused by parental migration on left behind children's mental health. This is the first known study conducted in the country that investigated the impact of parental migration on the emotional health of Brazilian left behind children. The sample comprised of 50 participants. The mean separation time found between children and parents was 7.33 years. In some the separation was still ongoing. The Strengths and Difficulties Questionnaire (SDQ) and an interview were utilized in this study. The SDQ results revealed that participants had problems in one or more of the following areas: emotional symptoms, conduct problems, hyperactivity and peer problems. Surprisingly, 80 percent of the participants showed no problems regarding prosocial abilities. Significant positive correlations were found between the following scales: prosocial and peer problems, emotional problems and hyperactivity, conduct problems and hyperactivity and finally, between prosocial and conduct problems. Additionally, it was observed that being left by the mother seems to be more damaging than being left by the father or both parents. It was also found that girls are apparently more prone to develop emotional problems than boys. On top of these results, a range of symptoms was reported by the participants. They were previously diagnosed or had received treatment for problems such as, anxiety disorder, panic disorder, eating disorder, depression, psychotic-like experiences, abuse of alcohol/drugs, suicide ideation, loneliness, and low self-esteem. This research substantiates the hypothesis that parental migration causes a hurtful impact on emotional health of left behind children and can be used as a guide for welfare policies and to design intervention programs.

Keywords: Abandonment, parent migration, psychological issues, trauma

RESUMEN

La inmigración es parte del panorama geopolítico en Estados Unidos. Sin embargo, sorprendentemente hay poca investigación que explora el trauma causado por esta separación y sus consecuencias sobre la salud mental de esos niños. Este es el primer estudio conocido realizado en el país que investiga el impacto de la migración de los padres en la salud emocional de 50 brasileños separados de sus padres. El tiempo medio de separación entre hijos y padres fue de 7,33 años. En algunos casos, la separación aún estaba en curso. En este estudio se utilizó el Cuestionario de Fortalezas y Dificultades (SDQ) y una entrevista. Los resultados del SDQ revelaron que los participantes tenían problemas en una o más de las siguientes áreas: síntomas emocionales, problemas de conducta, hiperactividad y problemas con los compañeros. Sorprendentemente, el 80 por ciento de los participantes no mostró problemas relacionados con las habilidades pro sociales. Se encontraron correlaciones positivas significativas entre las siguientes escalas: problemas pro sociales y con los compañeros, problemas emocionales e hiperactividad, problemas de conducta e hiperactividad y problemas pro sociales y de conducta. Además, se observó que ser dejado por la madre parece ser más dañino que ser dejado por el padre o ambos padres, y que las niñas son más propensas a desarrollar problemas emocionales que los niños. También, los participantes informaron de una variedad de síntomas: ansiedad, ataques de pánico, trastorno de la alimentación, experiencias de tipo psicótico, soledad, depresión, consumo de alcohol/drogas, ideación suicida y baja autoestima. Esta investigación corrobora la hipótesis de que la migración de los padres causa un impacto dañino en la salud emocional de los niños y puede utilizarse como guía para políticas de bienestar y para planificar programas de intervención.

Palabras clave: Abandono, migración de padres, problemas psicológicos, trauma.

DEDICATION

*To my children, Daniel and Gabriella,
who continuously teach me something new and,
always inspire me to renew myself and go beyond the horizons*

ACKNOWLEDGEMENTS

This research could not be possible without the contribution of many of my clients and the Brazilian community in general, which awakened me to the need for a scientific study that provides information about the impact of parent migration on the emotional health of left behind children. I am very grateful to everyone who contributed to this research because, despite being a very delicate and difficult topic to be addressed and explored, the participants courageously accepted to talk about it and thus, contributed enormously to the study being carried out.

I would particularly like to acknowledge the guidance of Dr. Azucena Garcia-Palacios, my Doctoral Thesis Director, who holds an impressive and vast knowledge coupled by a great ability to teach and guide. Dr. Garcia-Palacios amazingly preceded me through this rich experience as a doctoral student at Universitat Jaume I and, I cannot thank her enough. I also want to thank my tutor, Juana Bretón López.

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Knowledge will enrich your lives and cannot ever be taken from you. I love you to the moon and back!

LIST OF ABBREVIATION AND ACRONYMS

Borderline Personality Disorder	BPD
Child Health and Migrant Parents in Southeast Asia	CHAMPSEA
Children’s Companion Mother Program	CCMP
Common Mental Disorder	CMD
Department of Children and Family.....	DCF
Left Behind Adolescents	LBA
Left Behind Children.....	LBC
Psychotic-Like Experience	PSE
Post-Traumatic Symptomatic Disorder	PTSD
Strengths and Difficulties Questionnaire.....	SDQ

TABLE OF CONTENTS

Abstract.....	vi
Resumen	viii
Dedication.....	ix
Acknowledgments.....	x
List of abbreviations and acronyms.....	xi
Table of Contents.....	xii
List of Tables	xix
List of Figures.....	xxv
Deontological Letter.....	xxviii
Chapter 1: Introduction.....	1
1.1 Migration and Left Behind Children.....	1
1.2 Parental migration may affect Left Behind Children.....	3
1.3 Lack of literature in Europe and America	4
1.4 The reasons Children are left behind.....	5
1.5 The caregivers of Left Behind Children.....	6
1.6 Long term versus short term parental separation from LBC.....	8
1.7 The psychological, psychosocial, educational and behavioral problems.....	9
1.8 The current immigration scenario in the United States.....	19
1.9 Mediator factors can help ameliorate LBC’s emotional conditions...	24
1.10 The state of the art of left behind children literature and its guidance for this current study	28
Chapter 2: Method	30

2.1 Objective and Hypothesis	30
2.1.1 Objective and Hypothesis 1: Age and psychological problems.....	30
2.1.2 Objective and Hypothesis 2: Gender and psychological problems.....	31
2.1.3 Objective and Hypothesis 3: Years of separation and psychological problems.....	31
2.1.4 Objective and Hypothesis 4: Questionnaires responded by parent or self-responded.....	32
2.1.5 Objective and Hypothesis 5: Separation from mother, father or both and psychological problems.....	32
2.1.6 Objective and Hypothesis 6: Reunited with parents or not and psychological problems.....	33
2.1.7 Objective and Hypothesis 7: Emotional problems.....	34
2.1.8 Objective and Hypothesis 8: Conduct problems.....	34
2.1.9 Objective and Hypothesis 9: Hyperactivity.....	34
2.1.10 Objective and Hypothesis 10: Peer problems.....	35
2.1.11 Objective and Hypothesis 11: Prosocial	35
2.1.12 Objective and Hypothesis 12: Total Difficulties.....	35
2.1.13 Objective and Hypothesis 13: Percentage of emotional problems, conduct problems, hyperactivity, peer problems, prosocial and total difficulties	36
2.1.14 Objective and Hypothesis 14: Inter-item correlations between emotional problems, conduct problems, hyperactivity, peer problems and prosocial.....	37

2.2 Participants.....	38
2.3 Materials.....	39
2.4 Procedure.....	46
2.5 Statistical analysis.....	50
2.6 Validity threats	51
Chapter 3: Results	57
3.1 Sample characteristics	57
3.2. Psychological problems	71
3.2.1 Emotional problems	72
3.2.2 Conduct problems	73
3.2.3 Hyperactivity	74
3.2.4 Peer problems	75
3.2.5 Prosocial	77
3.2.6 Total Difficulties	78
3.2.7 Relationship between age and emotional problems.....	79
3.2.8 Relationship between age and conduct problems.....	80
3.2.9 Relationship between age and hyperactivity.....	80
3.2.10 Relationship between age and peer problems.....	81
3.2.11 Relationship between age and prosocial.....	81
3.2.12 Relationship between age and total difficulties.....	82
3.2.13 Relationship between gender and emotional problems.....	83
3.2.14 Relationship between gender and conduct problems.....	85
3.2.15 Relationship between gender and hyperactivity.....	87
3.2.16 Relationship between gender and peer problems.....	89
3.2.17 Relationship between gender and prosocial.....	91

3.2.18 Relationship between gender and total difficulties..... 93

3.2.19 Relationship between years of separation and emotional
problems..... 95

3.2.20 Relationship between years of separation and conduct
problems..... 95

3.2.21 Relationship between years of separation and
hyperactivity..... 96

3.2.22 Relationship between years of separation and peer
problems..... 96

3.2.23 Relationship between years of separation and
prosocial..... 97

3.2.24 Relationship between years of separation and total
difficulties..... 97

3.2.25 Relationship between questionnaires responded by
parent or self-responded and emotional problems..... 98

3.2.26 Relationship between questionnaires responded by
parents or self-responded and conduct problems..... 98

3.2.27 Relationship between questionnaires responded by
parents or self-responded and hyperactivity..... 104

3.2.28 Relationship between questionnaires responded by
parents or self-responded and peer problems..... 106

3.2.29 Relationship between questionnaires responded by
Parents or self-responded and prosocial..... 108

3.2.30 Relationship between questionnaires responded by
parents or self-responded and total difficulties..... 111

3.2.31 Relationship between reunited with parent or not and emotional problems.....	114
3.2.32 Relationship between reunited with parent or not and conduct problems.....	116
3.2.33 Relationship between reunited with parent or not and hyperactivity.....	119
3.2.34 Relationship between reunited with parent or not and peer problems.....	121
3.2.35 Relationship between reunited with parent or not and prosocial.....	124
3.2.36 Relationship between reunited with parent or not and total difficulties.....	126
3.2.37 Relationship between separated from mother, father or both and emotional problems.....	128
3.2.38 Relationship between separated from mother, father or both and conduct problems.....	131
3.2.39 Relationship between separated from mother, father or Both and hyperactivity.....	133
3.2.40 Relationship between separated from mother, father or both and peer problems.....	136
3.2.41 Relationship between separated from mother, father or both and prosocial.....	139
3.2.42 Relationship between separated from mother, father or both and total difficulties.....	142
3.2.43 Percentage of emotional problems, conduct problems,	

hyperactivity, peer problems, prosocial and total difficulties.....	145
3.2.44 Inter-Item correlations between emotional problems, conduct problems, hyperactivity, peer problems and prosocial.....	148
Chapter 4: Discussion.....	152
4.1 Results related to objective and hypothesis 1: Age and psychological problems.....	153
4.2 Results related to objective and hypothesis 2: Gender and psychological problems.....	154
4.3 Results related to objective and hypothesis 3: Years of separation and psychological problems.....	155
4.4 Results related to objective and hypothesis 4: Questionnaires responded by parents or self-responded and psychological problems.....	156
4.5 Results related to objective and hypothesis 5: Separation from mother, father or both and psychological problems.....	158
4.6 Results related to objective and hypothesis 6: Reunited with parents or not and psychological problems.....	161
4.7 Results related to objective and hypothesis 7: Emotional problems...	162
4.8 Results related to objective and hypothesis 8: Conduct problems.....	163
4.9 Results related to objective and hypothesis 9: Hyperactivity	163
4.10 Results related to objective and hypothesis 10: Peer problems	164
4.11 Results related to objective and hypothesis 11: Prosocial	164
4.12 Results related to objective and hypothesis 12: Total difficulties	165
4.13 Results related to objective and hypothesis 13: Percentage of emotional problems, conduct problems, hyperactivity, prosocial and	

total difficulties.....	166
4.14 Results related to objective and hypothesis 14: Inter-item correlations between emotional problems, conduct problems, hyperactivity, prosocial and total difficulties	167
4.15 What was not assessed in this study	169
4.16 Left behind children mental health information provided by the participants during the interview.....	170
Chapter 5: Conclusion.....	172
5.1 The outcome of this study.....	172
5.2 How useful this study can be?	173
References.....	180
Appendix A: The Strengths and Difficulties Questionnaire SDQ	188
The Questionnaires P 4– 17.....	189
The Self Responded Questionnaire S 18 +.....	191
Appendix B: The Strengths and Difficulties Questionnaire SDQ: The Scoring.....	193
Appendix C: The Interview	198

LIST OF TABLES

Table 1 Frequency of the Age of the Participants	58
Table 2 Statistics of the Age of the Participants	59
Table 3 Crosstabulation of Relationship Between Age of the Participants and Questionnaires Responded by Parent or Self-Responded.....	60
Table 4 Chi- Square Tests of Relationship Between Age of the Participants and Questionnaires Responded by Parent or Self-Responded	61
Table 5 Frequency of Gender of the Participants.....	62
Table 6 Frequency of Years of Separation	64
Table 7 Statistics of Years of Separation	65
Table 8 Frequency of Questionnaires Responded by Parent or Self-Responded..	66
Table 9 Frequency of Participants who Reunited with Parents.....	67
Table 10 Frequency of Separation from Mother, Father or both Parents	68
Table 11 Crosstabulation of Relationship between Questionnaires Responded by Parent or Self-Responded and Reunited with Parent or not.....	70
Table 12 Chi-Square Tests of Relationship between Questionnaires Responded by Parent or Self-Responded and Reunited with Parent or not.....	70
Table 13 Frequency of Emotional Problems.....	72
Table 14 Frequency of Conduct Problems	73
Table 15 Frequency of Hyperactivity	75
Table 16 Frequency of Peer Problems.....	76
Table 17 Frequency of Prosocial	77
Table 18 Frequency of Total Difficulties	78
Table 19 Relationship between Age and Emotional Problems.....	80

Table 20 Relationship between Age and Conduct Problems.....	80
Table 21 Relationship between Age and Hyperactivity.....	81
Table 22 Relationship between Age and Peer Problems.....	81
Table 23 Relationship between Age and Prosocial.....	82
Table 24 Relationship between Age and Total Difficulties.....	82
Table 25 Crosstabulation of the Relationship between Gender and Emotional Problems	83
Table 26 Chi-Square Tests of the Relationship between Gender and Emotional Problems	84
Table 27 Crosstabulation of the Relationship between Gender and Conduct Problems.....	85
Table 28 Chi-Square Tests of the Relationship between Gender and Conduct Problems	86
Table 29 Crosstabulation of the Relationship between Gender and Hyperactivity	87
Table 30 Chi-Square Tests of the Relationship between Gender and Hyperactivity.....	88
Table 31 Crosstabulation of the Relationship between Gender and Peer Problems.....	89
Table 32 Chi-Square Tests of the Relationship Between Gender and Peer Problems.....	90
Table 33 Crosstabulation of the Relationship between Gender and Prosocial.....	91
Table 34 Chi-Square Tests of the Relationship between Gender and Prosocial...	92
Table 35 Crosstabulation of the Relationship between Gender and Total Difficulties	93

Table 36 Chi Square Tests of the Relationship between Gender and Total Difficulties.....	94
Table 37 Relationship between Years of Separation and Emotional Problems...	95
Table 38 Relationship between Years of Separation and Conduct Problems.....	96
Table 39 Relationship between Years of Separation and Hyperactivity.....	96
Table 40 Relationship between Years of Separation and Peer Problems.....	97
Table 41 Relationship between Years of Separation and Prosocial.....	97
Table 42 Relationship between Years of Separation and Total Difficulties.....	98
Table 43 Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems	100
Table 44 Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems	100
Table 45 Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems.....	102
Table 46 Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems.....	103
Table 47 Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity	105
Table 48 Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity.....	105
Table 49 Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems	107
Table 50 Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems	108
Table 51 Crosstabulation of the Relationship between Questionnaires	

Responded by Parent or Self-Responded and Prosocial.....	110
Table 52 Chi-Square Tests of the Relationship between Questionnaires	
Responded by Parent or Self-Responded and Prosocial.....	110
Table 53 Crosstabulation of the Relationship between Questionnaires	
Responded by Parent or Self-Responded and Total Difficulties	112
Table 54 Chi-Square Tests of the Relationship between Questionnaires	
Responded by Parent or Self-Responded and Total Difficulties.....	113
Table 55 Crosstabulation of the Relationship between Reunited with Parent or not and Emotional Problems	115
Table 56 Chi-Square Tests of the Relationship between Reunited with Parent or not and Emotional Problems	115
Table 57 Crosstabulation of the Relationship between Reunited with Parent or not and Conduct Problems	117
Table 58 Chi-Square Tests of the Relationship between Reunited with Parent or not and Conduct Problems	118
Table 59 Crosstabulation of the Relationship between Reunited with Parent or not and Hyperactivity	120
Table 60 Chi-Square Tests of the Relationship between Reunited with Parent or not and Hyperactivity	120
Table 61 Crosstabulation of the Relationship between Reunited with Parent or not and Peer Problems.....	122
Table 62 Chi-Square Tests of the Relationship between Reunited with Parent or not and Peer Problems	123
Table 63 Crosstabulation of the Relationship between Reunited with Parent or not and Prosocial	124

Table 64 Chi-Square Tests of the Relationship between Reunited with Parent or not and Prosocial	125
Table 65 Crosstabulation of the Relationship between Reunited with Parent or not and Total Difficulties	127
Table 66 Chi-Square Tests of the Relationship between Reunited with Parent or not and Total Difficulties	127
Table 67 Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Emotional Problems	129
Table 68 Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Emotional Problems	130
Table 69 Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Conduct Problems	132
Table 70 Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Conduct Problems	132
Table 71 Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Hyperactivity	135
Table 72 Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Hyperactivity	135
Table 73 Crosstabulation of the Relationship with Separated form Mother, Father or Both Parents and Peer Problems	138
Table 74 Chi-Square Tests of the Relationship with Separated from Mother, Father or Both Parents and Peer Problems	138
Table 75 Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Prosocial	141

Table 76 Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Prosocial	141
Table 77 Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Total Difficulties	144
Table 78 Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Total Difficulties	144
Table 79 Percentage of Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties	147
Table 80 Inter-Item Correlations between Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems and Prosocial	151
Table B1 Scoring symptoms on the SDQ for 4-17 years old and 18+	195
Table B2 Categorizing SDQ scores for 4-17 years old and 18+	197

LIST OF FIGURES

Figure 1 Percentage of the Age of the Participants.....	59
Figure 2 Relationship between Age of the Participants and Questionnaires Responded by Parent or Self -Responded and Age of the Participants	62
Figure 3 Percentage of Gender of the Participants	63
Figure 4 Percentage of Years of Separation between LBC and Parent	65
Figure 5 Percentage of the Questionnaires Responded by Parent or Self-Responded.....	66
Figure 6 Percentage of Participants who Reunited with Parents	67
Figure 7 Percentage of Separation from Mother, Father or both Parents	69
Figure 8 Relationship between Questionnaires Responded by Parent or Self- Responded and Reunited with Parent or not.....	71
Figure 9 Percentage of Emotional Problems	73
Figure 10 Percentage of Conduct Problems	74
Figure 11 Percentage of Hyperactivity	75
Figure 12 Percentage of Peer Problems	76
Figure 13 Percentage of Prosocial	77
Figure 14 Percentage of Total Difficulties	78
Figure 15 Relationship between Gender and Emotional Problems	84
Figure 16 Relationship between Gender and Conduct Problems	86
Figure 17 Relationship between Gender and Hyperactivity	88
Figure 18 Relationship between Gender and Peer Problems	90
Figure 19 Relationship between Gender and Prosocial	92
Figure 20 Relationship between Gender and Total Difficulties	94

Figure 21 Relationship between Questionnaires Responded by Parent or Self-
 Responded and Emotional Problems 101

Figure 22 Relationship between Questionnaires Responded by Parent or Self-
 Responded and Conduct Problems 103

Figure 23 Relationship between Questionnaires Responded by Parent or Self-
 Responded and Hyperactivity 106

Figure 24 Relationship between Questionnaires Responded by Parent or Self-
 Responded and Peer Problems 108

Figure 25 Relationship between Questionnaires Responded by Parent or Self-
 Responded and Prosocial..... 111

Figure 26 Relationship between Questionnaires Responded by Parent or Self-
 Responded and Total Difficulties 113

Figure 27 Relationship between Reunited with Parent or not and Emotional
 Problems..... 116

Figure 28 Relationship between Reunited with Parent or not and Conduct
 Problems 118

Figure 29 Relationship between Reunited with Parent or not and Hyperactivity ... 121

Figure 30 Relationship between Reunited with Parent or not and Peer Problems....123

Figure 31 Relationship between Reunited with Parent or not and Prosocial 125

Figure 32 Relationship between Reunited with Parent or not and
 Total Difficulties..... 128

Figure 33 Relationship between Separated from Mother, Father or Both Parents
 and Emotional Problems 130

Figure 34 Relationship between Separated from Mother, Father or Both Parents
 and Conduct Problems 133

Figure 35 Relationship between Separated from Mother, Father or Both Parents and Hyperactivity	136
Figure 36 Relationship between Separated from Mother, Father or Both Parents and Peer Problems.....	139
Figure 37 Relationship between Separated from Mother, Father or Both Parents and Prosocial	142
Figure 38 Relationship between Separated from Mother, Father or Both Parents and Total Difficulties	145
Figure 39 Percentage of Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties	148

DEONTOLOGICAL LETTER

Date: vie., 17 ene. 2020 a las 8:48

Subject: Resolució favorable de la Comissió Deontològica

To: <azucena@uji.es>

Azucena García Palacios

Dep. de Psicologia Bàsica, Clínica i Psicobiologia

Facultat de Ciències Humanes i Socials

Us comuniquem que la Comissió Deontològica de la Universitat Jaume I ha emés informe FAVORABLE sobre el projecte núm. expedient "CD/05/2020" The Impact of Parental Migration on Emotional Health of Left Behind Children: A Study with Brazilian Immigrants in the United States sobre la Tesis Doctoral de Liliane Clark , presentada per Azucena García Palacios, per considerar que compleix les normes deontològiques exigides.

La Comissió indica, però, les següents observacions:

El tractament de dades personals d'aquest projecte té naturalesa privada, segons els criteris de la Normativa sobre tesis doctorals subjectes a confidencialitat i tractament de dades personals en treballs acadèmics (aprovada en la sessió número 1-2018 del consell de govern del dia 31 de gener de 2018). Es comunica a la persona sol·licitant que la persona doctoranda ha d'assumir les obligacions del tractament de dades personals que la llei replega. En el present cas, tenint en compte que tot el tractament

de dades presonals es farà als Estat Units d'Amèrica, la doctoranda haurà de vetllar pel compliment en materia de protecció de dades vigent en eixe territori.

Atentament,

Beatriz Susana Tomás Mallén

Secretària de la Comissió Deontològica

Universitat Jaume I

Castelló de la Plana, 16 de gener de 2020

CHAPTER 1

INTRODUCTION

1.1 Migration and Left Behind Children

The present dissertation examined the impact of parental migration on the emotional development of left behind children of Brazilian Immigrants in the United States. The general aim was to start an original line of research with a specific group of settlers exploring psychological consequences of the experiences of being a left behind child because of parental migration. The populace chosen for this study was the Brazilian immigrants living in the United States. This is, actually, the first research that has investigated this phenomenon occurring in this particular cluster of immigrants in America.

Firstly, it is pertinent to understand the concept of migration and the terms utilized in this research. Due to particular conditions and needs, there are parents who are not able to take their children along with them whilst migrating to a new country. The separation may last years and negative emotional effects may certainly be the outcome for both the children who were left behind and their parents. It could be a traumatic experience that can last meaningful periods of time and cause severe damage, particularly for children who are in the beginning or in the middle of their emotional and psychological developmental process.

Left Behind Children (LBC) are usually known as the offspring who are left behind in their original country when their parents immigrate to another part of the nation, or even to another country. Butt (2018) elucidates the matter whilst commenting that, "A child may be physically absent yet vitally present in a family's emotional and strategic landscape. Within transnational families, absent children include, but are not limited to, 'hidden' children who have been given away, left

behind, aborted, fostered, institutionalized or abandoned; desired or imagined children who have never been born; children who are gone but not forgotten; children who live as ghosts in their family's daily lives" (p. 127).

Whereas that author provides an amplified spectrum of the separation regarding the left behind children, other scholars shed more light on understanding the term by saying that "children left behind refers to minors who are left in their home country while one or both of their parents emigrate for work for at least six months. From a quantitative point of view, children left behind in countries with strong migratory pressure are many" (Valtolina & Colombo, 2012, p. 905).

However, the mentioned term's meaning may go beyond geographic explanations and has other dimensions that are explained as it follows: "In the world's richest countries, the term children left behind is used to describe inequalities in child well-being, mainly relating to material well-being, education and health" (Janson, 2014, p. 572). This elucidation where the expression left behind children is directly associated with problems in the well-being can offer a clue on the possible impact of this separation between parents and their children.

Another term comes to the scene while studying this subject: transnational families and migration. Mazzucato et al., (2015) explicates "When parents migrate, leaving their children in the origin country, transnational families are formed. Transnational family studies on children who are "left behind" indicate that children suffer psychologically from parental migration" (p. 215). Here, the authors' avowal indicates that this separation is presumed to be harmful.

In order to gain a little bit of perspective of where the term transnational families can be applicable, Hoang et al., (2015) explains that the transnational family consists of vital members dispersed across international borders (p. 263). On the other

hand, Solheim and Ballard (2016) sustained in their study that there are unique characteristics of ambiguous loss that can impact transnational family practices.

As it is raised here, a phenomenon is the vital key for that type of family separation: Emigration. Exodus has been a very common mean for those who need or want better opportunities in life. There are individuals who see emigration as a way to better provide for their family. Janson (2014) who studied left behind children in China expounds that “Overseas work and employment income are important in countries where unemployment is a large and persistent problem, as they increase households’ resources and support society in general by reducing the unemployment rate” (p. 572).

1.2 Parental migration may affect Left Behind Children

It is common sense that emigrating causes stress and negatively interferes on the emotional well-being of the individual. Several scholars, whilst studying this issue, confirmed these assumptions. Kirchner et al., (2011) from the University of Barcelona, affirm that the following scholars: Achotegui (2002); (2009); Bhugra (2004); Finch et al., (2004); Gruesser et al., (2005); Haasen et al., (2008); Ramos-Villagrasa and García-Izquierdo (2007); along with Smart and Smart, (1995), all agreed whereas addressing that “Emigration can pose a risk to the immigrant’s mental health for several reasons: Acculturation, mourning, new demands, new challenges, conflict, etc” (p.108).

Understandably, it is not easy to immigrate when one has a family. In certain cases, it is not feasible to take the children along whilst one is migrating to a bigger city and that becomes even more difficult when one moves to another country. As a consequence, there are immigrants who choose to leave their children in their native

environment. The separation period of time might vary and seems to leave its damages.

The studies about this phenomenon, immigration and leaving a child behind, indicate that psychological damages can be one outcome. Most scholars raised the possibility of an emotional impact on those affected by the separation, regardless of where the study was conducted.

1.3 Lack of literature in Europe and America.

There are numerous studies that aim to investigate the impact of this separation on LBC and others researches that explore the effects of that separation on the parents. But unfortunately, there is not an extensive literature on the topic conducted in western countries. In fact, the more reasonable amount of research found has been conducted in Asia, whereas there are quite a few limited studies originated in America and Europe.

In Asia, most research is conducted in China because parental migration occurs quite often within the country, from the rural areas to urban areas. Although, regardless of how this migration occurs or where it happens, in the literature review, all scholars raised the possibility of a damaging mental health impact on those affected by this separation.

Due to the high rates of migration in Asia, there is an organization, the Child Health and Migrant Parents in Southeast Asia (CHAMPSEA), that studies the relationships between transnational families and the children's emotional well-being (Graham & Jordan, 2011, p. 767). This, apparently, motivates scholars to continuously examine the issue.

There are several studies that suggest a connection between psychological problems on left behind children. For instance, Gao et al., (2010) investigating the impact of parental migration on health status and health behaviours among left behind adolescents in China, found “that parental migration is a risk factor for unhealthy behaviours amongst adolescent school children in rural China” (p. 1).

In fact, all the literature found points to the damaging consequences of parental migration in those children who did not accompany their parents in this very important change. Throughout this entire chapter, the traced studies confirm the connection between parental migration and problems in the emotional development of left behind children.

1.4 The reasons children are left behind.

Tomsa and Jenaro (2015) contribute to understand the issue by sustaining that “Children left behind while their parents immigrate or travel for employment are becoming a widespread phenomenon for economic reasons, creating potentially stressful and inadequate developmental support for a substantial portion of some countries' working-class populations” (p.485).

Apparently, economic poor conditions are a common reason for emigration. Cheng and Sun (2015) while reviewing studies that report the occurrence of depression and anxiety among left behind children in China cited Duan and Zhou (2005), who affirmed that “Nearly 80% of migrant workers have opted to leave their children in their hometown because they cannot afford to raise them in urban settings. Those children in countryside who stay at home when both of their parents or one parent migrate to urban areas for at least 6 months have been referred to as ‘left-behind children’ (LBC)” (p. 515).

Viet Nguyen (2016) draws attention to the fact that an “important trend associated with economic and medical conditions is improvement in the children’s nutrition and health” (230). The scholar also articulates that the majority of undernourished children live in Asia and Africa. As a consequence of these poor conditions, as the author points out, parental migration generally occurs because the householders seek more ability to bring better income and decent conditions to their families.

Following the line of thought and information given by the mentioned scholar, it is easier to understand the reasons why many Latinos immigrate to the United States. It is also well-known that the Latin America and its countries which are still in development have serious economic problems that are reflected in the general well-being of everyone. Developing children are the ones who pay the most. That is why so many people from countries localized in the south and central America immigrate to the United States. Brazilians are an expressive part of the Latinos who immigrate to the States and are the populace chosen for this present study.

1.5 The caregivers of Left Behind Children.

Cheng and Sun (2015) add that “LBC are usually taken care of by grandparents or someone else from their extended families, and most of them can only live together with their parents once a year during the 7-day Spring Festival Holiday. In other days, LBC can only keep contact with their parents through telephone, message and letters” (p. 515).

Indeed, the chosen person who will raise the child will take on a great responsibility. Understandably, raising a child without the presence of their parents is quite difficult and involves a lot of dedication, patience and love. At some point it can

be really a burden for those who have to take care of the child. Eventually, problems can surface and handling them will not be an easy task.

Apparently, not everyone thinks about how the care givers will be affected by such important task that involves this huge commitment. Graham et al., (2015), studying the parental migration and the mental health of those who stay behind to care for children in South-East Asia, shed light into the topic. They concluded that all stay behind carers in the Indonesian studied populace were more likely than carers in non-migrant families to suffer Common Mental Disorders (CMD).

Their results suggest that it is the “stay-behind mothers with husbands working overseas who are most likely to experience poor mental health” (Graham et al., 2015, p. 225). They examined the subject and warned about the importance of considering the mental health of those who will take care of the left behind children since, this can directly affect the psychological overall condition of the children. If the relationship between the caregivers and the child is not ideal, this can certainly worsen the impact of parental migration on the left behind children.

Following this rationale, it is relevant to consider the mental health of those who will take care of the left behind children regardless of them being the mothers, fathers, grandparents or other relative. If there is an indication of mental problems, intervention programs should be provided so, that caregivers are treated as quickly as possible. This is quite important because, if the caregivers are psychologically negatively affected, this can be passed on to the children who already must cope with the burden of being separated from their migrant parents.

This scenario can be contemplated from a more complex perspective. Lu, et al., (2019), researchers in China, whilst studying the migration and the children’s

psychological development found that “The disadvantage of left-behind children was mediated by their caregivers’ emotional well-being and parenting practices” (130).

Hence, it can be concluded that it is really imperative to pay close attention, take care and provide the right conditions for the caregivers since they are fundamental to help in the development of left behind children. A good and health relationship between caregivers and left behind children is crucial for it can function as a mediator factor that helps to reduce the impact of the parents’ absence.

1.6 Long term versus short term parental separation from LBC.

In 2016, a scholar, Viet Nguyen, conducted a research to verify whether parental migration benefitted left behind children from Ethiopia, India, Peru and Vietnam. The author examined whether parental migration could affect health and cognitive ability of left-behind children aged at 5–8 years old in the mentioned countries. The scholar sustains, based on the results, that “although parental migration increases per capita consumption, it does not improve health and cognitive ability of children”.

In addition, according to the author’s findings, despite the fact that parental migration did not show a meaningful effect on children in Ethiopia, it did seem to “reduce health outcomes of children in the other three countries and decreased the cognitive ability test scores in India and Vietnam”. Furthermore, the scholar affirms that “the negative effect on children tends to be higher for long-term parental migration than short-term parental migration” (Viet Nguyen, 2016, p. 230).

It is reasonable to conclude that the longer the left behind children are away from their parents the more they lose the power of this interaction between them and, this will be reflected in the establishment of possible psychological problems for the

children. It is unfortunate but, in terms of migration to other countries, the separation time period can be literally extended for many years. This will definitely cause its damages to those left behind.

1.7 The psychological, psychosocial, educational, and behavioral problems on LBC.

All reviewed studies suggest a relationship between **psychological problems** on left behind children. To illustrate, a team of scholars studying depression in children who were left behind in China found that the “Children’s Depression Inventory scores of left-behind children are significantly higher than those of non-left-behind children” (Liang et al., 2017, p.1897).

In China, as it was pointed out by the scholars, the left behind children live in the same country as their parents and it still is not easily feasible for them to reunite with their parents. That is even more difficult in the cases where one immigrates to a distant country and it is even more aggravated when the immigrant is not able to return to their native countries for numerous years because they did not have a legal immigration status of permanent residency.

Elucidating it better, in the United States, if the immigrant is not legally documented yet in terms of immigration status, he will not leave the country until he does have the rightful documents otherwise they will not be able to enter the United States again. Sadly, in the States, it is very common to hear people saying that they are in the country for several years, many of them for decades without the possibility to return to their home country because they do not have the proper papers.

In this current study, regarding immigration status, several participants disclosed that they were not documented yet and therefore, they could not return to

their country and see their children. Very often, undocumented immigrants stay a considerable amount of time living separated from their children because of their immigration status of being undocumented.

As they say, they live in a literal asylum because they do not have the proper papers. Many of them will only reunite with their children several years after they left their native country. In this research, several participants commented that the bonding with their children was ruined because of this long separation.

Under the revealed scenario, during this migration process, one can wonder how many children were left behind, for how long and whether they developed emotional and behavioral problems because of this separation. Researchers at University of Barcelona studied the consequences on the mental health of Latin American mothers and fathers who left their children behind and found interesting results. They avow that “Emigrating and having to leave children behind may be a risk factor for the mental health of immigrants” (Kirchner et al., 2011, p. 107). Here an interesting point was raised, the consequences of this separation on the parents who migrated.

In addition, the Spaniard authors emphasize the problem by affirming that “Furthermore, in collectivist cultures (Triandis et al., 1988) such as the Latin American one, which places great emphasis on the closed and extended family, the ambivalence that results from migrating and leaving one’s relatives behind, or indeed remaining and accepting a poorer quality of life, may produce emotional distress (Grzywacz et al., 2006)” (Kirchner et al., 2011, p.108).

Without a doubt, the existing literature brings to light a perspective on how painful and damaging that separation can be for the parents and especially for left behind children who are still in a psychological development process which may lead

to a disastrous outcome later in life. But the mentioned Spaniard authors draw the attention to the Latinos who have a peculiar family constellation.

Undoubtedly, Latin families, such as Brazilian immigrants, who are used to living very close to their relatives suffer greatly from this separation. Particularly when what was left behind was a child.

Additionally, whilst continuing to explore the topic more generally, Graham and Jordan (2011) who studied the psychological well-being of left behind children in southeast Asia found that “Multivariate models show that children of migrant fathers in Indonesia and Thailand are more likely to have poor psychological well-being, compared to children in nonimmigrant households” (p.763). The authors concluded that “The migration of a parent is a process that transforms family relationships and functioning” (p. 765).

Xu et al., (2019) conducted a study that examined the role of the mother versus father absence and the left behind children’s academic accomplishments, cognitive abilities, and emotional well-being. The results of their research revealed that households without a mother was negatively associated with adolescents’ test scores and depressive symptoms, whereas households with absent fathers was rarely associated with negative outcome” (p. 1635). However, the authors elucidate that this phenomenon can occur because of what they call disparities in parenting practices.

Surely, these results might be ambiguous because other factors may intervene, for example the gender of the left behind child, as it was pointed out by other scholars. Faisal and Turnip (2019) in their study, found that speaking of health, their “results indicate that left behind girls were negatively affected by one parent migrating, especially if the migrant parent was the father” (p. 1746).

In addition, the authors emphasize that the discrepancies of parenting practices also played a role on the outcome of the problems presented by left behind children which corroborates what Xu et al., (2019) had pointed out. Besides, Faisal and Turnip (2019) inform that, in China, 61 million rural children have been left by their parents who migrated to the urban cities and 60% live apart from their mother. This current study examines, within the populace studied, whether the children were left by the mother, father or by both parents.

The discussion can go a little further because Tang et al., (2019) found interesting results regarding the gender of left behind children associated with mental health. They studied the health condition of left behind children in rural areas of a province in China and found that there were important differences between left behind children and non-left-behind children on numerous health issues. “However, regarding symptoms like fever, cough or respiratory difficulties, diarrhea and twitch, as well as mental health problems like unhappiness and insomnia, no significant difference was found. Gender difference was also demonstrated showing that girls were more vulnerable than boys to certain symptoms and emotional problems” (p - 1).

Furthermore, a team of researchers, Man et al., (2017), examined the psychological problems and related influential factors of left- behind adolescents (LBA) in Hunan, China and their findings indicate that “Due to lack of companionship of parents, compared with non-left behind children, left behind children (LBC) suffer from more psychological problems compared with children live with their parents”. Their findings suggest that left behind children (LBC) have more severe psychological problems than non-left behind children.

Wickramage et al., (2015) examining the risk of mental health and nutritional problems for left-behind children of international labor migrants affirmed that their

“Findings provide evidence on health consequences for children of migrant worker families in a country experiencing heavy out-migration of labour” (p.1). It is indisputable that migrant worker families will have to deal with the possible problems developed in left behind children because of this separation. Could awareness campaigns help?

Interestingly, Wang et.al., (2017) confirm that assumption when they disclosed that “Migration with parents, rather than separation from parents, was associated with better psychological well-being and fewer behavioural problems” (p. 884). This is a premise that all scholars end up confirming in their studies.

They disclose that their “findings have relevance for migrant parents in helping to inform decisions about where to raise their children as well as for policymakers in countries where migration is a major issue. When children are left behind, models of community support need to be considered, especially for those who are most vulnerable” (p.884).

The authors’ findings resonate with the purpose of this present study: to help provide information for policymakers, the health and education system so, they can all work together to diminish the emotional risks suffered by LBC. Awareness campaigns are certainly a great idea mentioned by Wang et al., (2017) so, parents with the right information can ponder where they want to raise their children.

There is another study conducted by Dai and Chu (2016) that evaluated anxiety, happiness and self-esteem of western Chinese left behind children. Their conclusions revealed that non- LBC showed a higher level of happiness and a lower level of anxiety compared to LBC children.

In an extensive research, Cheng and Sun (2014) reviewed 107 publications about **depression** and **anxiety** among left behind children in China. Their findings

show that “High rates of psychological depression/anxiety were reported among left behind children compared to their age-matched peers” (p.515). Hence, there is in fact indication of an impact of parent migration on emotional development of left behind children.

Furthermore, scholars in Eastern Europe studied parent migration and the psychological health of left behind children in the Romanian Republic of Moldova. They compared the health state of children of migrant parents to children of nonimmigrant parents. The authors found that the migration of “mothers infrequently results in worse **psychosocial** outcomes for children, contrary to what has been assumed in the discourse about parental migration in Moldova” (Vanore et al., 2015, p. 252). This is, surely, a very relevant information regarding this phenomenon.

It is realistic to deduce that a separation in which the parents leave their children behind can be understood as abandonment, further contributing to potential detriments in their health development. Hence, according to the reviewed literature, it is reasonable to infer that the trauma of being abandoned can last significant periods of time and will leave its damages on the children’s overall psychological development. **Behavioral symptoms** such as anxiety disorders, cognitive abilities impairment, depression, loneliness, and other more severe pathological factors may be the outcome of this separation.

To exacerbate the problem, there is a plausible possibility that left behind children will have a reminiscence of the traumatic experience of being abandoned even after reuniting with their parents. The recollection of the trauma of this separation is, apparently, very common in Post-Traumatic Stress Disorder (PTSD). The literature indicate that abandonment can be considered an actual risk to develop serious mental health conditions such as, Post-Traumatic Stress Disorder (PTSD) and

Borderline Personality Disorder (BPD).

The development of dissociative symptoms is also linked to traumatic experiences (i.e., Panova, 2009). This condition can be worsened over time since children who feel that they were abandoned may relive that traumatic experience on a daily basis when they see that their parents are not present.

A quite serious disorder associated to **trauma** and abandonment is the Borderline Personality Disorder (BPD). According to Schmahl et al., (2004) “Borderline personality disorder (BPD) is a highly prevalent and disabling condition linked to early stressors including traumatic abuse and abandonment” (p. 33).

Nevertheless, the authors reveal that “adverse events in the range of emotional abuse or neglect also play a significant role in the development of psychopathology (p. 34). It is very well-known that tribulations during the child’s psychological development course will define their ultimate overall emotional conditions later in life.

Unfortunately, Borderline Personality Disorder is just one possible grave psychopathological outcome for those who suffer a severe trauma of abandonment. Sun et al., (2017) studying the **psychotic-like experiences** (PLEs), trauma and related risk factors among left behind children in China found that “More left behind children reported experiencing PLEs than others. They also scored higher on the overall frequency of PLEs, severity of childhood trauma, and the subjectively perceived psychological impact of trauma both at the time of the events and at present” (p. 43).

Another quite serious problem related to difficulties in the overall mental health is the risk of suicide. Fu et al., (2017) conducted a study with non-left behind children and left behind children with the purpose to investigate whether there was an association between the parental absence and suicide ideation. Their findings suggest

that while compared to non-left-behind children, the left behind children with both parents' absence were more presumably to present suicide ideation. Gao et al., (2010) also confirmed the risk of suicide in left behind children while studying the health status and health behaviors of left behind adolescents in China.

Essentially, the results of all studies found in this literature review imply that emotional or psychological damages are inflicted in left behind children.

A specific problem, **loneliness**, seems to be especially prevalent in LBC. For instance, whilst studying the psychological adjustment among left-behind children in rural China and the role of parental migration and parent-child communication, Su, et al., (2013) found that “on both groups of children with one parent or two parents migrating that were investigated in fact suffered more loneliness compared to the group of children with no parent migrating” (p.162).

Likewise, Jia and Tian (2010), investigating the loneliness of left-behind children by using a cross-sectional survey in a sample of rural China, found that “whether children were left behind or not influenced their likelihood of being lonely”. Their results showed that the left-behind were 2.5 times more likely to suffer from loneliness and 6.4 times more likely to be very lonely when compared to non-left-behind children. Plausibly, they concluded that “Left Behind Children are at significant risk for loneliness” (p.812).

A recent research conducted by Faisal and Turnip (2019), reveal more findings about loneliness in left behind children. The scholars, while studying the predictors of loneliness among the left behind children of migrant workers in Indonesia, found that “Emotional loneliness was more affected by parental absence compared to social loneliness” (p. 1746).

Health status has been also a subject of research. Furthermore, Gao et al., (2010) investigated the impact of parental migration on health status and also on what they called health behaviors among left behind adolescent school children in China. Through their study, the term utilized by the authors, unhealthy behaviors, are interpreted as emotional and conduct problems such as being unhappy, having unhealthy eating habits resulting in being overweight, smoking, alcohol consumption, binge drinking and even presenting suicide ideation.

Bullying victimization can also be a problem endured by LBC. Researchers in China chose to scrutinize the problem. It is unquestionable the repercussions of the damages brought by bullying. Zhang et al., (2019) affirmed that bullying victimization among school-age children is an important public health issue that may affect their well-being and mental health (p.1).

The mentioned researchers examined how bullying impacts left behind children. The study compared children who lived with their parents and left behind children. According to their results, left behind children presented a higher level of victimization compared to non-left behind children. Their findings confirm that the LBC seem to be more prone to suffer bullying compared to the children who lived with their parents. It is well-known that bullying can be harmful to the emotional health of the victim.

The authors sustained that bullying victimization was positively associated with depression through decreased self-compassion and hope. Additionally, their findings point out that self-compassion played a more crucial role than hope in the connection between bullying and depression (Zhang et al., 2019, p-1).

Indeed, this is a quite interesting and innovative study. The scholars thought about measuring the impact hope and self-compassion can have in the healing process

of children who are bullied. This can be used as a guide in intervention programs that work with bullying victims and also in those that aim to help left behind children who are victims of bullying.

Concerning how separation can affect **education** in left behind children, Goldsmith et al., (2018) studied the educational attainment of the LBC of undocumented Mexicans. They avowed that researches had already shown that having undocumented parents lower the educational attainment of children that grew up in the United States. The authors, in their study, aimed to learn how that affected the education area of left behind children in their native countries.

The scholars found that having both parents documented increases the educational attainment of children left behind by over two years in comparison to similar children with mixed-status, undocumented, and nonimmigrant parents. That possibly happens because undocumented immigrants cannot go back to their original country to visit their children who were left behind thus, the separation is felt more intensely.

The researchers add that the negative effect is especially more significant for boys that migrate as teenagers. Education can be pointed as one of these negative outcomes. Goldsmith et al., (2018) emphasize that their findings suggest that “the US immigration laws that define most Mexican immigrants as undocumented have had a devastating effect on the education of Mexican children left behind” (Goldsmith, Flores-Yeffal et al., 2018, p.194).

On the other hand, Chang et al., (2019), Whilst studying parental migration, educational achievement, and mental health of junior high school students in rural China, found that there was “no significant impact of parental migration on the math achievement of LBCs. In terms of mental health, however, our results indicate that

left-behind girls were negatively affected by one parent migrating, especially if the migrating parent was the father” (p. 337).

Thus, although the scholars found no evidence that parental migration affected achievements regarding math specifically, they confirm what other authors say about the detrimental effects that parental migration causes on the mental health of left behind children. But they add a curious information, left behind girls seem to be more affected by their fathers’ migration.

1.8 The current immigration scenario in the United States.

The present research aimed on Brazilians who immigrate to the United States and left their children behind in their home country. There is a substantial amount of this population who do not have green cards and thus, they are not entitled to travel to their original country without relinquishing the ability to return to the United States. Consequently, in many cases, they stay a considerable period living separated from their children.

Official census information that provides data about immigrants was retrieved to better understand the migratory scenario in the United States. Using the latest United States Census Bureau data from 2010 and 2011, Camarota (2012) reveals that there are more than 50 million immigrants (legal and illegal) and their U.S.-born children (under 18) in the United States by country of birth, state, and legal status.

In that same survey data, the number of Brazilian immigrants that live in the United States was 344,714. Unfortunately, there is no information in that Census Bureau data about the children who were left behind in their native country by those who migrated.

It is pertinent to point out that it might be difficult to have the right numbers of immigrants in the United States and, this becomes even more unachievable regarding the topic of left behind children. There are various factors that make it challenging to obtain accurate data. For instance, there are undocumented immigrants who do not respond to the surveys fearing to be located and targeted by Immigration and Customs Enforcement, which can mean being deported later.

In addition, undocumented immigrants who have United States-born children attending school in the country tend not to report to the authorities that they left other children behind in their native country. This will only be possible when they have the opportunity to change their immigration status and get their work permit or residency authorization in the United States.

To make things worse, according to Camarota (2012), one-third of South American immigrants are illegal in the United States. Hence, it can be easily concluded that there are still too many immigrants that cannot be reunited with their children.

Studies indicate that the United States policies really need to be reviewed. For instance, Dreby (2015) explains the matter by saying that “two arms of U.S. immigration policy shape the lives of families and children. The first, enforcement practices, lead to the involuntary separation of parents and children-or the fears of this outcome-when the United States government detains and forcibly removes the parents of U.S. citizen children. The second, the policies which restrict migration to the United States, cause children to experience both long and short-term separations when their parents migrate without them” (p. 245).

The mentioned author explained it very well. The immigration policies in the United States is a well-known stage of debate between social classes within the

country and, this debate goes even farther because it turns out to be base for international discussion. Everyone agrees that urgent revisions need to be made.

Between the years 2003-2006 and 2009-2012, Dreby (2015) interviewed children and their parents or guardians in both the United States and in Mexico to assess the meanings these two types of separations had and to assess the potential impacts for children's well-being. The scholar found "that enforcement practices create economic and emotional hardship due to feelings of uncertainty, while restrictive immigration policies lead to resentment among children even post-reunification" (p. 245).

Surely, the author's findings corroborate what many people in the States and over the borders express and feel about it. It is known that a large part of society has gloomy opinions and thoughts about how immigration functions in the United States.

This partially explains the emotional issues presented by the children who were ultimately reunited with their parents. Surely, there are other plausible problems that play a role on the level of psychological damage suffered by left behind children.

As it has been pointed out by the literature, factors such as, the separation period of time, how the child will perceive and feel the abandonment, the parenting competence of the caregiver who raises the LBC and the implementation of intervention programs are just some examples of how a combination of certain aspects can worsen or meliorate the LBC well-being state.

The problems faced by children who are left behind can be added up by the cases of those who are on the brink to be separated from their parents because of the parents' possibility of deportation. According to Chaudry et al., (2010), "There are an estimated 5.5 million children in the United States with unauthorized immigrants parents and, about three-quarters of whom are natural born U. S.- citizens".

Speaking about the detrimental effects of deportation on the mental health of the children who are left behind in the United States, a scholar, Lovato (2019), while studying how forced separations caused by parental deportations affected Latinos adolescents found that “1) Following the deportation of a parent, youth experienced symptoms of trauma; 2) fear of additional family separation; 3) behavioral changes; and 4) academic disruptions. Implications include developing culturally-based, trauma-informed, and contextually situated assessments and interventions for youth and families affected by deportation” (p. 42).

The word trauma is explicitly pointed out in this mentioned study which corroborates what other studies, that investigate the consequences of the parental migration on the mental health of left behind children, have unearthed. Hence, based on these findings, it can be easily concluded that if the children are left behind by their parents in South or Central America or even if they are separated from their parents while being in the United States, this time because of deportation, they will all suffer this estrangement and this will imply in a traumatic experience for them. This infers on having to cope later with the harmful impact of that in their mental health.

Another very interesting study investigated the impact of parental deportation on the mental health of children. Allen et al., (2015) conducted a very impressive research and the results showed that children with a deported parent were significantly more likely to display externalizing and internalizing problems than children whose parents were not deported or in the process of deportation (p.386).

It confirms what the common sense already presumes. Children need to be raised by their parents. The attachment of the face-to-face contact between children and their parents is essential and can be crucial for their health development.

Allen et al., (2015), substantiated a necessary and quite relevant discussion in the context of the immigration system and the pertinent policies in the United States. In their study, the participants were individuals who were attending free consultations on immigration matters in a non-profit organization located in Texas. The mentioned organization offers public sessions with an overview information about the immigration system and policy in the United States and yet, provides one-on-one legal consultation with lawyers.

The individuals who sought the services were looking for answers for either themselves, for their families and/or for friends. The authors disclosed that although over 800 people attended the sessions only 95 children were reported in their study.

But the biggest difficulties were yet to come. According to the information disclosed by the scholars, the problems had just started after the demographic forms were distributed. Despite all assurances about the confidentiality of the data collected in the research when it was asked to sign the consent, a substantial amount of people declined participation.

To make things even more difficult, other potential participants showed concern on who would have access to their individual data. Then, the sample size gradually decreased. In sum, the potential participants expressed that that research could serve as a potential threat and could be used against them in potential legal proceedings. At the end, the sample for their study counted with 43 participants: the parent deported group had only 23 children whilst the parent fighting deportation had only 20 children.

The unveiled difficulties whilst getting participants are utterly understandable. Being undocumented is a quite serious issue in the United States for the immigrant is always under the risk of being caught and deported. No immigrant who are under

these conditions want to be located much less indicted by potential child-related legal problems.

Despite all struggles and limitations, the scholars' findings show that are potential significant negative emotional and behavioral consequences to the child when a parent is deported and the child stays in the country. It is important to consider that this separation will not only impact the left behind child who will possibly face more strenuous conditions and challenging existence but also, society will have to bear these collateral damages.

1.9 Mediator factors can help ameliorate LBC's emotional conditions.

In Asia, a very interesting approach was developed to help enhance the LBC's mental health conditions. According to Guan and Deng (2019), in rural China, as the annual number of reported difficulties presented by left behind children was progressively increasing, innovative approaches were sought by the communities to help dealing with this problem. The community implemented the Children's Companion Mother Program (CCMP), which serves as a community-based intervention platform to assist left behind children.

The mentioned researchers conducted a study to assess the outcomes of this whole-community intervention program aimed on enhancing the well-being of left behind children and other rural children from seven years old to 18 years old. The scholars examined the outcomes through a quasi-experimental design by comparing left behind children who participated in the CCMP to those who did not participate in the program.

As it was explained by the researchers, the children who received this kind of intervention could vary across different demographics thus, they compared the effects

between long-term and short-term participants, boys and girls and between rural children and left behind children. And yet, they compared the different outcomes between those who were left by one parent or by both (Guan & Deng, 2019, p.3).

The researchers chose 10 towns in one province and 113 towns in another province in China to conduct their study. They assessed the differences between the experimental and control groups regarding the well-being of those children. The dimensions they examined were: resilience, physical health, academic performance, safety, guardianship, and social communicative competence of the participants. They utilized the Mann-Whitney U tests and found noteworthy results.

In all studied areas, the results favored the children who were engaged in the program compared to those who did not participate in the CCMP. The resilience of the children who were participating in the CCMP was, according to the authors, significantly higher than those who had not been using the program.

On the other hand, the non-CCMP children showed poorer health physical behaviors when compared to those who were engaged in the program. Similarly, the non-CCMP children had poorer safety awareness when compared to the CCMP children. In the educational area, those who participate in the program had better academic performance than those who did not use the CCMP. And lastly, the CCMP children reported better guardianship and higher communicative ability than non-CCMP children (Guan & Deng, 2019, p.3-5).

Indeed, this is a quite impressive research. The initiative to create a program of this level of importance is memorable and, without a doubt, the study was fundamental to corroborate whether the efforts and design of the program were being efficient or not. The results validated the community's efforts by confirming that there was a positive impact on LBC.

This study can shed light on how society can be proactive and assist on this matter. The findings are promising and point to thought-provoking and efficient alternatives. They can encourage the communities to create similar programs that can help improving the LBC's well-being condition. Surely, there are other factors that can ameliorate the well-being of LBC.

Another interesting point that should be raised is that a good, constant and consistent communication between parents and their children who were left behind might help ameliorate their relationship and strength their bonds. But the various factors involved in this communication must be considered in order for it to achieve its main objective.

For instance, immigrants rely mostly on the long-distance communication to be somehow present in their children's lives. Madianou and Miller (2011) studied the reconfiguration of the relationships between Filipina migrant mothers in the United Kingdom and their LBC. They examined whether communication could help minimize the damages caused by the distance on left behind children.

The authors established that "while mothers feel empowered that the phone has allowed them to partially reconstruct their role as parents, their children are significantly more ambivalent about the consequences of transnational communication" (Madianou & Miller, 2011, p. 457).

Thus, based on these findings, it is reasonable to conclude that, although the continuous and consistent use of the technological means of communication can be very important to help maintaining the connection between parents and their left behind children, these means can never be compared to the face-to-face contact between the parents and their children.

Scientific findings question the roles of communication and a variety of sources that are provided to left behind children as possible mediating factors. Faisal and Turnip (2019) say that “Left-Behind children would be more susceptible to experiences loneliness if they had more access to entertainment gadgets, experiences less support and intimacy from friends, had been left by their migrant parents more than once, were female, had low self-esteem, experienced emotional difficulties and rarely communicated with their parents” (p. 1746). Therefore, it can be easily deduced that providing left behind children with all the technological paraphernalia, games, etc., will not help to reduce the negative impact of their parents’ absence.

Another team of researchers studied the migration and the children’s psychosocial development in China and offered great contributions about when and why migration matters. (Lu et al., 2019) compared different groups of children age 3-5 in their study. The research was conducted with migrant children, left-behind children and rural and urban children from nonimmigrant families.

Their findings pointed out that rural children who were left behind by both parents were drastically worse in terms of psychological and behavioral well-being than rural nonimmigrant children. And more importantly, they added that rural children left behind by one parent and migrant children were not worse off (Lu et al., 2019). With that being said, the authors concluded that “the disadvantage of left behind children was favorably mediated by their caregiver’s emotional well-being and parenting practices” (p.1).

Furthermore, Lu et al., (2019) suggested that health practices such as a regular contact with parents helped better their LBC’s overall well-being. However, they emphasized that this contact does not mean the sending of gifts and allowances. The researchers confirmed with their study what a popular common sense indicates. Thus,

once more it is emphasized that the quality of the communication between parents and their left behind children can be really critical and helpful.

1.10 The state-of-the-art literature about left behind children and its guidance for this current study.

All literature found confirms that there is a strong relationship between parental migration and the development of emotional and behavioral problems in left behind children. Scholars such as, Allen et al., (2015), Chang et al., (2019), Cheng and Sun (2014), Dai and Chu (2016), Faisal and Turnip (2019), Gao et al., (2010), Graham and Jordan (2011), Huang et al., (2018), Jia and Tian (2010), Liang et al., (2017), Mazzucato et al., (2015), Wickramage et al., (2015) and others found significant mental health issues and behavioral problems developed by left behind children.

Indeed, this literature review was very useful to corroborate the development of mental health problems in left behind children but some of the studies traced, brought to light other aspects related to left behind children and their difficulties. For instance, elements such as age, gender, whether it was the mother or the father who migrated and left their children behind, and the period time of separation between parents and children, were investigated and the studies' results provided great information regarding the roles of these variables in the development of mental health problems found in left behind children.

Furthermore, other tracked studies were very helpful to understand a little bit more about the complexity of the scenario providing the reasons children are left behind when parents migrate, how the left behind children's term is applied and also

learn about the current immigration scenario in the United States and its idiosyncrasies.

On top of this, studies that were conducted to assess mediator factors such as the role of the caregiver and their parenting abilities, the quality of communication between parents and their children who were left in their native country and also, community programs that were developed to help ameliorate the mental health conditions of left behind children suggested that different actions can help to reduce the impact of parental migration on the emotional development of left behind children.

Moreover, the literature review provided vital information about key tools to assess emotional and behavioral problems in left behind children. The application of the Strength and Difficulties Questionnaire by several authors that conducted this line of research paved the road for what was chosen and designed later in this current study. Undoubtedly, it helped to delineate and even review here and there the conduction of this research.

What is more important is that, the unearthed state-of-the-art literature about left behind children reinforced the main hypothesis of this study that left behind children will present significant psychopathological symptoms because of the separation from their parents.

Chapter 2:

Method

2.1 Objective and Hypothesis

This study had the main objective to explore the presence of psychological problems in the children who were left behind by their parents, Brazilians, who migrated to the United States.

The main hypothesis is that children left behind due to their parents' migration will present psychological problems.

All demographic information provided by the participants in the interview was used in order to explore age, gender, years of separation, if the questionnaire was responded by the parents or self-responded (responded by the left behind child), if the LBC was separated from mother, father, or both, and if the LBC was reunited or not with their parents.

In order to assess of psychological and behavioral problems such as emotional problems, conduct problems, peer problems, hyperactivity, prosocial ability, and total difficulties, the Strength and Difficulties Questionnaire, a questionnaire that scrutinizes the cited problems was used.

2.1.1 Objective and Hypothesis 1: Age and psychological problems.

Objective: Despite the fact that it was not found in the literature any evidence that there is a relationship between age and psychological problems, the statistical tool, ANOVA, was utilized to learn whether there was a potential connection in this sample.

The hypothesis is that age will determine more symptomatic problems regarding emotional development in left behind children. To explain it better, as left behind children age, more psychological problems will surface.

Also, although no study was found in the literature that investigated the relationship between age and the SDQ questionnaires responded by parents or self-responded, statistical tests were run to examine this matter. Since, this study used the two different categories of respondents, it was interesting to learn more about it.

The hypothesis is that a relationship will be found between age and the questionnaires responded by parent or self-responded and psychopathological problems.

2.1.2 Objective and Hypothesis 2: Gender and psychological problems.

Objective: To explore the relationship between gender and psychological problems in this sample the frequency, Chi-Square tests and crosstabulation of the relationship between the variables were assessed.

The hypothesis tested here is that girls will be more affected than boys. Faisal and Turnip (2019) suggested that girls are more affected than boys if the migrant parent is the father. Also, Tang et al., (2019), in their study's results found that girls were more prone to certain symptoms and emotional problems.

2.1.3 Objective and Hypothesis 3: Years of separation and psychological problems.

Objective: To explore the years of separation of left behind children and their parents and a possible connection with emotional and behavioral problems in this population, the frequency, statistics and crosstabulation tests were run.

The hypothesis is that the longer the period, the greater the chances of emotional damages. In the literature, Viet Nguyen (2016) points out that the harmful effect tends to be higher for long term parental migration.

2.1.4 Objective and Hypothesis 4: Questionnaire responded by parents or self-responded and psychological problems.

In the literature, no scientific work was found examining questionnaire responded by parents or self-responded thus, there is no indication that there is a relationship between the questionnaire responded by parents or self-responded and the frequency of psychological problems.

Objective: Despite the fact that it was not found in the literature any evidence that there is a relationship between the mentioned variables, the frequency, Chi-Square tests and crosstabulation of the relationship between these variables were used in order to explore a probable connection.

The hypothesis is that the questionnaires responded by parents will point out to more symptomatic problems in left behind children regarding the emotional development in the group when compared to the left behind children who self-responded the questionnaires. The rationale here is that, since the participants who self-responded the questionnaire had already the chance to reunite with their parents, they possibly show less psychopathological problems.

2.1.5 Objective and Hypothesis 5: Separation from mother, father or both and psychological problems.

Objective: To explore the likelihood of relationship between separation from mother, father or both and psychological problems in this sample, statistical tests and crosstabulation were run.

The hypothesis, based on what was found in the literature, is that children, in a migration scenario, will be more prone to be left by their mothers than by their fathers and will present more psychological problems.

Several studies found in the literature point out to that. For instance, Vanore et al., (2015) and Xu et al., (2019) suggest that separation from mother is more detrimental than separation from father. On top of that, Faysal and Turnip (2019), found in their studies that 60 percent of the children are left by their mothers.

2.1.6 Objective and Hypothesis 6: Reunited with parents or not and psychological problems.

Objective: Since in this study, there were two groups of respondents, questionnaires responded by parents and self-respondents, in order to explore whether the participants in the two categories had reunited with their parents or not, statistical tests and a crosstabulation between the variables were run.

It was not found in the literature any scientific study that investigated this relationship between the mentioned variables nor it was found any research that examined the relationship between the fact that the child was reunited with their parents or not and the frequency of psychological problem. In order to explore any possible connection between the variables, the frequency, statistics, Chi-Square tests and crosstabulation of the relationship between them were used.

The first hypothesis regarding this matter is that all participants who self-

responded the questionnaire have reunited with their parents since they are in the United States. The second hypothesis is that the children who reunited with their parents will show less psychological problems. The rationale is that the reunion could have a healing effect in left behind children since the parent sought solutions to end the separation.

2.1.7 Objective and Hypothesis 7: Emotional problems.

Objective: To explore the existence of emotional problems in this populace, the frequency, descriptive statistics and Chi-Square tests were run.

The hypothesis is that this populace will present emotional symptoms. Studies such as those conducted by Kirchner et al., (2011), Man et., (2017), Su et al., (2013), show results that indicate emotional problems in left behind children.

2.1.8 Objective and Hypothesis 8: Conduct problems.

Objective: To explore the incidence of conduct problems in this populace, the frequency, descriptive statistics and Chi-Square tests were run.

The hypothesis is that this populace will present conduct symptoms. Studies such as those conducted by Wang et al., (2017), show results that indicate behavioral problems in left behind children due to migration.

2.1.9 Objective and Hypothesis 9: Hyperactivity.

Objective: To explore the incidence of hyperactivity in this populace, the frequency, descriptive statistics and Chi-Square tests were run.

The hypothesis is that left behind children will present more problems related to hyperactivity. In the literature, it was not found a study that specified hyperactivity

in left behind children. However, scholars such as Graham and Jordan (2011), Liang et al. (2017) Longobardi et al., (2017) point out to emotional and behavioral problems in left behind children and, hyperactivity is one possible symptom that can be included in those categories.

2.1.10 Objective and Hypothesis 10: Peer problems.

Objective: To explore the existence of peer problems in this populace, the frequency, descriptive statistics and Chi-Square tests were run.

The hypothesis is that left behind children will present peer problems. Peer problems can be expressed by situations of bullying victimization and other difficulties endured by left behind children. Zhang et al., (2019) warn about it. They found in their study that left behind children had higher level of victimization than non-left behind children.

2.1.11 Objective and Hypothesis 11: Prosocial.

Objective: To explore the occurrence of prosocial difficulties in this populace, the frequency, descriptive statistics and Chi-Square tests were run.

The hypothesis is that left behind children will present difficulties regarding prosocial abilities. In the literature, various scholars draw the attention to that. Jia and Tian (2010), Su et al., (2013) and Faisal and Turnip (2019) suggest the presence of loneliness in left behind children in their study.

2.1.12 Objective and Hypothesis 12: Total difficulties.

Objective: To explore the existence of total difficulties in this populace, the

frequency, descriptive statistics and Chi-Square tests were run.

The hypothesis is that the left behind children will present total difficulties. In the literature various studies were found pointing to the problem. For instance, Allen et al., (2015), Chang et al., (2019), Cheng and Sun (2014), Dai and Chu (2016), Faisal and Turnip (2019), Gao et al., (2010), Graham and Jordan (2011), Jia and Tian (2010), Mazzucato et al., (2015), Wickramage et al., (2015), Huang et al., (2018), suggest in fact, a connection between parental migration and the development of emotional and behavioral problems in left behind children.

2.1.13 Objective and Hypothesis 13: Percentage of emotional problems, conduct problems, peer problems, hyperactivity, prosocial and total difficulties.

Objective: In order to obtain a summary, a general picture of the situation of the left behind children in this sample, in terms of emotional problems, conduct problems, hyperactivity, peer problems, prosocial ability and total difficulties in this populace, descriptive statistics were run and the results were put together.

The hypothesis is that, in general, left behind children will present problems in emotional and behavioral areas. In the literature the shared knowledge is that left behind children suffer more psychological problems when compared to non-left behind children. Several authors like Graham and Jordan (2011), Liang et al. (2017) Longobardi et al., (2017) found in their studies problems in the mental health state of left behind children.

2.1.14 Objective and Hypothesis 14: Inter-item correlations between emotional problems, conduct problems, hyperactivity, peer problems and prosocial.

Objective: to explore the inter-item correlations between emotional problems, conduct problems, hyperactivity, peer problems and prosocial ability in this populace, the Pearson's correlations coefficient was used in order to assess any possible significant correlation between the variables.

The hypothesis is that, in left behind children, if there is a problem in one particular area, that will increase the chances to have a problem in other areas, as well. For instance, if there are difficulties in the prosocial ability that will indicate that there will be a problem in the conduct, peer, hyperactivity, and/or emotional area. In the literature all studies point out to psychological problems in left behind children due to parental migration. Therefore, it is pertinent to learn whether there are correlations between the various aspects of psychological problems.

The findings of this study optimistically can be used by like-minded ethnic groups such as the Hispanic communities and Latinos in general. Moreover, the data can similarly serve as a reference for other immigrant groups since, historically speaking, the United States is a country that has been built and is greatly inhabited by immigrants.

Hence, expectedly, the results from this study will help to guide policies lawmakers to create laws that can help immigrants to stay together with their children and enable the fastest possible reunion between parents and their left behind children. In addition, this research will confidently provide significant indications and guidelines for the creation of awareness and/or psychological programs to be

conducted by the mental health, social and educational systems which can aid immigrant families who suffer because of separation due to migration.

2.2 Participants.

Participants were recruited by means of two methods: 1) Contacting people from the portfolio of a private practice, Clark Consulting, and 2) posting an announcement on Brazilian Facebook pages.

Forty-six potential participants from the portfolio of clients of the Clark Consulting were contacted by the researcher but only thirty-eight individuals accepted to participate in this study. Only twelve participants were assessed via Web-based recruitment. The total of fifty individuals participated in this study.

Unfortunately, there is no way to find out how many Brazilian immigrants who left their children behind saw the posts on Brazilian Facebook group pages and did choose not to respond to the invitation to participate in this study. The administrator of one Facebook group page procured the researcher and commented that numerous potential participants also conversed with her and disclosed their reasons for not collaborating. She shared those motives with the researcher but did not disclose numbers. Also, twenty-four individuals sent messages to the researcher expressing their fears and explaining why they would not participate.

Brazilian parents who immigrated to the United States and had to leave their children behind responded questionnaires about the emotional health state of their LBC, regardless of whether they had already reunited with them or not. In addition, individuals who were eighteen years old and over who were once left behind in Brazil and later reunited with their families participated in this study. It was expected that the information about their emotional state could shed light upon this matter.

Whilst conducting a thesis that includes the participation of human beings, the acquiescence with the ethical standards, the procedure, rules and guidelines provided by the systematic ethics norms were carefully followed. The doctoral student who conducted this study obeyed the regular procedures that are commonly applied in the United States since the study was developed in the mentioned country. The cited PhD student had conducted a previous study for her Master thesis in a university in the United States, the Sacred Heart University located in Fairfield CT, therefore, she acknowledges the fundamental ethic norms of a research. Also, the study was evaluated and approved by the Universitat Jaume I ethics committee.

The nature and purpose of this study were fully explained to all participants. Besides, it was assured to them the confidentiality of their personal demographic and mental health information gathered for this study and also, the privacy of their individual scoring results of the Strengths and Difficulties Questionnaire (SDQ) they were answering. All participants expressively gave consent to take part of this research.

2.3 Materials.

The main tool chosen to gather relevant information involving emotional health of left behind children was a questionnaire developed by Robert Goodman in 1997, the Strengths and Difficulties Questionnaire (SDQ) and an interview covered other relevant demographic aspects that were studied. These instruments can be found in Appendix A, B and C.

The interview was created specifically for this study. It gathered information about demographic variables of the children and parents such as, the children's age, the occupation of the parents, the parents' educational level and the gender of the

child who was left behind. It was also used to access information about the situation of each child at the time of the assessment: whether the parent who left the child behind was the mother, father, or both parents, the period of time without the parent, who was the main caregiver and whether the children reunited with their parents or not.

In addition, this interview was valuable to obtain any possible relevant information the participants were willing to share about the left behind children's emotional condition, possible behavioral or social problems and whether the participants were ever diagnosed with any mental health issue.

Regarding the tool to evaluate health conditions of LBC regardless of age, it was found in this literature assessment that several researchers utilized the **Strengths and Difficulties Questionnaire (SDQ)** to access health information of left behind children. For instance, among the several studies examined, the following research conducted by Graham and Jordan (2011), Vanore et al., (2015); Longobardi, Veronesi and Prino (2017) and Wang, Zhou and Hesketh (2017) all utilized the Strengths and Difficulties Questionnaire (SDQ) to assess the mental health condition of left behind children.

Robert Goodman created this screening tool, the SDQ, in the United Kingdom in 1997 and is often utilized since then. Child psychosocial health is usually measured through caregiver-reported Strengths and Difficulties Questionnaire (SDQ) scores (Goodman, 1997).

The SDQ was initially directed for children between 4 and 18 years old and meant to be responded by parents, caregivers or teachers but fortunately, there is currently a version of the test that can be responded by left behind children who are eighteen years old or over. It is the Self-Responded Questionnaire.

Goodman (2001) explored the psychometric properties of the SDQ finding that the five-factor structure was confirmed. Reliability was satisfactory both at the level of internal consistency (internal Cronbach alpha = 0.73), and test-retest reliability after 4 to 6 months (mean = 0.62). Besides, SDQ high scores (above 90th percentile) predicted a significant probability of diagnosed mental disorders (means odd ratio = 15.7 for parent scales, 6.2 for youth scales). Goodman concludes that the reliability and validity of the SDQ indicate that it is a useful measure of psychopathology and adjustment in children and adolescents.

The SDQ, according to Longobardi et al., (2017) is a well validated behavioural screening questionnaire. They explain that the test consists of 25 items that inspects five aspects: emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behavior.

It is pertinent to say that Mieloo et al., (2012), point out that, as the scales contain just five items, they are less reliable than if they had more. However, despite the quantity of items, the SDQ has been largely utilized in studies and have offered helpful information about the mental health and behavioral status of those who are submitted to the test.

After elaborating the test, Goodman (1997) conducted a research note over the Strengths and Difficulties Questionnaire and compared it to the Rutter Questionnaires. Even though the author recognized that the “Rutter Questionnaires as a long established and highly respected behavioural screening questionnaire”, they convey that the SDQ functions as well as the Rutter, because the SDQ “has been designed to meet the needs of researchers, clinicians and educationalists” (p.581).

Thus, based on the reviews of the test utilized in many studies that seek to assess emotional and behavioural issues, the SQD has been chosen as the key tool to access the information needed for the present study.

While speaking about those who would be responding the questionnaire, Goodman (1997) says that “Child psychosocial health is usually measured through caregiver-reported Strengths and Difficulties Questionnaire (SDQ) scores”. Providentially, nowadays there is also a version of the test that can be responded by left behind children who are 18 years old or over.

This particular version does not impose an age limit. In this present study, there were numerous participants who were 18 years old or over and were willing to participate therefore, more information could be assessed, gathered and evaluated for this revision because of this accessible version of the questionnaire.

Hence, in the current research, the questionnaires were utilized as follows: P4-17 – SDQ for the parents of children between 4-17 years of age and, the S18 + SDQ for self-report of 18 years of age or older (“Youth In Mind, DWBA, SDQ Information for Researchers and Professionals About the Strength and Difficulties Questionnaires: Questionnaires”, 2016).

The Strength and Difficulties Questionnaire comprises of five scales: Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems and Prosocial. But, the questionnaire also offers an overall view of the probable difficulties presented by the respondent, by providing the Total Difficulties scale.

The questionnaire consists of 25 questions for which the participant must answer with “Not true”, “Somewhat true” or “Certainly true”. Each of the five scales has five questions that investigate the subject. The three-band type of categorization:

“Normal”, “Borderline” and “Abnormal” was chosen for this study. The Impact supplement that is part of the SDQ was not chosen to be utilized in this study.

Initially, whilst conducting a pilot study of this project, problems arrived regarding the second part of the SDQ, the Impact supplement. The first participants were presented with the questions of the Impact supplement but they all had difficulties to respond to them.

The participants of this initial phase of the project made valuable criticism that could be used in order to determine which parts of the Strengths and Difficulties Questionnaire would be used in this study. Many of them had been separated from their children for a long time and had no precise and accurate information to answer questions of this supplement part such as: how long have these difficulties been present, less than a month, 1-5 months, 6-12 months or over a year?

This is just one example of a question of the Impact Supplement. The other questions follow the same rationale and have the objective to identify more or less specific times of when this or that difficulty was developed in the left behind children.

Still talking about the Impact supplement that is part of the SDQ, after been presented with the questions of that part of the questionnaire a parent said, “how can I be precise in this information if I am not there with my kid? My mother who takes care of my child sometimes hide things from me so that I won’t worry so much. When she comes to tell me, something has already passed and was resolved or, she discloses something that was not resolved and is usually out of her control. So, these questions do not make any sense for those who are not in a daily basis raising their children”.

The same phenomenon happened with other participants and then, it was decided that this newest part of the questionnaire would not be used in this research. It

was then deliberated to use the original version of the Strengths and Difficulties Questionnaire.

Surely, the pilot study of this thesis that was conducted in the beginning of the its development and had ten participants, was extremely useful to delineate the project. It helped to get familiar with the interviews, to determine which parts of the SDQ would be chosen in the study and also to learn about the statistical tools and their applicable assessment and analysis of the results.

After each questionnaire was completed, the scoring was computed with the aid of the pertinent guide found at the “Youth in Mind, DBWA, SDQ Questionnaires: Scoring the SDQ” (2016). The original 3- band of the Strengths and Difficulties Questionnaire was chosen to calculate the scores. After the scoring was calculated, the results pointed out to the following categorizations: “Normal”, “Borderline” or “Abnormal” for each studied scale: Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties.

It is worth elucidating that Total Difficulties requires a peculiar form of examination and calculation because it is produced by summing the scores from the following scales: Emotional Problems, Conduct Problems, Hyperactivity and Peer Problems. Total Difficulties do not include Prosocial which is considered a strength and not a problem.

However, it is important to note that investigating whether there are difficulties about Prosocial skills also points to possible behavioral problems. Undeniably, it was really pertinent that the creator of the Strengths and Difficulties Questionnaire thought to include and investigate the prosocial abilities in the questionnaire.

It is suitable to disclose that the “Internalizing and Externalizing” scoring alternative method which is included in the Scoring the SDQ and the Table of the Scoring the SDQ Impact Supplement were not utilized in this study. For that reason, they are not included in the Appendix B. The concepts of the Original 3- band, “Normal”, “Borderline” and “Abnormal” were chosen over Internalizing and Externalizing.

The latter mentioned concepts seem very vague in terms of information on emotional and behavioral status. Also, since the Impact supplement was not chosen to be assessed and evaluated in this study, the Scoring of the SDQ Impact supplement was not utilized either.

Moreover, the Newer 4-band categorization model of the Strengths and Difficulties Questionnaire was not applied. This newer version was created later and has a broader conceptualization which was not in the interest for this study.

In this research, the chosen categorization was the original 3-band of the Strengths and Difficulties Questionnaire. This Newer 4-band includes more cut points that would make it unfeasible to evaluate the self-responded questionnaires, the 18+ SDQ.

Likewise, the Teacher Completed Strengths and Difficulties Questionnaire responses that are comprised in the SDQ Scoring instrument were not explored and evaluated. In this research, only parents and those who were once left behind by their parents responded the questionnaire. There was no access to teachers. As a consequence, this is not included in the Appendix B.

Usually, the studies that are conducted in schools use the Teacher Responses part of the SDQ. For instance, a study conducted by Mieloo et al., (2012) in Netherlands, used that Teacher Responses part of the Questionnaire and the Teacher

Responses Scoring of the Strengths and Difficulties Questionnaire because the study was mainly conducted in schools.

2.4 Procedure.

From August 2018 to January 2021, fifty individuals of the Brazilian community of immigrants in the United States, were assessed for this study. First and foremost, it is appropriate to inform how the participants were reached. This study was a combination of a Web-Based recruitment sampling and the participation of some of the clientele of a company that provides psychological coaching/consulting services based in the United States.

The Web-based tool was used to assess potential research respondents. Although the interview and the Strengths and Difficulties Questionnaire were applied over the phone or in person, the Web-based recruitment sampling, particularly the social media, was a useful instrument for the recruitment of participants.

Helms et al., (2021) shed light on the topic and offer a quite useful information. They conducted a scoping review of the applications and recruitment performance of web-based respondent-driven sampling. The scholars convey that “Web-based respondent-driven sampling is a novel sampling method for the recruitment of participants for generating population estimates, studying social network characteristics, and delivering health interventions. However, the application, barriers and facilitators, and recruitment performance of web-based respondent-driven sampling have not yet been systematically investigated”.

Although there are, without a doubt, many difficulties and limitations to this method pointed out by these scholars, this innovative means of recruiting seems to be in increase use by other researchers. For instance, Kühne and Zindel (2020) while

studying the use of Facebook and Instagram to recruit web survey participants, offer an insight on how to use these social media pages to recruit as many research's participants as possible. They recognize that the traditional data collection for a study is somehow difficult, very complex and can be even quite expensive. The authors provide interesting suggestions on how to advertise on the cited social media to obtain potential participants for a survey.

Folk et al., (2020) while studying the feasibility of Social-Media based recruitment and perceived acceptability of digital health interventions for caregivers appointed by the justice system found that "Facebook advertisements were successfully in quickly recruiting a diverse set of caregivers". Their findings demonstrate that social media and other digital health approaches can be a practical way to assess participants in the health care.

Hence, based in this literature review and despite the limitations that were warned by the authors, this study utilized the mentioned Social-Media based method to assess more participants. The Web-based recruitment, social media was employed to facilitate retrieving as many subjects as possible for this research. Brazilian Immigrant groups on Facebook were procured to assess as many participants as possible.

Groups such as "Brasileiros nos Estados Unidos -Brazilians in the United States" which is a group that has Brazilian members living within the entire nation and "Cabeça de Mulher – Women Mind" which is a group that has Brazilian members living in part of the northeast area of the United States: New York, New Jersey, Connecticut, Massachusetts, Rhode Island were utilized for this study. Also, some of the clients' portfolio of the Clark Consulting, Coaching & Training's was contacted in order to get more participants for this study.

The mentioned company assists clients all over the country, in states such as, Connecticut, New York, Massachusetts, New Jersey, Rhode Island, Pennsylvania, Virginia, Washington District of Columbia, Tennessee, Florida, California, Texas and Hawaii. This facilitated the access of potential participants who live in various states to contribute to this study.

The services consist in psychological coaching/consulting, career counseling and organizational consulting for companies. The individual sessions offered to adolescents and adults, couples and families are performed either online through videocalls or in person at the organization's office located in Connecticut. Clark Consulting assists Americans but most customers are from Brazil and Portugal.

While talking about those who were reached out through Facebook, the first contact for this request mostly happened after the potential participant saw a post on one of the Facebook Brazilian community pages, mentioning this study and the need to recruit participants for the research. The post was an open invitation to Brazilian Immigrants in the United States who had left their children behind in Brazil and to those who were once left behind by their parents in Brazil to participate in this study.

The post contained a brief introduction about the researcher, the university that made the study feasible (Universidad Jaume I in Spain) and provided a brief information about the nature of the study and its goals. It was emphasized how this research could help to know more about the impact of parental migration on the emotional health of the children who are left behind.

Thus, those who showed interest in participating contacted the researcher. The first contact mostly occurred through text messages generally followed by a brief conversation over the phone. Therefore, a day and time was set up for their participation in the research.

It is worth noting that many potential participants expressed their thoughts by making general comments via text messages directed to the researcher or over the phone and expressed that they could not participate. They presented various reasons.

Some expressed that they were afraid to talk about the subject for fear of this information being leaked to the Immigration of the United States and they end up being located and deported since their immigration status was still unlawful. Other potential participants disclosed a different impediment to participate.

It is common to many immigrants who left their children behind in their native country to grow a new family in the United States. Those children who were born in the States go to school. Hence, some potential participants disclosed that they were afraid that the personal information they would provide to this study could be accessible to the American school system. According to them, if that happened, teachers, principals or school counselors of their American children would not ever understand that another child was left behind.

Moreover, there were others potential participants who explained that they did not want to learn about the possible damages of their left behind children for it was too painful. Some of them added that it is easier to imagine that everything is fine for the left behind child is being very well taken care by the caregiver assigned to this role.

Also, there were individuals who said that the COVID 19 pandemic was not the right time to get involved into such research. Some mentioned that it could aggravate even more the actual horrible scenario they were enduring. Some of them disclosed that they did not want to elevate the level of anxiety and despair that has been brought by such plague by talking about a child who was left behind.

One parent even said that she thought that, for her perspective, the pandemic was understood as a big punishment for what she had done. She mentioned that it was a big irony for she had left her child back in Brazil to provide a more decent life for him and secure a better future for her kid and now she does not have enough funds to even sustain herself in the States. In her words, that could only be a punishment for what she had done.

Conversely, those who were former or current clients of the Clark Consulting, Coaching & Training and fit into the position of a parent of left behind children or who were once a left behind child were invited to participate after the objectives and details of the survey were extensively explained.

Not all clients of Clark Consulting who were summoned accepted to participate. But many accepted the invitation and some of them even called and asked to participate when they learned about the study. Probably, the therapeutic bond that already existed between the professional of the Clark Consulting and the client, and the existed relationship of trust facilitated the acceptance process of talking about such a delicate and painful topic.

All those who accepted to participate, regardless of whether they came through the Clark Consulting or the Brazilian Facebook pages, after the objective of the study was detailed and fully explained, and the participant's confidentiality was assured, the interview was conducted with them providing their demographic and general mental health data and later, they responded to the Strengths and Difficulties Questionnaire directly to the researcher.

2.5 Statistical analysis.

The statistical tool, the SPSS (Statistical Package for Social Sciences) version 27, was utilized to assess and interpret descriptive statistics and the possible correlations between the variables studied. All information gathered was placed in the SPSS analysis software and later carefully examined using statistical premises.

The Chi Square Tests were predominantly applied in the course of this study to investigate the possible significant association between numerous variables. In addition, while evaluating the inter item matrix of the following scales, Emotional Symptoms, Conduct problems, Hyperactivity, Peer problems and Prosocial, the Pearson's correlations coefficient was utilized. This statistical method measures the strength of the relationship between variables.

It is relevant to explain that while using the Pearson's correlations coefficient to examine the correlation between the variables, the Total difficulties scale was not included since it assembles information about the following scales: Emotional Symptoms, Conduct problems, Hyperactivity and Peer problems.

2.6. Validity threats.

Like any other research, there is always the probability of the occurrence of threats to internal validity. One limitation, for this research, was that the sample size of this study was smaller than it was expected, with only 50 participants.

There were several individuals who disclosed that despite the assurance of the confidentiality of this research they were afraid that their demographic information data would be accessible to the immigration system of the United States and/or to the Department of Children and Families (DCF) of the United States. They refused to participate in something that would make them feel more threatened and at risk, than they already feel by their immigration status.

They also dreaded about the potential legal proceedings they imagined they could suffer. It is understandable for being an undocumented immigrant in the United States already carries its burdens. The fear of being traced and deported is mentioned very often by immigrants who do not hold a legal status.

In the posts that were made in the Brazilian Facebook pages, with the purpose of recruiting potential participants, several members responded to these posts and expressed that type of apprehension. Several individuals have positioned themselves talking about their fears and fantasies about participating of such a survey.

Some of them disclosed thru private messages to the researcher of this study or to the administrator of the social media page that they would repudiate anything that could make them feel more uncomfortable and insecure about their futures in the United States than they already are. Some confessed that they feared that this study could put them at risk of deportation or being badly judged by others.

It is understandable that not many participants will be obtained in this line of research because the subject is, indeed, very complex and brings a lot of pain and other mixed and complicated feelings. For example, Longobardi et al., (2017) conducted their study with migrant minors in Italy and could not get too many participants. They started with 23 potential participants and ended up later with only 19 participants who accepted and were available to contribute to their study. It is not easy because the topic alone is very difficult and delicate.

In addition, in 2015, Allen et al., whilst conducting a study in the United States about the impact of parental deportation on mental health of left behind children, endured the same struggles on getting participants due to the nature of the study. By what they described, they invested a considerable amount of time with a

group of over 800 immigrants who were attending sessions in a non-profit organization but only 43 individuals accepted to participate in their study.

Despite the applicable researchers' assurance of confidentiality, many potential participants showed concerns and doubts regarding who would end up having access of their information and how that information could be used against them, legally speaking. This occurred in this study too.

On top of all the practical problems of fearing being locating and deported, this topic is, by itself, quite delicate and very painful. Several people, in the current study, disclosed that they would not like to participate because it evokes pain and shame and therefore, they would not collaborate. In addition, the fear of being judged and even realizing and confirming that their children are suffering damages that can be irreparable prevented them from participating in the study. All that is explained here interfered in the sample size of this study.

Contamination is another possible threat to the validity of this study. To understand it better, according to Bachman and Schutt (2007), "Contamination occurs in a treatment when the comparison group is in some way affected by or affects the treatment group" (p. 189).

Shame, for instance, is a sentiment that can possibly alter the obtained data and can be considered as a validity threat. It can be inferred that some participants, unconsciously or consciously, may have altered their responses and therefore, could possibly contaminated the results, so as not to make their left behind children look so bad psychologically speaking. This a validity threat to the results obtained in this research.

In addition, another possible threat to the validity of this study concerning contamination involves the fact that within the group of parents who are still

estranged from their children, they may not know their children well. Their responses to the Strength and Difficulties Questionnaire may not literally correspond to reality. The distance, the impossibility of being in daily life with their children can affect their perception of how the children are developing. They can only rely on the information provided by the caregiver and their unique point of view.

The web-based recruitment tool used in this study is an innovative instrument that has been utilized lately by researchers to assess as many participants as possible but, it is still an understudied instrument according to Helms et.al., (2021). Although the web-based respondent-driven sampling has not yet been properly investigated, in this current study, the participants responded to the survey and to the Strength and Difficulties Questionnaire directly to the researcher.

The participants did not have to answer the questionnaires and surveys, without the guidance of an interviewer. This can help, in some ways, to understand the text and questions more properly and, as a consequence, giving the pertinent answers. Thus, following this rationale, the web-based recruitment may not have been a valid threat.

But, Bachman and Schutt (2007), explains that treatment misidentification happens when the treatment itself does not cause the outcome but does show some intervening process the researcher is not aware (p.190). In addition to the participants having their own way of interpreting and understanding the questionnaires, the interviewer interference can also be a threat to the validity. However much the interviewer tries to be as impartial as possible, when it comes to working on the issues and explaining some questions of the SDQ, the results can be contaminated by the interviewer's individual way of interpreting and exposing the subjects to the participants.

Another negative interference in this study is related to the occurrence of external events. Bachman and Schutt (2007) explain external events can become a valid threat to a study because there are “things that happen outside of the experiment that can alter the subjects’ outcome scores” (p.188). In this study, the ongoing COVID 19 pandemic that plagues the world since the beginning of the year of 2019, served well as a validity threat. Many people on social media declared that they were in such a deplorable mental health state that they were not able to participate in this study. Indeed, the pandemic greatly affected the conduct of this research.

The COVID 19 pandemic greatly diminished the possibility of reaching out to participants because many of them were literally ill or suffering considerable losses within their families. Others were out of work, had lost their businesses or were fired and were not in a position to collaborate with the research.

Therefore, on top of not being able to get more participants who left their children behind, it was not possible to have a control group where Brazilians who immigrated to the United States and brought their children with them could also participate on the study. This desired comparison between groups could have provided this research with a more reliable data.

In addition, the sample type is another possible threat to the validity of this work. It can be related to the selection bias of the research. Bachman and Schutt (2007) drew the attention to the fact that selection bias can be a validity threat “when characteristics of the experimental and comparison group subjects differ” (p.186). Although, it was not chosen who would participate or not in this study, a particular group was chosen to be part of this research. An invitation was openly made to anyone in the Brazilian community in the United States who was a parent of left

behind children or an individual who was once left behind by their parents due to migration.

Thus, it is difficult to make assertions about this issue whilst only Brazilian immigrants participated. Immigrants in the United States come from different cultures and backgrounds. But, the community of Hispanic immigrants in the United States is vast. Those who speak Spanish who are coming from South American and Central American countries, share many of the characteristics of the Brazilian immigrants. Despite their different languages, they all have a Latino background.

On top of that, the community of Portuguese immigrants who is considerably expressive in the United States also shares many of the characteristics of the Brazilians. Henceforward, the results can be useful to all these communities of immigrants, Portugueses, Hispanics and Brazilians. Moreover, since the vast number of studies in Asia and other studies conducted in Europe point out that there is, in fact, an impact of parental migration on the emotional health of left behind children, one can infer that immigrants from different types of background can benefit from the findings of the current study too.

However, whilst talking about how endogenous changes can affect a research, Bachman and Schutt (2007), elucidate that endogenous changes happen “when the subjects develop or change during the experiment as part of an ongoing process independent of the experimental treatment” (p.186).

The authors sustain that the endogenous changes that may affect the validity of a research are testing, maturation and regression (p.187-188). Additionally, the scholars offer another useful information that should be considered while examining whether a research was exposed to endogenous changes. They say that pretests can influences and possibly alter posttests.

Thus, according to what is explained, regarding the possible endogenous changes that could have posed as validity threats, this study did not intend to have a pretest and posttest and did not have time for any maturation or regression consequently, seemingly, it was not exposed to endogenous changes.

CHAPTER 3:

Results

3.1 Sample Characteristics

Fifty individuals participated in this study. The participants' age fluctuated from 4 years old to 44 years old, the mean age was 20.16 years old and the median age was 19.5 years old (SD = 8.57). They were all left behind in Brazil by one or both parents due to migration. They stayed in the native country with a relative, a grandparent or an aunt.

Table 1 displays the frequency, percent, valid percent and cumulative percent of the age of the participants at the time of assessment. Whereas the following descriptive statistics: Mean, Minimum, Maximum, Standard Deviation and Percentiles of the Age of the Participants at the time of assessment are shown in Table 2.

Regarding percentage of the age of the participant at the time of the assessment, eight percent of them were 16 and another eight percent of the participants was 18 years old, six percent of them was 17 years old and another six percent was 22 years old, four percent of them was seven years old followed by 10, 13, 14, 19, 21, 24, 27, 29, 32 and 34 years old, and lastly each two percent of them was represented by participants who were 4, 5, 8, 12, 23, 25, 26, 40 and 44 years old.

Figure 1 exhibits the Percentage of the Age of the Participants.

Table 1

Frequency of the Age of the Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.0	2.0	2.0
	5	1	2.0	2.0	4.0
	7	2	4.0	4.0	8.0
	8	1	2.0	2.0	10.0
	10	2	4.0	4.0	14.0
	12	1	2.0	2.0	16.0
	13	2	4.0	4.0	20.0
	14	2	4.0	4.0	24.0
	16	4	8.0	8.0	32.0
	17	3	6.0	6.0	38.0
	18	4	8.0	8.0	46.0
	19	2	4.0	4.0	50.0
	20	4	8.0	8.0	58.0
	21	2	4.0	4.0	62.0
	22	3	6.0	6.0	68.0
	23	1	2.0	2.0	70.0
	24	2	4.0	4.0	74.0
	25	1	2.0	2.0	76.0
	26	1	2.0	2.0	78.0
	27	2	4.0	4.0	82.0
	28	1	2.0	2.0	84.0
	29	2	4.0	4.0	88.0
	32	2	4.0	4.0	92.0
	34	2	4.0	4.0	96.0

40	1	2.0	2.0	98.0
44	1	2.0	2.0	100.0
Total	50	100.0	100.0	

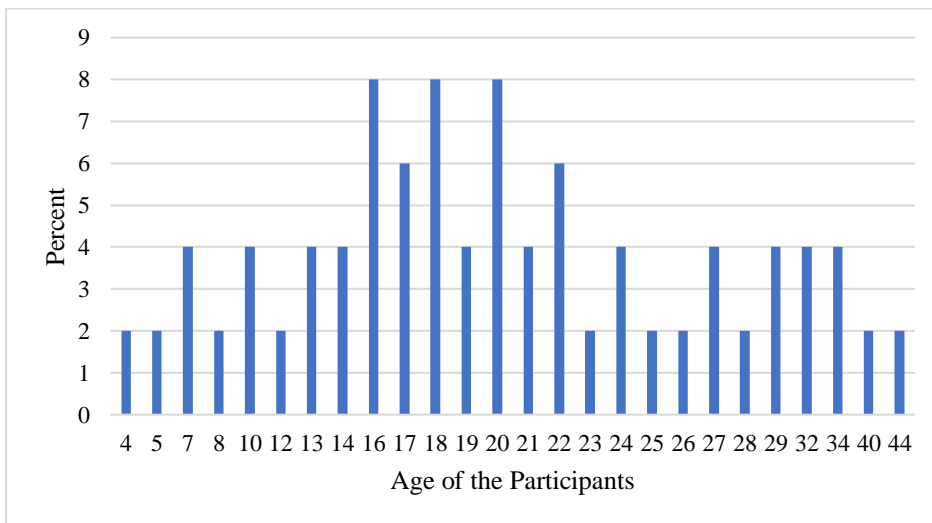
Table 2

Statistics of the Age of the Participants

N	Valid	50
	Missing	0
Mean		20.16
Median		19.50
Std. Deviation		8.572
Percentiles	25	15.50
	50	19.50
	75	25.25

Figure 1

Percentage of the Age of the Participants



It is pertinent to learn about the ages of the participants who self-responded the questionnaires and were once left behind children. Their age varied and are from 18 to 44 years old. Conversely, while talking about the left behind children's age data coming from questionnaires responded by their parent, it goes from four to 40 years old. Table 3 reveals the crosstabulation of the participants' age who self-responded the questionnaire and the age of the left behind children in questionnaires responded by their parents.

On the other hand, Table 4 discloses the Chi-Square Tests of the relationship between the age of the participants and the questionnaire being self-responded or responded by parents and the results indicates that this information is not relevant since the P value is greater than 0.05 ($p = 0.226$).

Figure 2 portrays the Relationship between Questionnaires Responded by Parent or Self-Responded and Age of the Participants.

Table 3

Crosstabulation of Relationship Between Age of the Participants and the Questionnaires Responded by Parents or Self-Responded

Count		Responded by Parent or Self		Total
		Parent	Self	
Age of the Participant	4	1	0	1
	5	1	0	1
	7	2	0	2
	8	1	0	1
	10	2	0	2
	12	1	0	1
	13	2	0	2
	14	2	0	2
	16	4	0	4

17	3	0	3
18	2	2	4
19	1	1	2
20	2	2	4
21	2	0	2
22	0	3	3
23	1	0	1
24	0	2	2
25	0	1	1
26	0	1	1
27	1	1	2
28	1	0	1
29	1	1	2
32	1	1	2
34	1	1	2
40	1	0	1
44	0	1	1
Total	33	17	50

Table 4

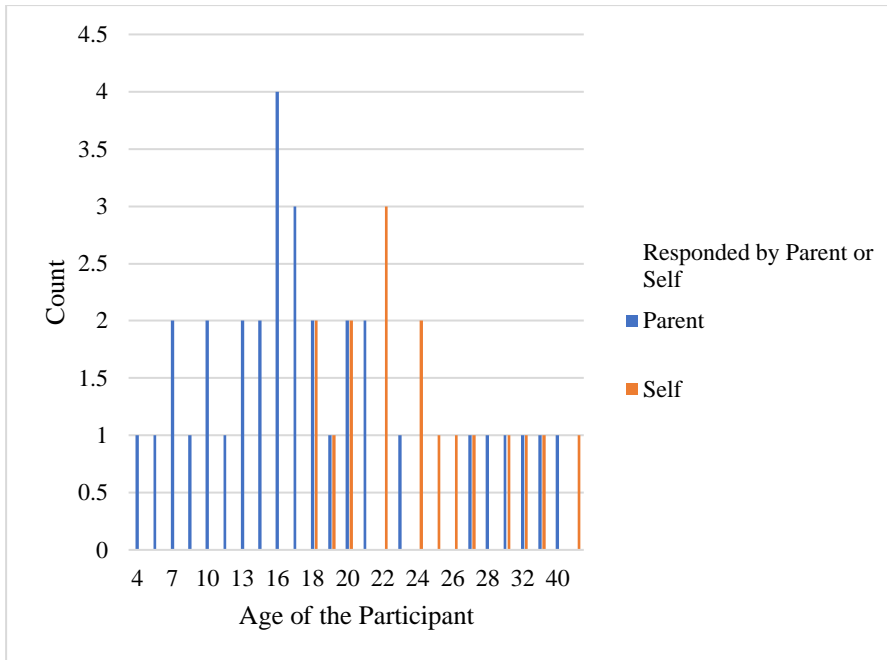
Chi-Square Tests of Relationship Between Age of the Participants and the Questionnaires Responded by Parents or Self-Responded

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	29.947 ^a	25	0.226
Likelihood Ratio	39.150	25	0.036
Linear-by-Linear Association	8.412	1	0.004
N of Valid Cases	50		

Note. Intercorrelations of Age of the Participants and the Questionnaire Being Self Responded or Responded by Parent. *a.* 52 cells (100.0%) have expected count less than 5 ($p = .226$). The minimum expected count is .34.

Figure 2

Relationship Between Age of the Participants and the Questionnaires Responded by Parents or Self-Responded



Speaking of gender, 58 percent were females and 42 percent of the participants were male. The descriptive statistics such as Frequency, Percent, Valid Percent and Cumulative Percent of Gender are shown in Table 5.

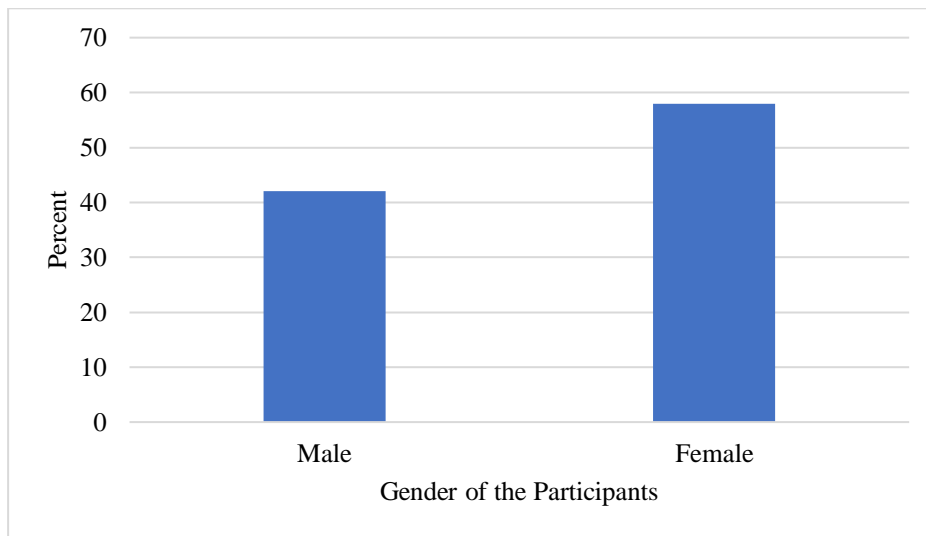
Figure 1 shows the percentage of the gender of the participants.

Table 5

Frequency of Gender of the Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	21	42.0	42.0	42.0
	Female	29	58.0	58.0	100.0
	Total	50	100.0	100.0	

Figure 3

Percentage of Gender of the Participants

Regarding the period of time children were estranged from their parents, the findings show that the mean separation period of time between left behind children and their parents was 7.33 years and the median separation period of time from their parents was 7.5 years (SD = 4.47).

In terms of percentage, 12 percent of the populace were estranged from their parents for one year, another 12 percent was separated from their parents for six years, followed by 10 percent of them separated from their parents for eight, nine and twelve years, eight percent of them were estranged from the parents for five years, six percent was separated for two and 13 years, four percent was separated for two, seven, 10 and 11 years and finally, two percent of the participants were estranged from their parents for three, four, 14, 16 and 19 years.

Table 6 presents the frequency, percent, valid percent and cumulative percent of years of separation between left behind children and their parents. Whereas the descriptive statistics: Mean, Median, Minimum, Maximum, Standard Deviation and Percentiles of Years of Separation are shown in Table 7.

Figure 4 illustrates the Percentage of Years of Separation between LBC and Parent.

Table 6

Frequency of Years of Separation

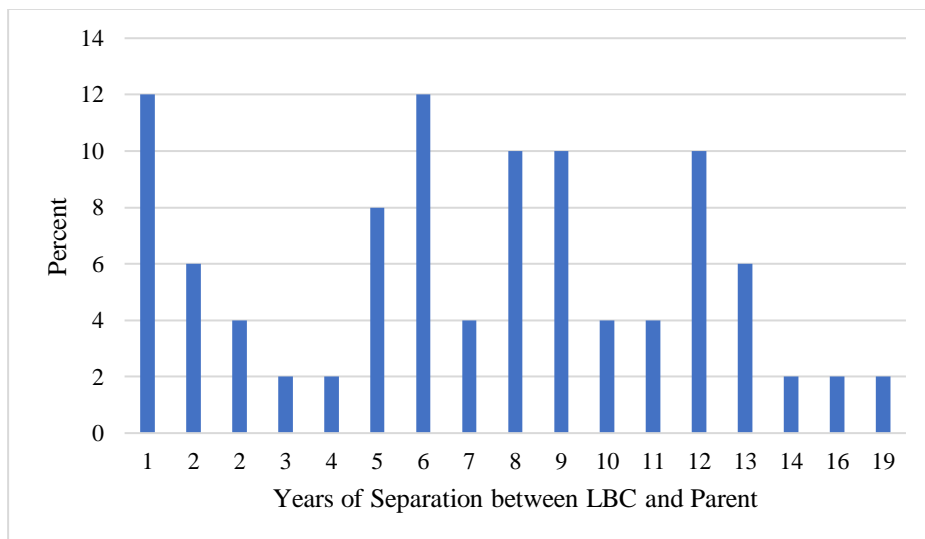
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	12.0	12.0	12.0
	2	3	6.0	6.0	18.0
	2	2	4.0	4.0	22.0
	3	1	2.0	2.0	24.0
	4	1	2.0	2.0	26.0
	5	4	8.0	8.0	34.0
	6	6	12.0	12.0	46.0
	7	2	4.0	4.0	50.0
	8	5	10.0	10.0	60.0
	9	5	10.0	10.0	70.0
	10	2	4.0	4.0	74.0
	11	2	4.0	4.0	78.0
	12	5	10.0	10.0	88.0
	13	3	6.0	6.0	94.0
	14	1	2.0	2.0	96.0
	16	1	2.0	2.0	98.0
	19	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table 7

Statistics of Years of Separation

N	Valid	50
	Missing	0
Mean		7.33
Median		7.50
Std. Deviation		4.473
Minimum		1
Maximum		19
Percentiles	25	3.75
	50	7.50
	75	11.00

Figure 4

Percentage of Years of Separation between LBC and Parents

The questionnaires were either responded by a Parent or Self-Responded (responded by the child who was left behind whilst the parent migrated). Self-

responded questionnaires represent 34 percent of the sample whilst 66 percent of the questionnaires were responded by a parent.

The descriptive statistics such as Frequency, Percent, Valid Percent and Cumulative Percent are shown in Table 8.

Figure 5 shows the Percentage of whether the Questionnaires were or Responded by Parent or Self Responded.

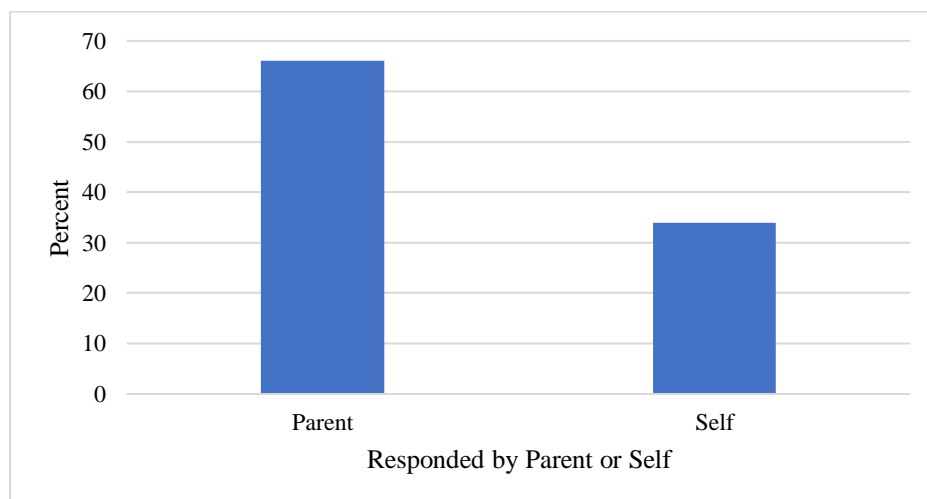
Table 8

Frequency of Questionnaires Responded by Parent or Self-Responded

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parent	33	66.0	66.0	66.0
	Self	17	34.0	34.0	100.0
	Total	50	100.0	100.0	

Figure 5

Percentage of the Questionnaires Responded by Parent or Self-Responded



According to the results gathered at the time of the assessment, not all children who were left behind met their parents. Table 9 demonstrates that 32 percent were

still living in Brazil and did not have the opportunity to reunite with their parents whilst 68 percent of the left behind children reunited with their parents.

Figure 6 displays the Percentage of Participants who Reunited with Parents.

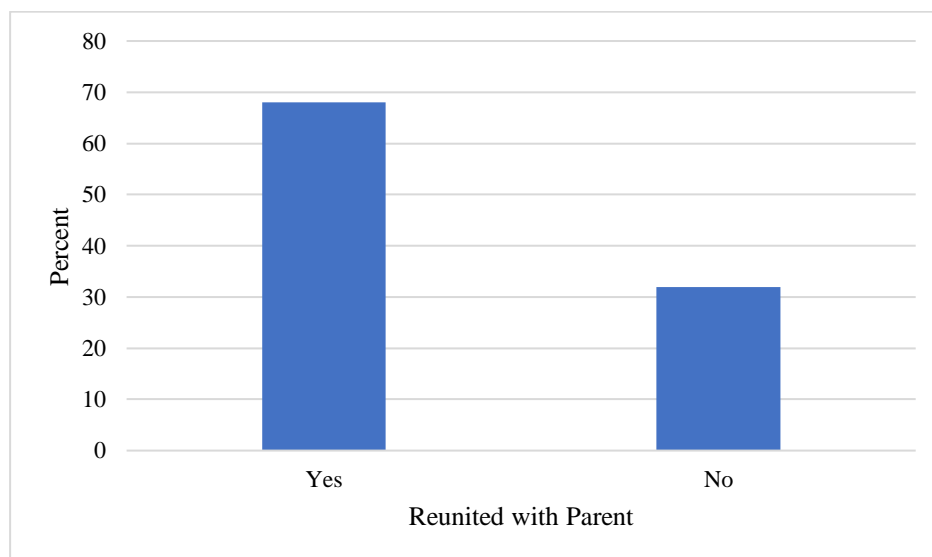
Table 9

Frequency of Participants who Reunited with Parents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	34	68.0	68.0	68.0
	No	16	32.0	32.0	100.0
	Total	50	100.0	100.0	

Figure 6

Percentage of Participants who Reunited with Parents



Caregiver data could not be included in this study because several participants changed their caregiver during their parents' absence. Regarding whether it was the mother, the father or both parents who left their children behind the results indicate

that 70 percent of the children was left behind by their mothers, 12 percent was left by their fathers and 18 percent was left by both parents.

Table 10 shows the frequency, percent, valid percent and cumulative percent of the children who were left behind by either their mothers, fathers or by both parents.

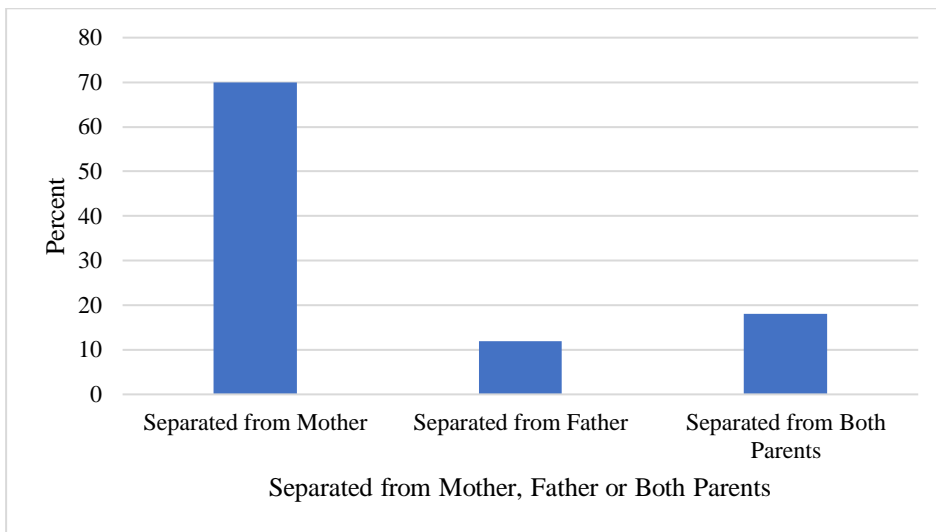
Figure 6 displays the Percentage of Separation from Mother, Father or both Parents.

Table 10

Frequency of Separation from Mother, Father or both Parents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Separated from Mother	35	70.0	70.0	70.0
	Separated from Father	6	12.0	12.0	82.0
	Separated from Both Parents	9	18.0	18.0	100.0
	Total	50	100.0	100.0	

Figure 7

Percentage of Separation from Mother, Father or both Parents

All participants who Self-Responded the questionnaire Reunited with their Parents while not all parents who responded the questionnaire have reunited with their children. A crosstabulation examination was conducted to learn about the mentioned facts. Table 11 reveals the relationship between Questionnaire Responded by Parent or Self Responded and Reunited with Parent or not.

Table 11 shows that 17 participants who were left behind children and self-responded the questionnaire met their parents and regarding the 33 parents who responded the questionnaire, 17 have met their children while 16 were not able to. This indicates that the period of separation is still going on and might be extended for a considerable amount of time.

Besides, Table 12 unveils the Chi Square Tests of the relationship between Questionnaire Responded by Parent or Self Responded and Reunited with Parent or not Crosstabulation. The Chi-Square Tests demonstrate that there is a significant difference since the P value is less than 0.05 ($p = 0.003$). The self-respondents were all reunited with their parents.

Figure 7 shows the Relationship between Questionnaire Responded by Parent or Self Responded Questionnaire and Reunited with Parent or not.

Table 11

Crosstabulation of Relationship between Questionnaires Responded by Parent or Self- Responded and Reunited with Parent or Not

Count		Reunited with Parent		Total
		Yes	No	
Responded by Parent or Self	Parent	17	16	33
	Self	16	1	17
Total		33	17	50

Table 12

Chi-Square Tests of Relationship between Questionnaires Responded by Parent or Self-Responded and Reunited with Parent or Not

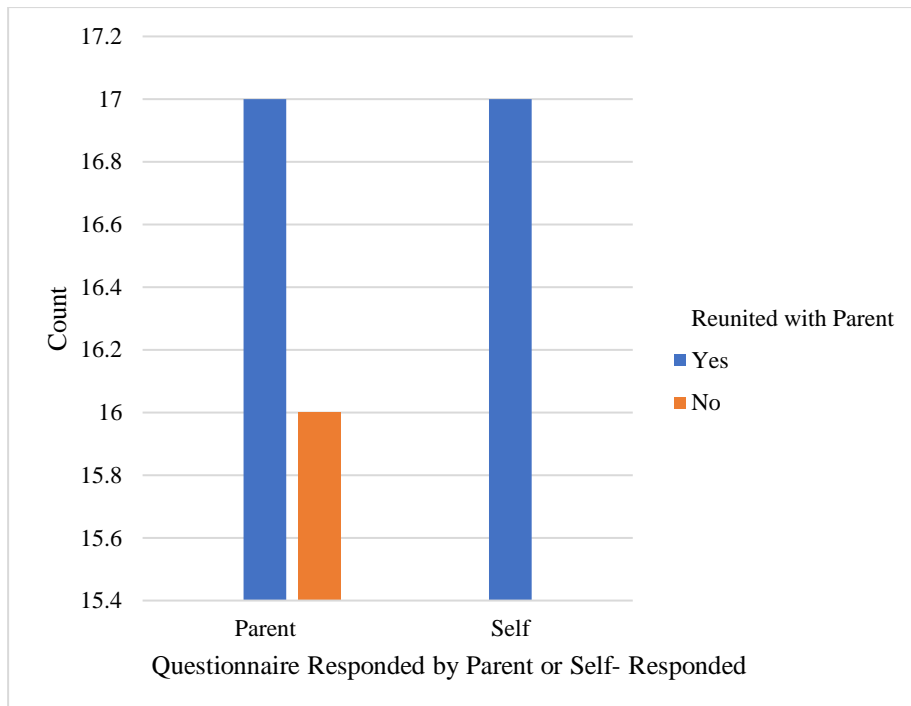
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.075 ^a	1	0.003		
Continuity Correction ^b	7.276	1	0.007		
Likelihood Ratio	10.780	1	0.001		
Fisher's Exact Test				0.004	0.002
Linear-by-Linear Association	8.893	1	0.003		
N of Valid Cases	50				

Note. Intercorrelations between whether the questionnaire was responded by parent or self-responded and reunited with parent or not are significant. *a.* 0 cells (.0%) have expected count less than 5. ($p = .03$). The minimum expected count is 5.78.

b. Computed only for a 2x2 table

Figure 8

Relationship between Questionnaires Responded by Parent or Self-Responded and Reunited with Parent or Not



3.2 Psychological problems.

This section explores all demographic variables and the psychological problems presented by left behind children and how these variables relate to each other.

The SDQ scales investigated in this research were: Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties. According to the SDQ scoring guide included in Appendix B, the bands presented for the SDQ scores in the cited scales are “Normal”, “Borderline” and “Abnormal” (“Youth In Mind, DWBA, SDQ Questionnaires”, 2016).

This original three-band categorization was utilized for the current study. The categorization of the SDQ scores is expected to reveal the possible problems

presented by the respondents in the areas investigated, and also their overall psychological state through the Total Difficulties item.

3.2.1 Emotional problems

While evaluating the frequency of the Emotional Problems Scale presented by the participants, the results are shown in Table 13. In this populace, 60 percent showed signs of abnormality, 8 percent of them were defined in the borderline range of abnormality and 32 percent showed that they were within the normal range.

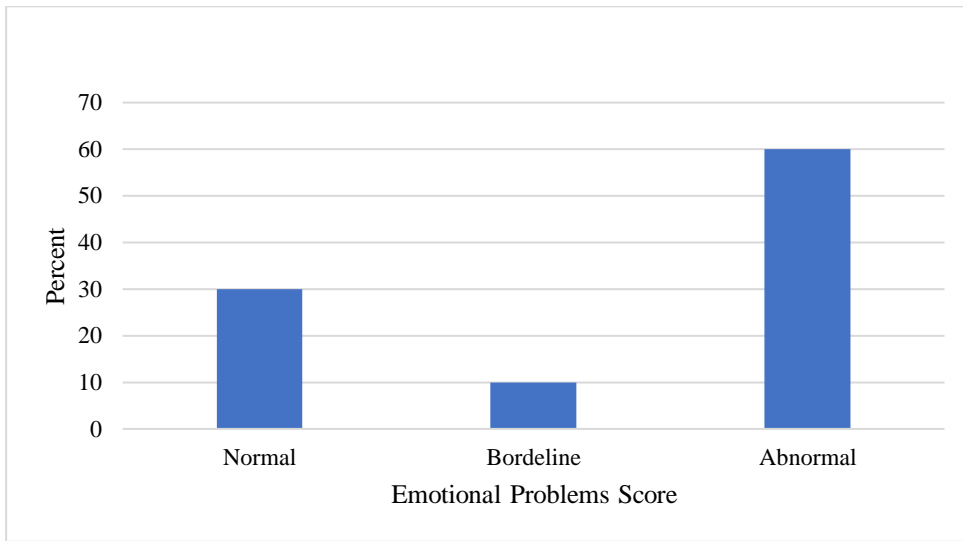
Figure 8 divulges the percentage of the scales “Normal”, “Borderline” and “Abnormal” regarding Emotional Problems.

Table 13

Frequency of Emotional Problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	16	32.0	32.0	32.0
	Borderline	4	8.0	8.0	40.0
	Abnormal	30	60.0	60.0	100.0
	Total	50	100.0	100.0	

Figure 9

Percentage of Emotional Problems**3.2.2 Conduct problems.**

Regarding the Conduct Problems Scale presented by the participants, the results are revealed in Table 14. In this study, 48 percent showed signs of abnormality, 10 percent of them were defined in the borderline range of abnormality and 42 percent showed that they were within the normal range.

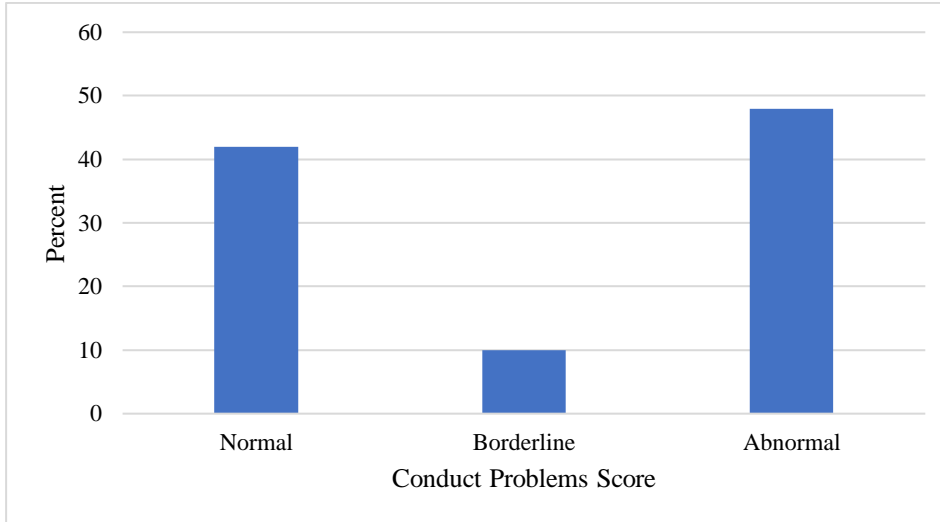
Figure 9 illustrates the percentage of the scales “Normal”, “Borderline” and “Abnormal” regarding Conduct Problems.

Table 14

Frequency of Conduct Problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	21	42.0	42.0	42.0
	Borderline	5	10.0	10.0	52.0
	Abnormal	24	48.0	48.0	100.0
	Total	50	100.0	100.0	

Figure 10

Percentage of Conduct Problems**3.2.3 Hyperactivity.**

The results of the Hyperactivity Scale presented by the participants are exposed in Table 15. The findings reveal that 36 percent showed signs of abnormality, 12 percent of them were defined in the borderline range of abnormality and 52 percent showed that they were within the normal range.

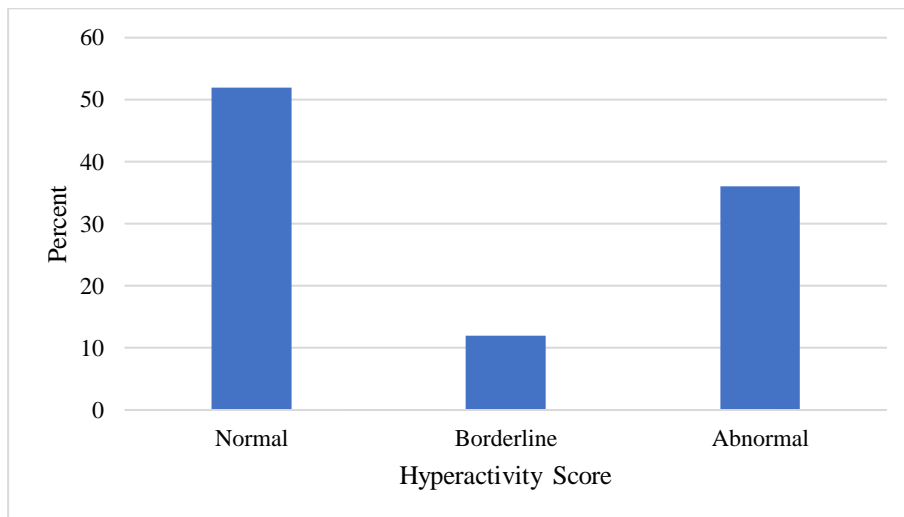
Besides, the Figure 10 demonstrates the percentage of the scales “Normal”, “Borderline” and “Abnormal” regarding the Hyperactivity Scale.

Table 15

Frequency of Hyperactivity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	26	52.0	52.0	52.0
	Borderline	6	12.0	12.0	64.0
	Abnormal	18	36.0	36.0	100.0
	Total	50	100.0	100.0	

Figure 11

Percentage of Hyperactivity**3.2.4 Peer problems.**

Speaking about the Peer Problems Scale presented by the participants, the results are exposed in Table 16. The cited Table shows the frequency, percent, valid percent and cumulative percent. The findings uncover that 52 percent showed signs of abnormality, 4 percent of them were defined in the borderline range of abnormality and 44 percent showed that they were within the normal range.

In addition, the Figure 11 illustrates the percentage of the scales “Normal”, “Borderline” and “Abnormal” regarding the peer problems scale of the studied populace regarding Peer Problems Scale.

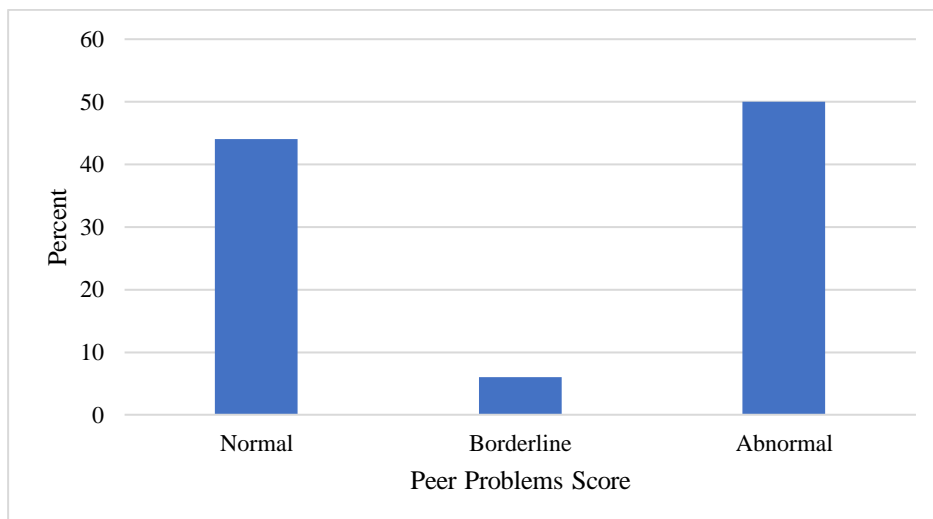
Table 16

Frequency of Peer Problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	22	44.0	44.0	44.0
	Borderline	2	4.0	4.0	48.0
	Abnormal	26	52.0	52.0	100.0
	Total	50	100.0	100.0	

Figure 12

Percentage of Peer Problems



3.2.5 Prosocial.

Whereas talking about the Prosocial Scale presented by the participants, the results are divulged in Table 17. The findings reveal that only 14 percent of the participants showed signs of abnormality, 6 percent of them were defined in the borderline range of deviation and 80 percent showed that they were within the normal range.

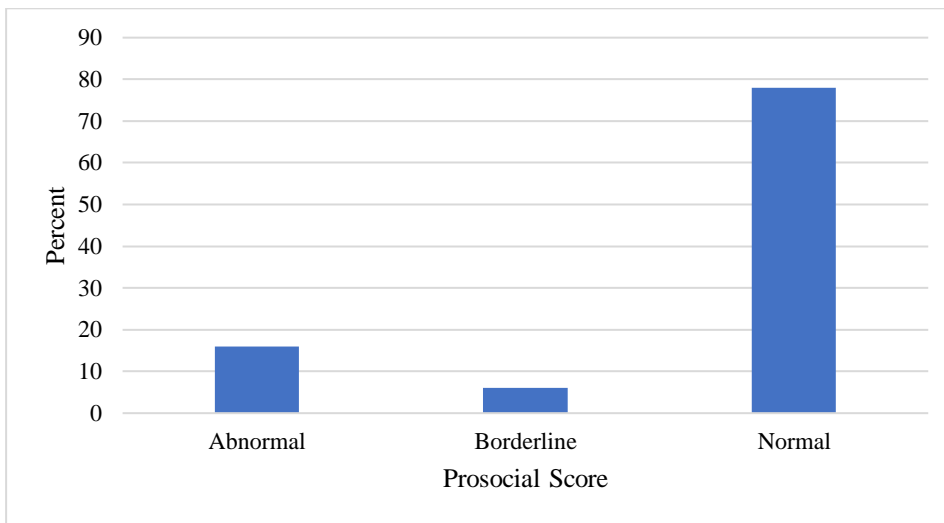
Moreover, Figure 12 shows the percentage of the scales “Normal”, “Borderline” and “Abnormal” regarding Prosocial Scale.

Table 17

Frequency of Prosocial

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	40	80.0	80.0	80.0
	Borderline	3	6.0	6.0	86.0
	Abnormal	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

Figure 13

Percentage of Prosocial**3.2.6 Total difficulties.**

The results of the Total Difficulties Scale presented by the participants are divulged in Table 18. The findings reveal that 46 percent of the participants showed signs of abnormality, 24 percent of them were defined in the borderline range of abnormality and 30 percent showed that they were within the normal range.

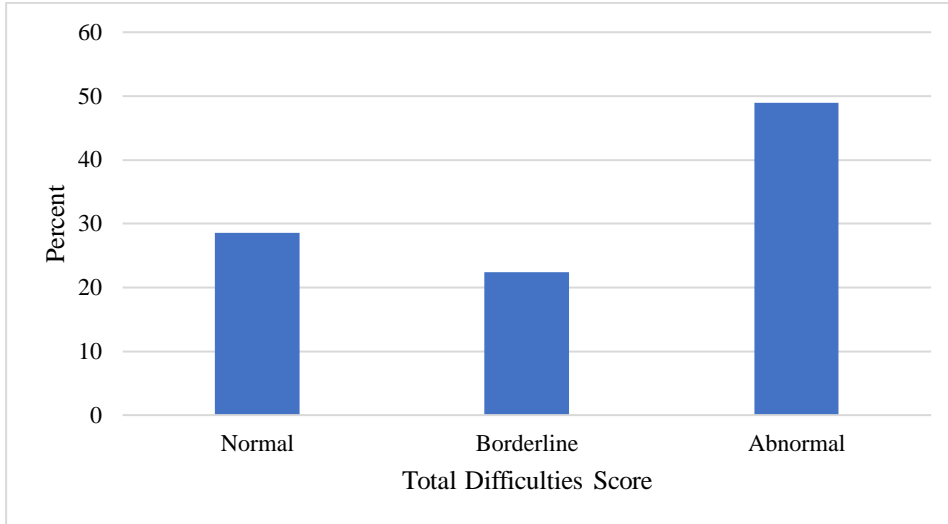
Furthermore, the Figure 13 demonstrates the percentage of the scales “Normal”, “Borderline” and “Abnormal” regarding the Total Difficulties Scale.

Table 18

Frequency of Total Difficulties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	15	30.0	30.0	30.0
	Borderline	12	24.0	24.0	54.0
	Abnormal	23	46.0	46.0	100.0
	Total	50	100.0	100.0	

Figure 14

Percentage of Total Difficulties**3.2.7 Relationship between age and emotional problems.**

While talking about the thinkable association of Age and Emotional Problems presented by the participants, although the group with an older age was the borderline group, the results from the ANOVA demonstrate that there are not significant results; $F(2,49) = 0.506$; $p = 0.606$. Table 19 displays the mean and standard deviation of each in each category of emotional problems: “Abnormal”, “Borderline” and “Normal”. Post-hoc Tukey analysis did not show any difference when taking the groups of emotional problems by pairs.

Table 19

Relationship between Age and Emotional Problems

Emotional problems	Mean	SD	N
Normal	18.81	10.06	16
Borderline	23.50	4.20	4
Abnormal	20.43	8.21	30

3.2.8 Relationship between age and conduct problems.

Furthermore, whilst examining whether the relationship between Age and the Conduct Problems presented by the participants the ANOVA indicates that there is no significance between them $F(2,49) = 0.097$; $p = 0.908$. Table 20 exhibits the mean and standard deviation of Age in the three Conduct Problems categories: “Abnormal”, “Borderline” and “Normal”. Post-hoc Tukey tests did not show any difference when taking the groups of conduct problems by pairs.

Table 20

Relationship between Age and Conduct Problems

Conduct problems	Mean	SD	N
Normal	20.29	7.87	21
Borderline	21.60	8.17	5
Abnormal	19.75	9.51	24

3.2.9 Relationship between age and hyperactivity.

Also, while investigating the relationship between Age and the Hyperactivity ANOVA indicates that there is no significance between them, $F(2,49) = 3.170$; $p = 0.051$. Table 21 exhibits the mean and SD of Age in each Hyperactivity group: “Abnormal”, “Borderline” and “Normal”. In this case, the Post-hoc Tukey tests showed

a significant difference only between the abnormal and normal group ($p = 0.040$), being the normal group older than the abnormal.

Table 21

Relationship between Age and Hyperactivity

Hyperactivity	Mean	SD	N
Normal	22.73	8.90	26
Borderline	20.33	11.00	6
Abnormal	16.39	5.87	18

3.2.10 Relationship between age and peer problems.

Besides, whilst inspecting the relationship between Age and the Peer Problems presented by the participants the ANOVA indicates that there is no significance between the groups $F(2,49) = 0.111$; $p = 0.895$. Table 22 exhibits the mean and standard deviation of age in the three groups for Peer Problems: “Abnormal”, “Borderline” and “Normal”. The Post-hoc Tukey analysis did not show any significant difference between the groups by pairs.

Table 22

Relationship between Age and Peer Problems

Peer problems	Mean	SD	N
Normal	19.59	8.58	22
Borderline	22.00	0.00	2
Abnormal	20.50	9.03	26

3.2.11 Relationship between age and prosocial.

Moreover, regarding the relationship between Age and Prosocial presented by the participants the ANOVA shows no significant differences, $F(2,49) = 0.193$; $p =$

0.825. Table 23 exhibits the mean and standard deviation of age in the three groups for Peer Problems: “Abnormal”, Borderline” and Normal”. The Post-hoc Tuckey analysis did not show any significant difference either.

Table 23

Relationship between Age and Prosocial

Prosocial	Mean	SD	N
Normal	20.50	8.12	40
Borderline	20.00	12.49	3
Abnormal	18.29	10.72	7

3.2.12 Relationship between age and total difficulties.

Lastly, regarding a possible association between Age and the Total Difficulties presented by the participants the ANOVA shows no differences $F(2,49) = 0.931$; $p = 0.401$. Table 24 unveils the mean and standard deviation for age in each group: “Abnormal”, Borderline” and Normal”. The Post-hoc Tukey tests did not show any significant difference either.

Table 24

Relationship between Age and Total Difficulties

Prosocial	Mean	SD	N
Normal	20.47	7.29	15
Borderline	22.75	12.54	12
Abnormal	18.61	6.71	23

3.2.13 Relationship between gender and emotional problems.

Conversely, while examining the possible relationship between Gender and Emotional Problems presented by the participants, the crosstab shows that the number of females that had an “Abnormal” categorization score in the SDQ was significantly higher when compared to the males’ results. Table 25 displays the crosstabulation count of the relationship between Gender and Emotional Problems in terms of “Abnormal”, Borderline” and Normal”.

According to Table 25, 20 females presented problems related to the emotional area while 10 males had difficulties in the mentioned scale. Regarding the Borderline categorization no females were found within this mentioned classification while four males were found within the Borderline area. Nine females did not present Emotional Problems while seven males were found within the Normal categorization.

In addition, Table 26 shows the Chi-Square Tests of the relationship between Gender and Emotional Problems which determine that these results are significant since the P value is less than 0.05 ($p = 0.039$).

On the other hand, Figure 15 portrays the relationship between Gender and Emotional Problems in terms of “Abnormal”, Borderline” and Normal”.

Table 25

Crosstabulation of the Relationship between Gender and Emotional Problems

Count		Emotional Problems Score			Total
		Normal	Borderline	Abnormal	
Gender of the Participant	Male	7	4	10	21
	Female	9	0	20	29
Total		16	4	30	50

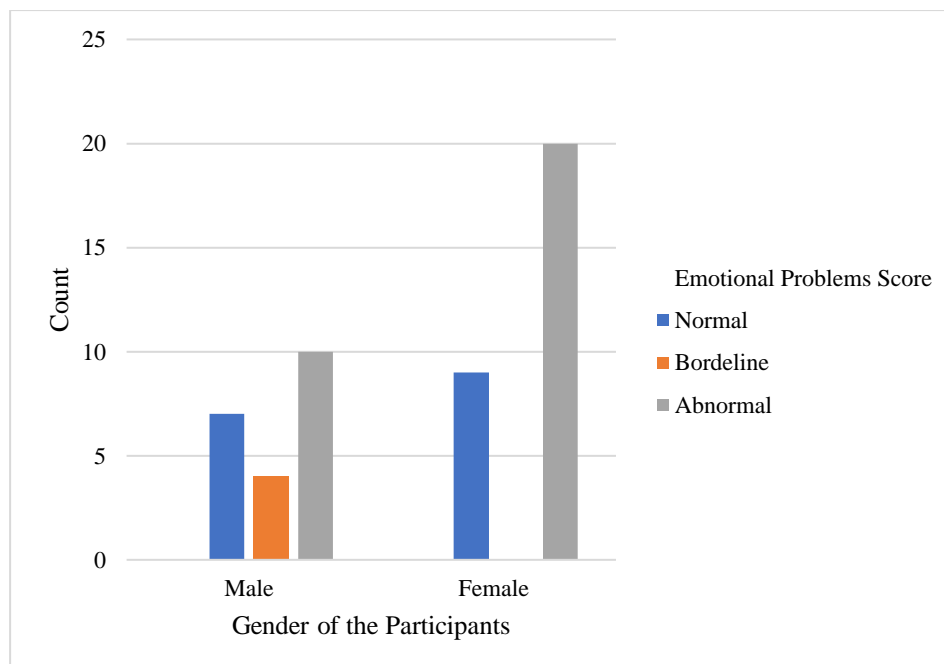
Table 26

Chi-Square Tests of the Relationship between Gender and Emotional Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.469 ^a	2	0.039
Likelihood Ratio	7.908	2	0.019
Linear-by- Linear Association	0.793	1	0.373
N of Valid Cases	50		

Note. Intercorrelations of Gender and Emotional Problems are significant *a*. 2 cells (33.3%) have expected count less than 5 ($p = .039$). The minimum expected count is 1.68.

Figure 15

Relationship between Gender and Emotional Problems

3.2.14 Relationship between gender and conduct problems.

On the other hand, the relationship between Gender and Conduct Problems presented by the participants the crosstab showed a curious outcome. Table 27 exhibits the crosstabulation count of the relationship between Gender and Conduct Problems in terms of “Abnormal”, Borderline” and Normal”.

According to the results, the same number of females and males had an “Abnormal” categorization score in the SDQ. Twelve females and 12 males presented problems associated with the Conduct Problems area. While five females were in the borderline Categorization, no males were found in this categorization. Besides, 12 females and nine males had no Conduct problems.

However, in Table 28, the Chi-Square Tests of the relationship between Gender and Conduct Problems show that these results are not significant since the P value is greater than 0.05 ($p = 0.119$).

Figure 16 discloses the relationship between Gender and Conduct Problems in terms of the “Abnormal”, Borderline” and Normal” categorizations.

Table 27

Crosstabulation of the Relationship between Gender and Conduct Problems

Count		Conduct Problems Score			Total
		Normal	Borderline	Abnormal	
Gender of the Participant	Male	9	0	12	21
	Female	12	5	12	29
Total		21	5	24	50

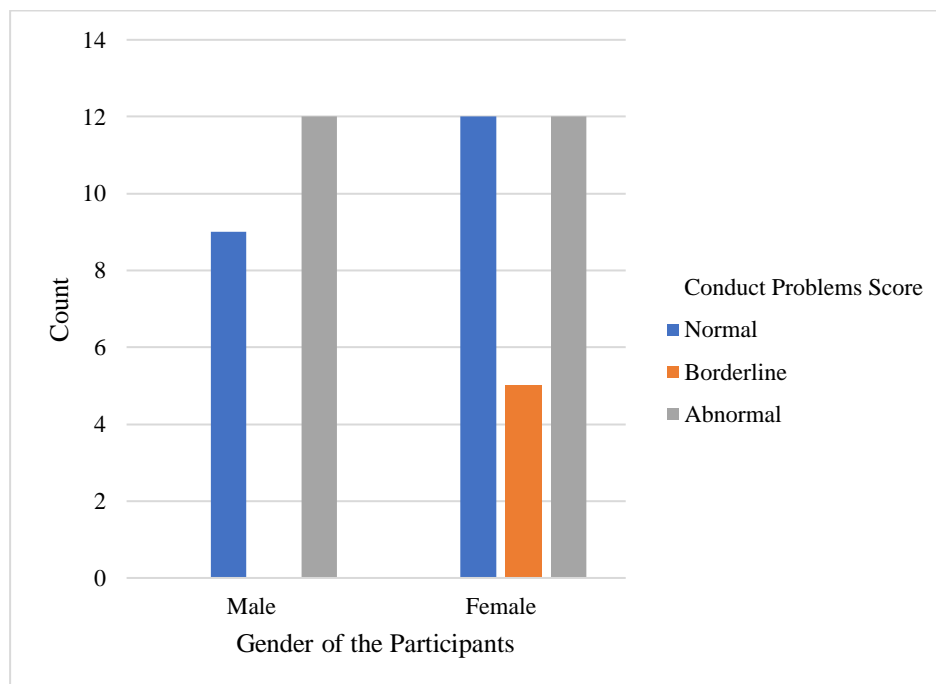
Table 28

Chi-Square Tests of the Relationship between Gender and Conduct Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.258 ^a	2	0.119
Likelihood Ratio	6.076	2	0.048
Linear-by- Linear Association	0.272	1	0.602
N of Valid Cases	50		

Note. Intercorrelations of Gender and Conduct Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .0119$). The minimum expected count is 2.10.

Figure 16

Relationship between Gender and Conduct Problems

3.2.15 Relationship between gender and hyperactivity.

Nevertheless, while evaluating the possible impact of Gender on Hyperactivity presented by the participants the crosstab showed again a thought-provoking outcome. Table 29 exposes the crosstabulation count of the relationship between Gender and Hyperactivity in terms of “Abnormal”, “Borderline” and “Normal”.

According to the data showed in this Table, the same number of females and males had an “Abnormal” categorization score in the SDQ. Nine females and nine males presented problems associated with the Conduct Problems area. Four females were found within the Borderline classification while two males were represented in the mentioned categorization. Sixteen females did not present Hyperactivity while 10 males had no problems regarding Hyperactivity.

But, the Chi-Square Tests of the relationship between Gender and Hyperactivity indicate that these results are not significant since the P value is greater than 0.05 ($p = 0.673$), as they are shown in Table 30.

Figure 17 reveals the relationship between Gender and Hyperactivity in terms of the “Abnormal”, “Borderline” and “Normal” categorizations.

Table 29

Crosstabulation of the Relationship between Gender and Hyperactivity

Count		Hyperactivity Score			Total
		Normal	Borderline	Abnormal	
Gender of the Participant	Male	10	2	9	21
	Female	16	4	9	29
Total		26	6	18	50

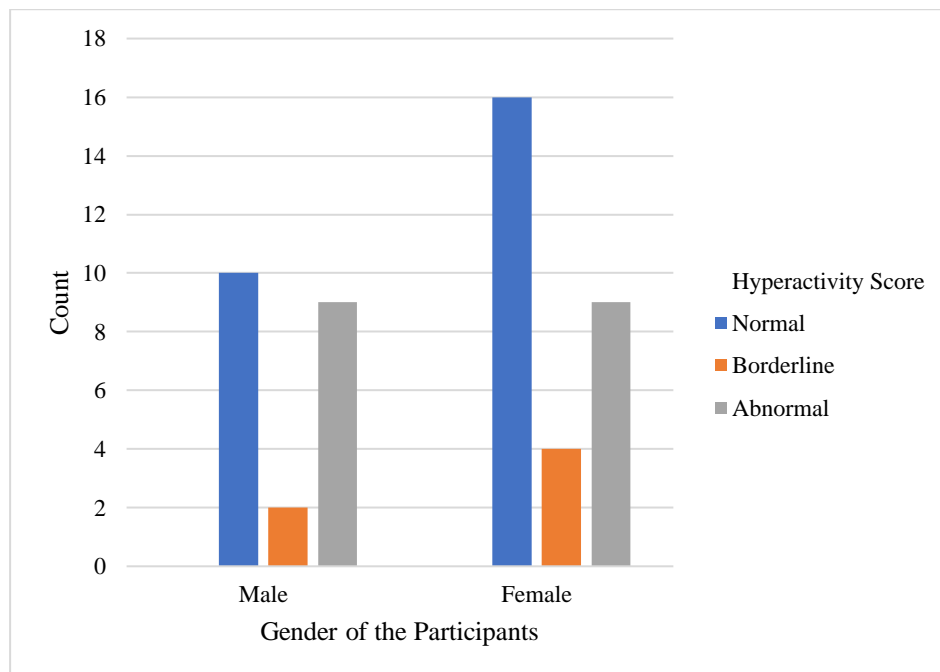
Table 30

Chi-Square Tests of the Relationship between Gender and Hyperactivity

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.792 ^a	2	0.673
Likelihood Ratio	0.791	2	0.673
Linear-by- Linear Association	0.524	1	0.469
N of Valid Cases	50		

Note. Intercorrelations of Gender and Hyperactivity are not significant. a. 2 cells (33.3%) have expected count less than 5 ($p = .0673$). The minimum expected count is 2.52.

Figure 17

Relationship between Gender and Hyperactivity

3.2.16 Relationship between gender and peer problems.

Regarding the presumable association between Gender and the Peer Problems presented by the participants there are interesting results in this populace. Table 31 uncovers the crosstabulation count of the relationship between Gender and Peer Problems in terms of “Abnormal”, Borderline” and Normal”.

According to the results, sixteen females presented problems associated with the Peer Problems area and nine males had problems in this area. No females were represented in the Borderline categorization while two males were found in this classification. And yet, thirteen females had not Peer Problems while nine males presented problems in the cited area.

However, the Chi-Square Tests of the relationship between Gender and Peer Problems indicate that these results are not significant since the P value is greater than 0.05 ($p = 0.234$) as they are exhibited in Table 32.

Figure 18 illustrates the relationship between Gender and Peer Problems in terms of the “Abnormal”, Borderline” and Normal” categorizations.

Table 31

Crosstabulation of the Relationship between Gender and Peer Problems

Count		Peer Problems Score			Total
		Normal	Borderline	Abnormal	
Gender of the Participant	Male	9	2	10	21
	Female	13	0	16	29
Total		22	2	26	50

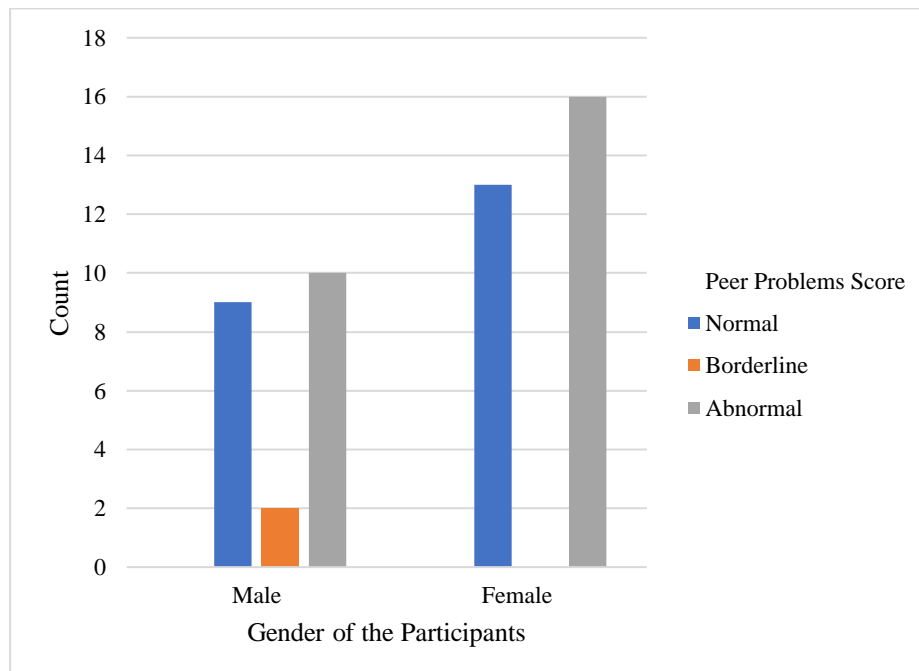
Table 32

Chi-Square Tests of the Relationship Between Gender and Peer Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.906 ^a	2	0.234
Likelihood Ratio	3.616	2	0.164
Linear-by- Linear Association	0.039	1	0.843
N of Valid Cases	50		

Note. Intercorrelations of Gender and Peer Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .234$). The minimum expected count is .84.

Figure 18

Relationship between Gender and Peer Problems

3.2.17 Relationship between gender and prosocial.

Talking about the probable connection between Gender and Prosocial presented by the participants the outcome is intriguing. Table 33 reveals the crosstabulation count of the relationship between Gender and Prosocial in terms of “Abnormal”, Borderline” and Normal”.

According to the results exhibited on the cited Table, only four females and three males presented problems associated with the Prosocial area. Three females were found within the Borderline categorization while no males were represented within this classification. Twenty-two females and 18 males had no problems in the Prosocial area.

Despite these interesting numbers, again, the Chi-Square Tests of the relationship between Gender and Prosocial suggest that these results are not significant since the P value is greater than 0.05 ($p = 0.313$) as they are shown in Table 34.

Figure 19 elucidates the relationship between Gender and Prosocial in terms of the “Abnormal”, Borderline” and Normal” categorizations.

Table 33

Crosstabulation of the Relationship between Gender and Prosocial

Count		Prosocial Score			Total
		Normal	Borderline	Abnormal	
Gender of the Participant	Male	18	0	3	21
	Female	22	3	4	29
Total		40	3	7	50

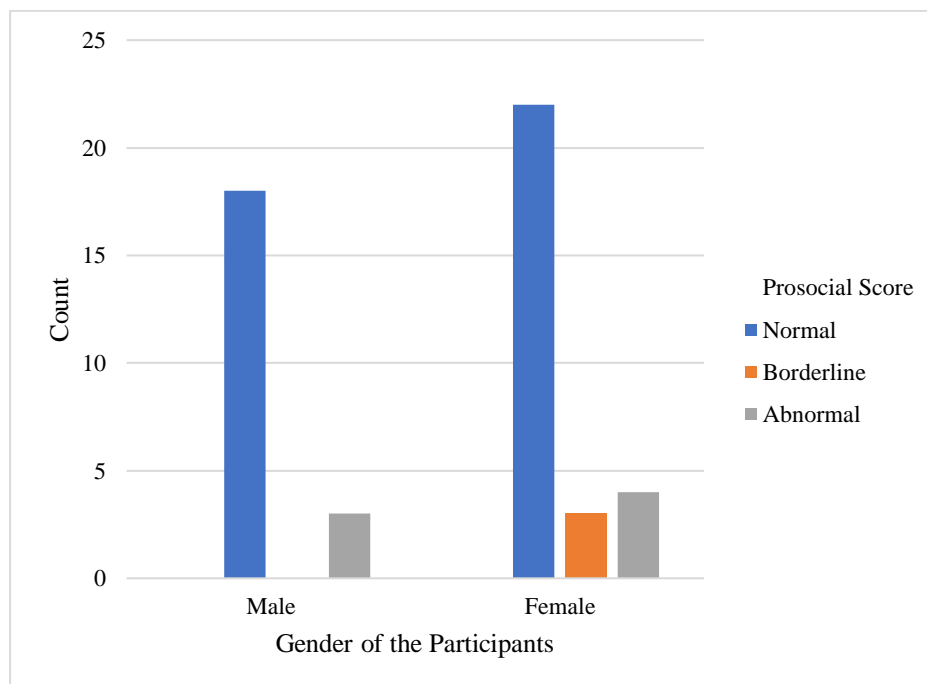
Table 34

Chi-Square Tests of the Relationship between Gender and Prosocial

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.322 ^a	2	0.313
Likelihood Ratio	3.417	2	0.181
Linear-by- Linear Association	0.207	1	0.649
N of Valid Cases	50		

Note. Intercorrelations of Gender and Prosocial are not significant. *a.* 4 cells (66.7%) have expected count less than 5 ($p = .313$). The minimum expected count is 1.26.

Figure 19

Relationship between Gender and Prosocial

3.2.18 Relationship between gender and total difficulties.

Conversely, while evaluating the possible connection between Gender and the Total Difficulties Scale presented by the participants there is an enthralling outcome. Table 35 reveals the crosstabulation count of the relationship between Gender and Total Difficulties in terms of “Abnormal”, “Borderline” and “Normal”.

The results shown in Table 35 reveal that 14 females had an “Abnormal” categorization score in the SDQ while nine males had the same categorization score regarding Total Difficulties. Exactly six females and six males were found in the Borderline categorization while nine females and 6 males did not present Total Difficulties.

But, despite the revealed numbers, the Chi-Square Tests of the relationship between Gender and Total Difficulties denote that these results are not significant since the P value is greater than 0.05 ($p = 0.812$) as they are shown on Table 36.

On the other hand, Figure 20 exposes the relationship between Gender and Total Difficulties in terms of the “Abnormal”, “Borderline” and “Normal” categorizations.

Table 35

Crosstabulation of the Relationship between Gender and Total Difficulties

Count		Total Difficulties Score			Total
		Normal	Borderline	Abnormal	
Gender of the Participant	Male	6	6	9	21
	Female	9	6	14	29
Total		15	12	23	50

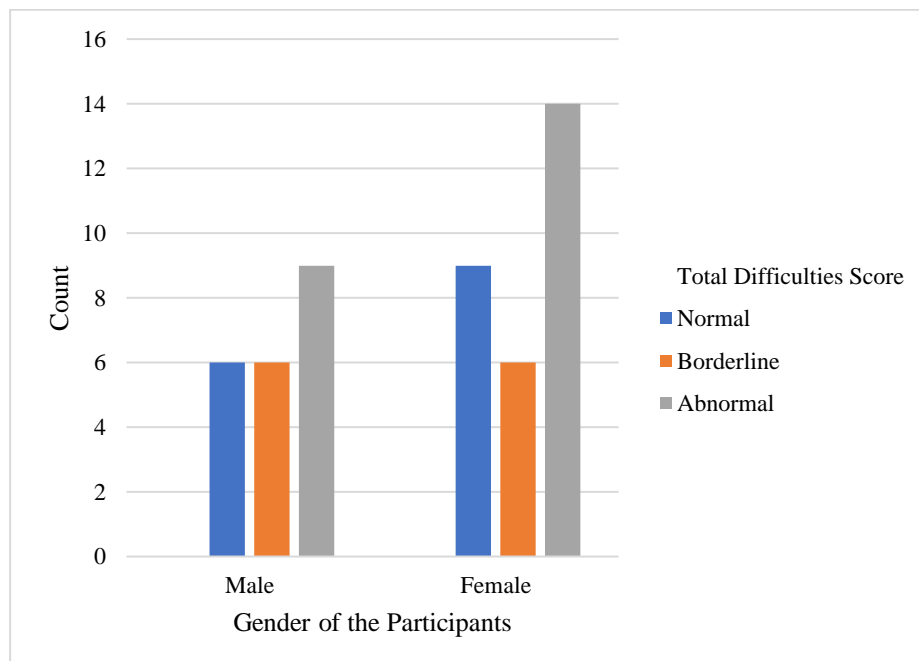
Table 36

Chi-Square Tests of the Relationship between Gender and Total Difficulties

	Value	df	Asymptotic Significance (2-sided)
Pearson	.418 ^a	2	0.812
Chi-Square			
Likelihood Ratio	0.414	2	0.813
Linear-by- Linear Association	0.014	1	0.905
N of Valid Cases	50		

Note. Intercorrelations of Gender and Total Difficulties are not significant. *a.* 0 cells (0.0%) have expected count less than 5 ($p = .812$). The minimum expected count is 5.04.

Figure 20

Relationship between Gender and Total Difficulties

3.2.19 Relationship between years of separation and emotional problems.

Although, while evaluating the possible relationship between Years of Separation, the period of time left behind children were separated from their parents, and the Emotional Problems presented by the participants the results are inquisitive. Table 37 discloses the mean and standard deviation of year of separation in the three groups regarding Emotional Problems: “Abnormal”, Borderline” and Normal”. The abnormal group is the one with more years of separation.

However, the results from the ANOVA demonstrate that there are not significant results; $F(2,49) = 2.851$; $p = 0.068$. Post-hoc Tukey analysis did not show any difference when taking the groups of emotional problems by pairs.

Table 37

Relationship between years of separation and Emotional Problems

Emotional problems	Mean	SD	N
Normal	5.78	4.13	16
Borderline	4.75	3.30	4
Abnormal	8.50	4.49	30

3.2.20 Relationship between years of separation and conduct problems.

As for the possible relationship between Years of Separation, the period of time left behind children were separated from their parents, and the Conduct Problems presented by the participants the results from the ANOVA show no significant differences between the groups, $F(2,49) = 0.344$; $p = 0.711$. Post-hoc Tukey analysis did not show any difference when taking the groups of emotional problems by pairs. Mean and standard deviation are displayed in Table 38.

Table 38

Relationship between years of separation and Conduct Problems

Conduct problems	Mean	SD	N
Normal	6.83	5.14	21
Borderline	7.60	4.28	5
Abnormal	7.71	4.47	24

3.2.21 Relationship between years of separation and hyperactivity.

Whereas inspecting the conceivable relationship between Years of Separation, the period of time left behind children were separated from their parents, and the Hyperactivity presented by the participants the results of the ANOVA show no significant differences, $F(2,49) = 0.217$; $p = 0.806$, as well as the Post-hoc Tukey analysis (see Table 39).

Table 39

Relationship between years of separation and Hyperactivity

Hyperactivity	Mean	SD	N
Normal	7.69	4.91	26
Borderline	6.00	4.20	6
Abnormal	7.25	4.02	18

3.12.22 Relationship between years of separation and peer problems.

Furthermore, while reviewing the possible relationship between Years of Separation, the period of time left behind children were separated from their parents, and the Peer Problems presented by the participants, as it can be seen in Table 40, the group with a highest number of years of separation is the borderline group. However,

the results of the ANOVA show no significant differences, $F(2,49) = 1.156$; $p = 0.324$, as well as the Post-hoc Tukey analysis. It should be noticed that the borderline group only include two participants.

Table 40

Relationship between years of separation and Peer Problems

Peer Problems	Mean	SD	N
Normal	7.02	4.17	22
Borderline	12.00	9.89	2
Abnormal	7.23	4.35	26

3.2.23 Relationship between years of separation and prosocial.

Also, whereas studying the possible relationship between Years of Separation, the period of time left behind children were separated from their parents, and the Prosocial presented by the participants, although the group with the highest number of years of separation is the abnormal, the results of the ANOVA show no significant differences between the groups, $F(2,49) = 0.618$; $p = 0.543$, as well as the Post-hoc Tukey analysis (see Table 41).

Table 41

Relationship between years of separation and Prosocial

Hyperactivity	Mean	SD	N
Normal	7.35	4.36	40
Borderline	4.83	6.21	3
Abnormal	8.29	4.86	7

3.2.24 Relationship between years of separation and total difficulties.

In addition, whilst examining the relationship between the period of time left behind children were separated from their parents, and the Total Difficulties presented by the participants the results are quite similar to most previous evaluations. Table 42 discloses the mean and standard deviation of Years of Separation regarding the Total Difficulties in terms of “Abnormal”, Borderline” and Normal”.

The ANOVA show no significant differences when taking the three groups. Post-hoc Tukey test also show no significant differences between the groups when taking them by pairs. It is worth indicating that even if the differences are not significant the group with the lower number of years of separation is the normal group.

Table 42

Relationship between years of separation and Total Difficulties

Total Difficulties	Mean	SD	N
Normal	5.53	3.87	15
Borderline	8.04	6.02	12
Abnormal	8.13	3.71	23

3.2.25 Relationship between questionnaires responded by parents or self-responded and emotional problems.

Furthermore, whilst examining if there was an association between the results regarding Emotional Problems and the questionnaires who were self-responded or answered by the parents, there were interesting findings. Table 43 discloses the crosstabulation count of the relationship between Questionnaires Responded by

Parent or Self-Responded and Emotional Problems in terms of “Abnormal”, “Borderline” and “Normal”.

Table 43 shows that when the information was given by the parent from the total of 33 participants, 17 left behind children presented “Abnormal” “results regarding Emotional Problems, added to two children who were found within the “Borderline” categorization. Additionally, the same Table reveals that 14 participants had no Emotional Problems.

Besides, in Table 43, while reviewing the results presented by those who self-responded the questionnaire, from the 17 participants, 13 had “Abnormal” results, added to 2 participants who were found within the “Borderline” categorization. Conversely, only two participants presented a “Normal” result.

But, despite the intriguing numbers, the statistical method that assesses the two variables indicates that there is no relationship with Responded by Parent or Self-Responded Questionnaires and Emotional Problems.

The Chi-Square Tests of the relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems shown in Table 44, demonstrate that these results are not significant since the P value is greater than 0.05 ($p = 0.086$). Hence, there is no relationship between Responded by Parent or Self-Responded Questionnaires and Emotional Problems presented by left behind children.

Figure 21 shows the Relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 43

Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems

Count		Emotional Problems Scale			Total
		Normal	Borderline	Abnormal	
Responded by Parent or Self	Parent	14	2	17	33
	Self	2	2	13	17
Total		16	4	30	50

Table 44

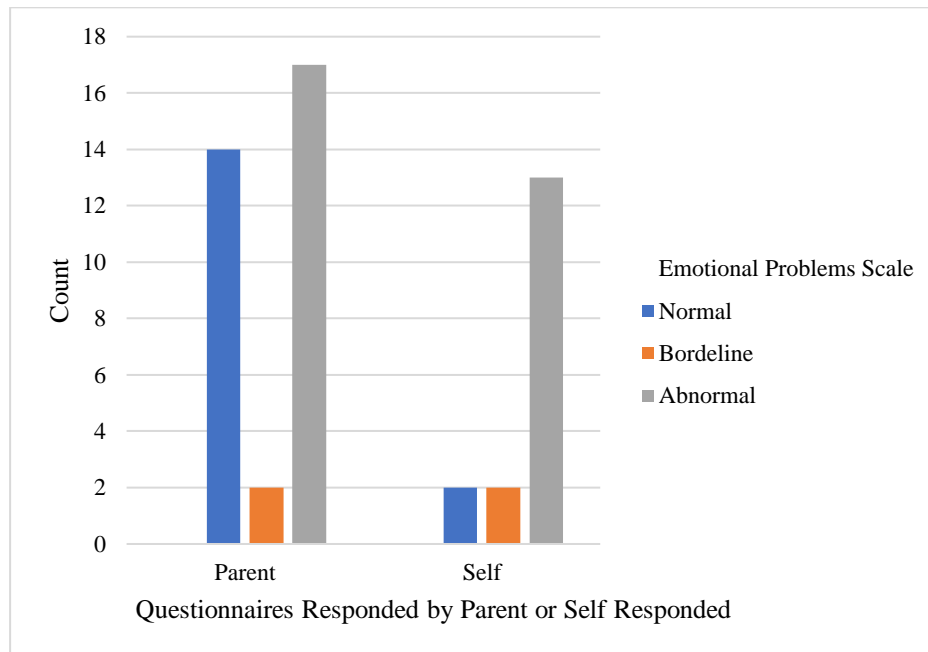
Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.917 ^a	2	0.086
Likelihood Ratio	5.448	2	0.066
Linear-by-Linear Association	4.041	1	0.044
N of Valid Cases	50		

Note. Intercorrelations of Questionnaires Responded by Parent or Self Responded and Emotional Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .086$). The minimum expected count is 1.36.

Figure 21

Relationship between Questionnaires Responded by Parent or Self-Responded and Emotional Problems



3.2.26 Relationship between questionnaires responded by parents or self-responded and conduct problems.

Moreover, whilst examining if there was an association between the results regarding Conduct Problems and the questionnaires who were self-responded or answered by the parents, there were thought-provoking findings. Table 45 discloses the crosstabulation count of the relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems in terms of “Abnormal”, “Borderline” and “Normal”.

Table 45 shows that when the information was given by the parent from the total of 33 participants, 18 left behind children presented “Abnormal” “results regarding Conduct Problems, added to three children who were found within the

“Borderline” categorization. Additionally, the same Table reveals that 12 participants had no Conduct Problems.

Besides, in Table 45, while reviewing the results presented by those who self-responded the questionnaire, from the 17 participants, 13 had “Abnormal” results, added to 2 participants who were found within the “Borderline” categorization. Conversely, only two participants presented a “Normal” result.

Although the numbers were intriguing, the statistical method that assesses the two variables indicates that there is no relationship with Responded by Parent or Self-Responded Questionnaires and Conduct Problems.

The Chi-Square Tests of the relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems shown in Table 46, uncover that these results are not significant since the P value is greater than 0.05 ($p = 0.432$). Hence, there is no relationship between Responded by Parent or Self-Responded and Conduct Problems presented by left behind children.

Figure 22 portrays the Relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 45

Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems

Count		Conduct Problems Scale			Total
		Normal	Borderline	Abnormal	
Responded by Parent or Self	Parent	12	3	18	33
	Self	9	2	6	17
Total		21	5	24	50

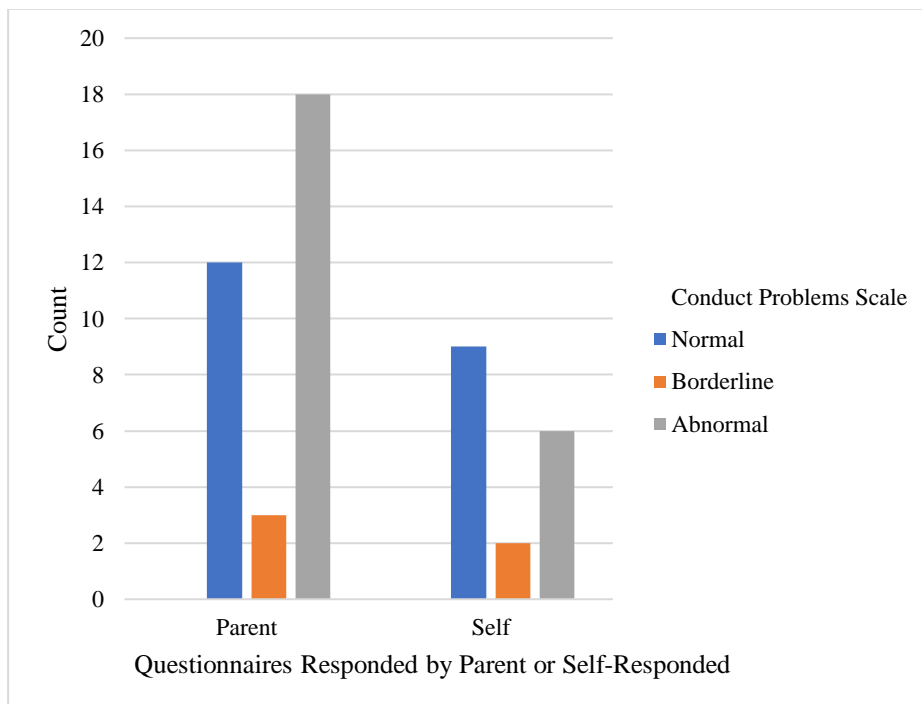
Table 46

Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.681 ^a	2	0.432
Likelihood Ratio	1.699	2	0.428
Linear-by-Linear Association	1.575	1	0.210
N of Valid Cases	50		

Note. Intercorrelations of Questionnaires Responded by Parent or Self Responded and Conduct Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .432$). The minimum expected count is 1.70.

Figure 22

Relationship between Questionnaires Responded by Parent or Self-Responded and Conduct Problems

3.2.27 Relationship between questionnaires responded by parents or self-responded and hyperactivity.

Whereas studying if there was an association between the results regarding Hyperactivity and the questionnaires who were self-responded or answered by the parents, there were thought-provoking findings. Table 47 discloses the crosstabulation count of the relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity in terms of “Abnormal”, “Borderline” and “Normal”.

The mentioned Table unveils that when the information was given by the parent from the total of 33 participants, 12 left behind children presented “Abnormal” “results regarding Hyperactivity, added to three children who were found within the “Borderline” categorization. Additionally, the results demonstrate that 18 participants had no Hyperactivity issues.

Moreover, in Table 47, while reviewing the results presented by those who self-responded the questionnaire, from the 17 participants, 6 had “Abnormal” results, added to 3 participants who were found within the “Borderline” categorization. Conversely, eight participants presented a “Normal” result in terms of Hyperactivity.

Despite the informed numbers, the Chi-Square Tests of the relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity as it is shown in Table 48, reveal that these results are not significant since the P value is greater than 0.05 ($p = 0.667$). Hence, there is no relationship between Responded by Parent or Self-Responded Questionnaires and Hyperactivity presented by left behind children.

Figure 23 shows the Relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 47

Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity

Count		Hyperactivity Scale			Total
		Normal	Borderline	Abnormal	
Responded by Parent or Self	Parent	18	3	12	33
	Self	8	3	6	17
Total		26	6	18	50

Table 48

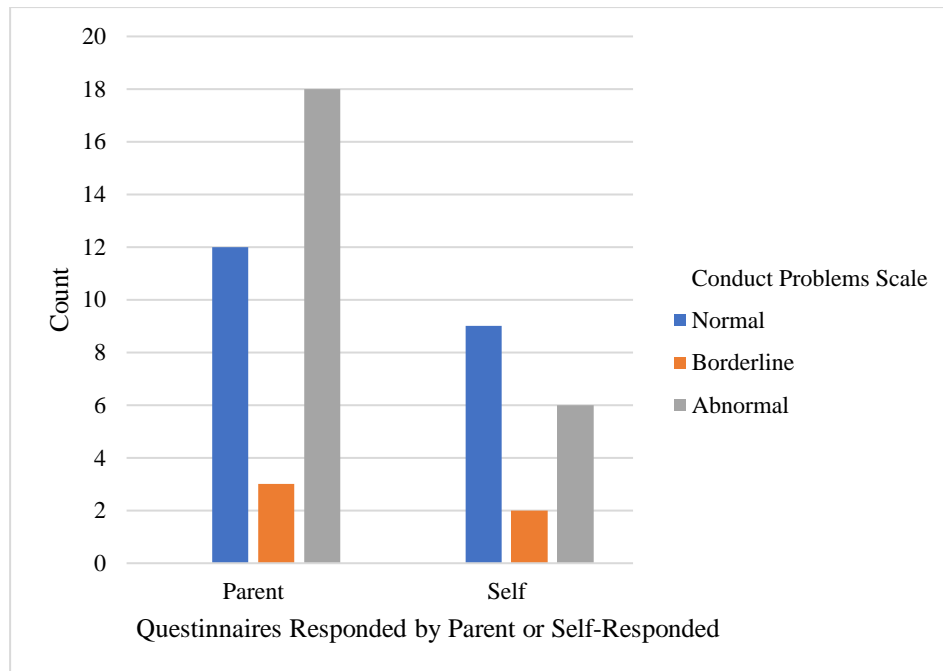
Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.809 ^a	2	0.667
Likelihood Ratio	0.775	2	0.679
Linear-by-Linear Association	0.053	1	0.818
N of Valid Cases	50		

Note. Intercorrelations of Questionnaires Responded by Parent or Self- Responded and Hyperactivity are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .0667$). The minimum expected count is 2.04.

Figure 23

Relationship between Questionnaires Responded by Parent or Self-Responded and Hyperactivity



3.2.28 Relationship between questionnaires responded by parents or self-responded and peer problems.

Also, while considering if there was an association between the results regarding Peer Problems and the questionnaires who were self-responded or answered by the parents, there were thought-provoking findings. Table 49 discloses the crosstabulation count of the relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems in terms of “Abnormal”, “Borderline” and “Normal”.

The cited Table exposes that when the information was given by the parent from the total of 33 participants, 16 left behind children presented “Abnormal” “results regarding Peer Problems, no children were found within the “Borderline” categorization and 18 participants had no Peer Problems.

Besides, while reviewing the results presented by those who self-responded the questionnaire, from the 17 participants, 10 had “Abnormal” results and two participants were found within the “Borderline” categorization. Conversely, five participants presented a “Normal” result in terms of Peer Problems.

However, intriguing numbers or not, the Chi-Square Tests the relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems shown in Table 50 uncover that these results are not significant since the P value is greater than 0.05 ($p = 0.069$). Hence, there is no relationship between Responded by Parent or Self-Responded and Peer Problems presented by left behind children.

Figure 24 shows the Relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 49

Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems

Count		Peer Problems Scale			Total
		Normal	Borderline	Abnormal	
Responded by Parent or Self	Parent	17	0	16	33
	Self	5	2	10	17
Total		22	2	26	50

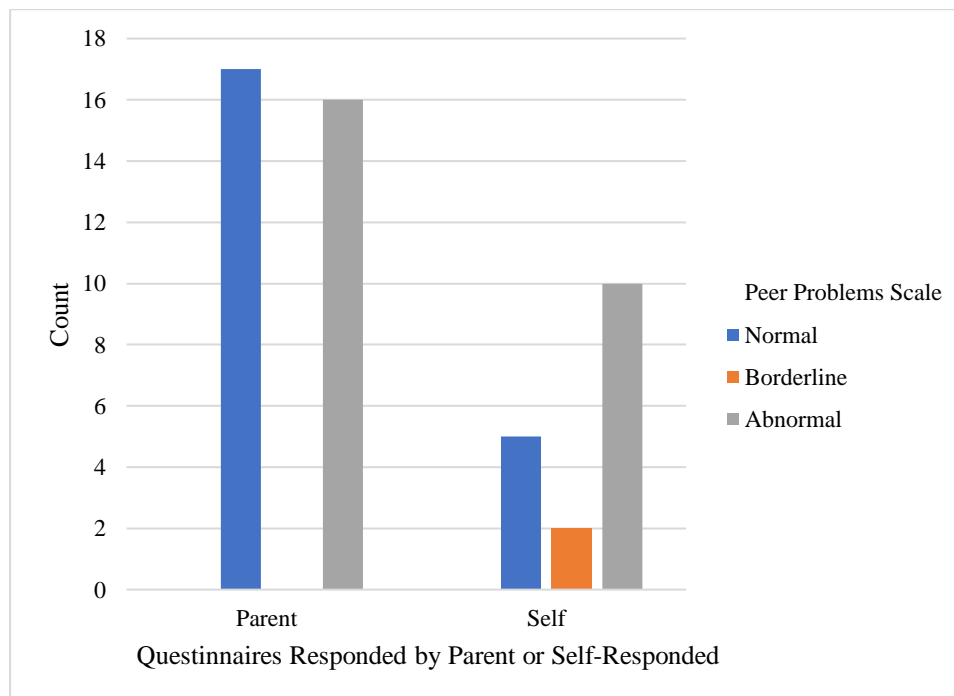
Table 50

Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Peer Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.359 ^a	2	0.069
Likelihood Ratio	5.875	2	0.053
Linear-by-Linear Association	1.214	1	0.271
N of Valid Cases	50		

Note. Intercorrelations of Questionnaires Responded by Parent or Self-Responded and Peer Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .069$). The minimum expected count is .68.

Figure 24

Relationship between Questionnaires Responded by Parent or Self-Responded Questionnaires and Peer Problems

3.2.29 Relationship between questionnaires responded by parents or self-responded and prosocial.

Whilst investigating whether there was an association between the results regarding Prosocial and the questionnaires who were self-responded or answered by the parents, there were challenging findings. Table 51 discloses the crosstabulation count of the relationship between Questionnaires Responded by Parent or Self-Responded and Prosocial in terms of “Abnormal”, “Borderline” and “Normal”.

The mentioned Table exposes that when the information was provided by the parent from the total of 33 participants, seven left behind children presented “Abnormal” results regarding Prosocial, three participants were found within the “Borderline” categorization and 23 participants had “Normal” results regarding Prosocial.

Also, in Table 51, while reviewing the results presented by those who self-responded the questionnaire, from the 17 participants, all participants presented “Normal” results regarding Prosocial.

This time, the intriguing numbers indicate that there is, actually, a possible correlation. The Chi-Square Tests of the relationship between Questionnaires Responded by Parent or Self-Responded and Prosocial shown in Table 52 reveal that these results are significant since the P value is less than 0.05 ($p = 0.040$). Hence, there is relationship between Responded by Parent or Self-Responded Questionnaires and Prosocial presented by left behind children.

Figure 25 displays the Relationship between Questionnaires Responded by Parent or Self-Responded and Prosocial in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 51

Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Prosocial

Count		Prosocial Scale			Total
		Normal	Borderline	Abnormal	
Responded by Parent or Self	Parent	23	3	7	33
	Self	17	0	0	17
Total		40	3	7	50

Table 52

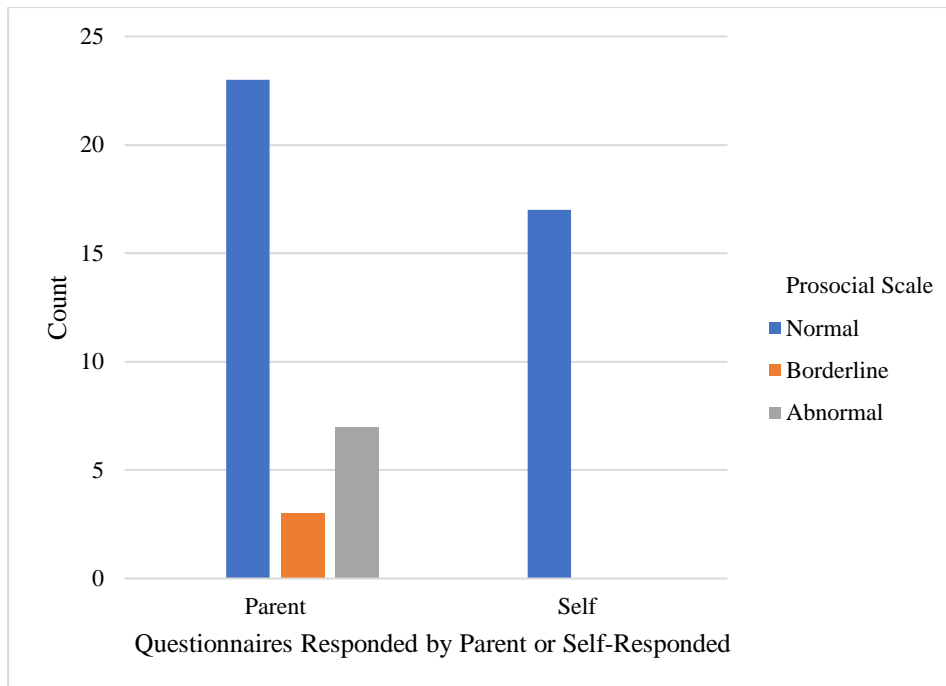
Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Prosocial

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.439 ^a	2	0.040
Likelihood Ratio	9.555	2	0.008
Linear-by-Linear Association	5.785	1	0.016
N of Valid Cases	50		

Note. Intercorrelations of Questionnaires Responded by Parent or Self Responded and Prosocial are significant. *a.* 4 cells (66.7%) have expected count less than 5 ($p = .040$). The minimum expected count is 1.02.

Figure 25

Relationship between Questionnaires Responded by Parent or Self Responded and Prosocial



3.2.30 Relationship between questionnaires responded by parents or self-responded and total difficulties.

Whilst investigating whether there was an association between the results regarding the overall Total Difficulties and the questionnaires who were self-responded or answered by the parents, there were challenging findings. Table 53 discloses the crosstabulation count of the relationship between Questionnaires Responded by Parent or Self-Responded and Total Difficulties in terms of “Abnormal”, “Borderline” and “Normal”.

The mentioned Table exposes that when the information was provided by the parent from the total of 33 participants, 16 left behind children presented “Abnormal” results regarding Prosocial, six participants were found within the “Borderline” categorization and 11 participants had “Normal” results regarding Total Difficulties.

Also, in Table 53, while reviewing the results presented by those who self-responded the questionnaire, from the 17 participants, seven presented “Abnormal” results, six were found within the “Borderline” categorization and four participants presented “Normal” results regarding Total Difficulties.

But, the Chi-Square Tests of the relationship between Questionnaires Responded by Parent or Self-Responded and Total Difficulties exhibited in Table 54 reveal that these results are not significant since the P value is greater than 0.05 ($p = 0.395$). Hence, there is no relationship between Responded by Parent or Self-Responded Questionnaires and Total Difficulties presented by left behind children.

Figure 26 shows the Relationship between Questionnaires Responded by Parent or Self-Responded and Total Difficulties in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 53

Crosstabulation of the Relationship between Questionnaires Responded by Parent or Self-Responded and Total Difficulties

Count		Total Difficulties Scale			Total
		Normal	Borderline	Abnormal	
Responded by Parent or Self	Parent	11	6	16	33
	Self	4	6	7	17
Total		15	12	23	50

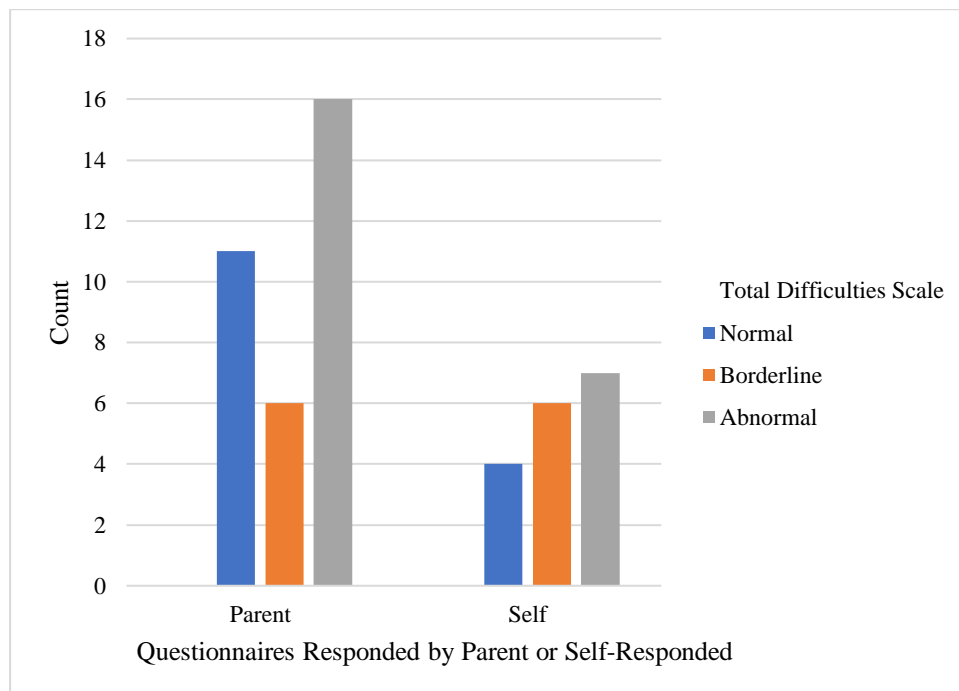
Table 54

Chi-Square Tests of the Relationship between Questionnaires Responded by Parent or Self-Responded and Total Difficulties

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.859 ^a	2	0.395
Likelihood Ratio	1.803	2	0.406
Linear-by-Linear Association	0.009	1	0.923
N of Valid Cases	50		

Note. Intercorrelations of Questionnaires Responded by Parent or Self Responded and Total Difficulties are not significant. *a.* 1 cells (16.7%) have expected count less than 5 ($p = .395$). The minimum expected count is 4.08.

Figure 26

Relationship between Questionnaires Responded by Parent or Self Responded and Total Difficulties

3.2.31 Relationship between reunited with parent or not and emotional problems.

While evaluating whether the fact of having reunited with the parent or not is associated with the Emotional Problems presented by the participants the crosstab results are apparently thought provoking. Table 55 discloses the crosstabulation count of the relationship between Reunited with Parent or Not and Emotional Problems in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 55 of the 34 participants who reunited with their parents 22 presented problems associated with Emotional Problems, three of them were found within the Borderline categorization and nine did not present Emotional Problems. On the other hand, of the 16 who did not reunite with their parents, eight presented Emotional Problems, one was within the Borderline categorization and seven did not present Emotional Problems.

But, the Chi-Square Tests of the relationship between Reunited with Parent or Not and Emotional Problems shown in Table 56 demonstrate that the P value is greater than 0.05 ($p = 0.473$) consequently, the relationship between the variables are not significant.

Figure 27 divulges the relationship between Reunited with Parent or Not and Emotional Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 55

Crosstabulation of the Relationship between Reunited with Parent or not and Emotional Problems

Count		Emotional Problems Scale			Total
		Normal	Borderline	Abnormal	
Reunited with Parent	Yes	9	3	22	34
	No	7	1	8	16
Total		16	4	30	50

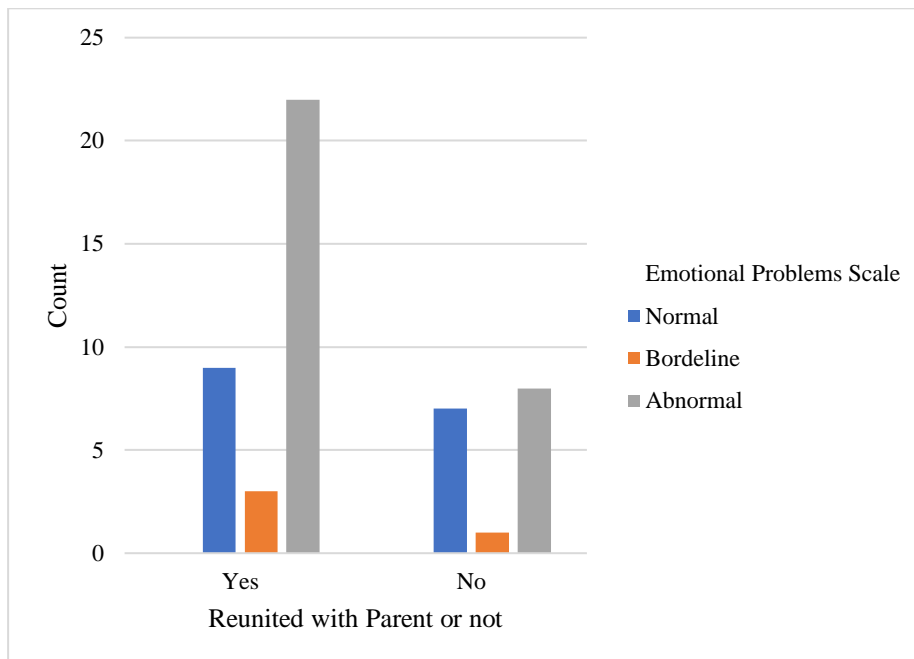
Table 56

Chi-Square Tests of the Relationship between Reunited with Parent or not and Emotional Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.497 ^a	2	0.473
Likelihood Ratio	1.463	2	0.481
Linear-by-Linear Association	1.296	1	0.255
N of Valid Cases	50		

Note. Intercorrelations of Reunited with Parents or not and Emotional Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .0473$). The minimum expected count is 1.28.

Figure 27

Relationship between Reunited with Parent or not and Emotional Problems

3.2.32 Relationship between reunited with parent or not and conduct problems.

In addition, while analyzing whether the fact of having reunited with parent or not interfered on the Conduct Problems presented by the participants the crosstab showed interesting numbers. Table 57 discloses the crosstabulation count of the relationship between Reunited with Parent or Not and Conduct Problems in terms of “Abnormal”, Borderline” and Normal”.

According to the results exposed in Table 57, of the 34 participants who reunited with their parents 13 presented problems associated with the Conduct Problems’ area, four were within the Borderline categorization and 17 did not have Conduct Problems. While talking about those who did not reunite with their parents, 11 participants had Conduct problems, one was found within the Borderline categorization and four did not present Conduct Problems.

However, the Chi-Square tests of the relationship between Reunited with Parent or Not and Conduct Problems shown in Table 58 indicate that the P value is greater than 0.05 ($p = 0.131$) and therefore there is no significant association between the variables.

Figure 28 reveals the relationship between Reunited with Parent or Not and Conduct Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 57

Crosstabulation of the Relationship between Reunited with Parent or not and Conduct Problems

Count		Conduct Problems Scale			Total
		Normal	Borderline	Abnormal	
Reunited with Parent	Yes	17	4	13	34
	No	4	1	11	16
Total		21	5	24	50

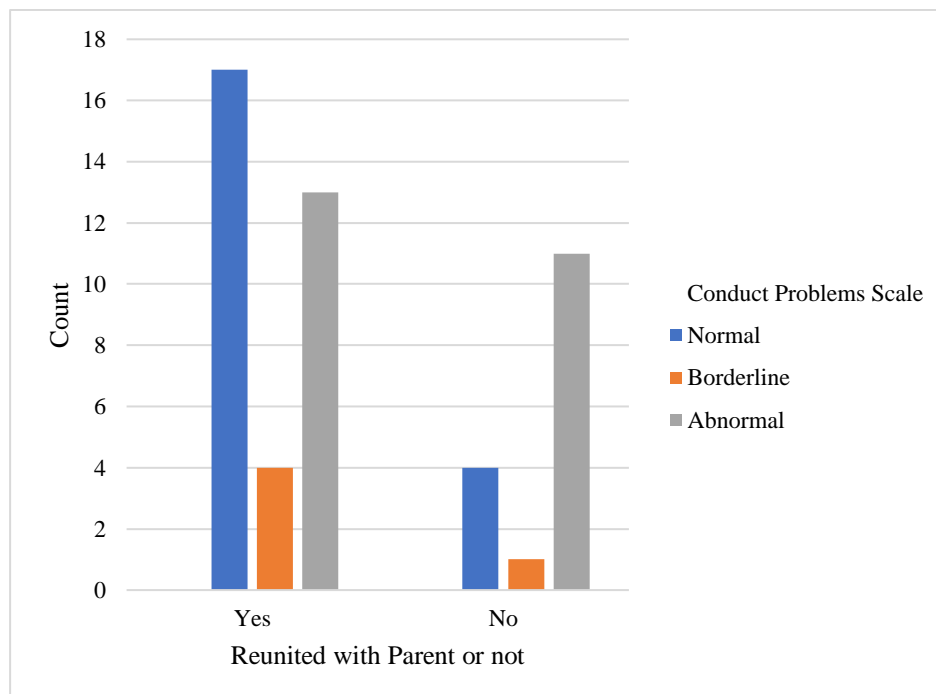
Table 58

Chi-Square Tests of the Relationship between Reunited with Parent or not and Conduct Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.061 ^a	2	0.131
Likelihood Ratio	4.128	2	0.127
Linear-by-Linear Association	3.666	1	0.056
N of Valid Cases	50		

Note. Intercorrelations of Reunited with Parents or not and Conduct Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .131$). The minimum expected count is 1.60.

Figure 28

Relationship between Reunited with Parent or not and Conduct Problems

3.2.33 Relationship between reunited with parent or not and hyperactivity.

Additionally, while analyzing whether the fact of having reunited with the parents or not interfered on Hyperactivity presented by the participants the crosstab showed interesting numbers. Table 59 divulges the crosstabulation count of the relationship between Reunited with Parent or Not and Hyperactivity in terms of “Abnormal”, Borderline” and Normal”.

According to the results in Table 59, of the 34 participants who reunited with their parents 13 presented problems associated with Hyperactivity, three were within the Borderline categorization and 18 did not present Hyperactivity. Regarding those who did not reunite with their parents, five presented Hyperactivity, three were found within the Borderline categorization and eight did not present Hyperactivity.

Nevertheless, once more, the Chi-Square tests of the relationship between Reunited with Parent or Not and Hyperactivity shown in Table 60 exhibit that the P value is greater than 0.05 ($p = 0.589$) hence, there is no association between the variables.

Figure 29 divulges the relationship between Reunited with Parent or Not and Hyperactivity in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 59

Crosstabulation of the Relationship between Reunited with Parent or not and Hyperactivity

Count		Hyperactivity Scale			Total
		Normal	Borderline	Abnormal	
Reunited with Parent	Yes	18	3	13	34
	No	8	3	5	16
Total		26	6	18	50

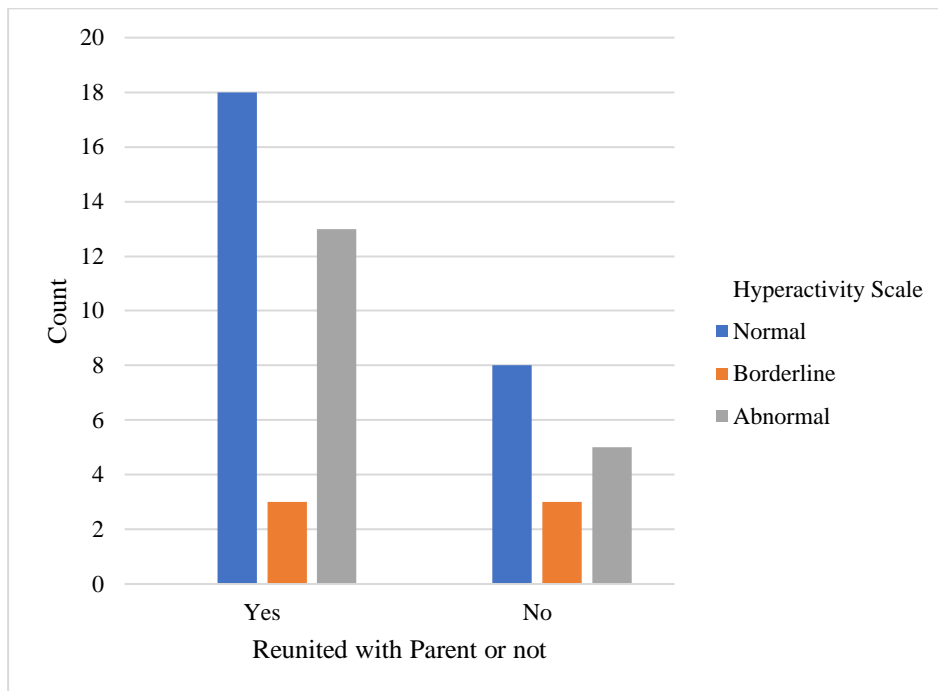
Table 60

Chi-Square Tests of the Relationship between Reunited with Parent or not and Hyperactivity

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.059 ^a	2	0.589
Likelihood Ratio	1.002	2	0.606
Linear-by-Linear Association	0.020	1	0.886
N of Valid Cases	50		

Note. Intercorrelations of Reunited with Parents or not and Hyperactivity are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .589$). The minimum expected count is 1.92.

Figure 29

Relationship between Reunited with Parent or not and Hyperactivity

3.2.34 Relationship between reunited with parent or not and peer problems.

Also, while analyzing whether the fact of having reunited with parent or not interfered on the Peer Problems presented by the participants the crosstab showed interesting numbers. Table 61 divulges the crosstabulation count of the relationship between Reunited with Parent or Not and Peer Problems in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 61, of the 34 participants who reunited with their parents 19 presented problems associated with Peer Problems, two were within the Borderline categorization and 13 did not present Peer Problems. While talking about those who did not reunite with their parents, seven presented Peer

Problems, no one was found within the Borderline categorization and nine did not present Peer Problems.

However, the Chi-Square tests of the relationship between Reunited with Parent or Not and Peer Problems shown on Table 62 exhibit that the P value is greater than 0.05 ($p = 0.359$) thus, the variables are not significantly correlated.

Figure 30 divulges the relationship between Reunited with Parent or Not and Peer Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 61

Crosstabulation of the Relationship between Reunited with Parent or not and Peer Problems

Count		Peer Problems Scale			Total
		Normal	Borderline	Abnormal	
Reunited with Parent	Yes	13	2	19	34
	No	9	0	7	16
Total		22	2	26	50

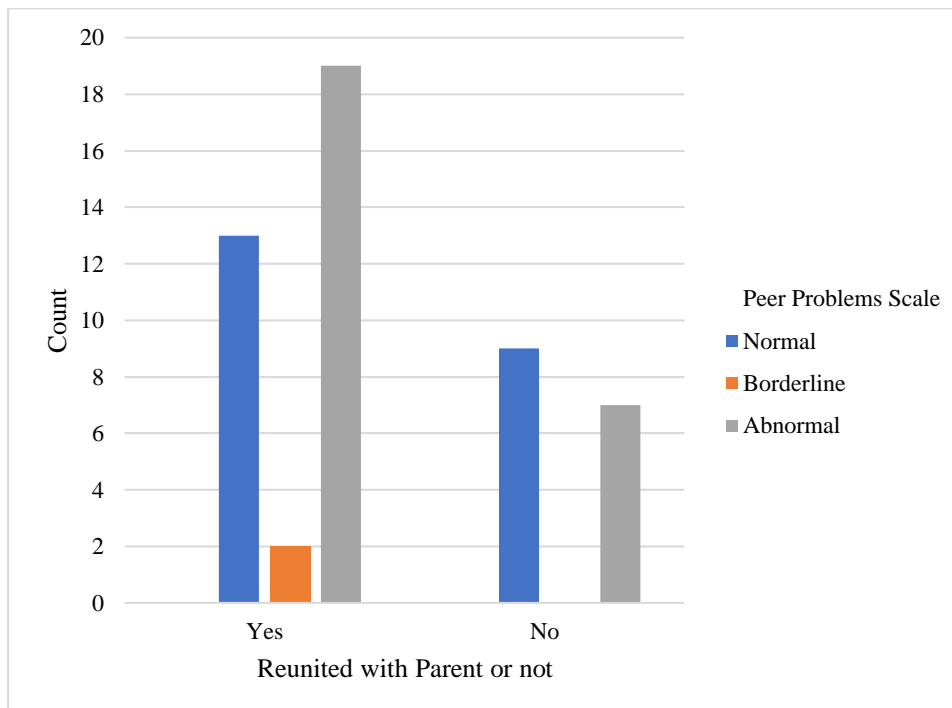
Table 62

Chi-Square Tests of the Relationship between Reunited with Parent or not and Peer Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.052 ^a	2	0.359
Likelihood Ratio	2.630	2	0.268
Linear-by-Linear Association	1.016	1	0.313
N of Valid Cases	50		

Note. Intercorrelations of Reunited with Parents or not and Peer Problems are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .359$). The minimum expected count is .64.

Figure 30

Relationship between Reunited with Parent or not and Peer Problems

3.2.35 Relationship between reunited with parent or not and prosocial.

Besides, whereas examining whether the fact of having reunited with parent or not interfered on Prosocial abilities presented by the participants the crosstab exhibited curious numbers. Table 63 divulges the crosstabulation count of the relationship between Reunited with Parent or Not and Prosocial in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 63, of the 34 participants who reunited with their parents five presented problems associated with Prosocial, one was found within the Borderline categorization and 28 did not present Prosocial difficulties. While talking about those who did not reunite with their parents, two presented Prosocial problems, two were found within the Borderline categorization and 12 did not present Prosocial troubles.

However, the Chi-Square tests of the relationship between Reunited with Parent or Not and Prosocial shown on Table 64 exhibit that the P value is greater than 0.05 ($p = 0.413$) thus, there is no relationship between the variables.

Figure 31 illustrates the relationship between Reunited with Parent or Not and Prosocial in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 63

Crosstabulation of the Relationship between Reunited with Parent or not and Prosocial

Count		Prosocial Scale			Total
		Normal	Borderline	Abnormal	
Reunited with Parent	Yes	28	1	5	34
	No	12	2	2	16
Total		40	3	7	50

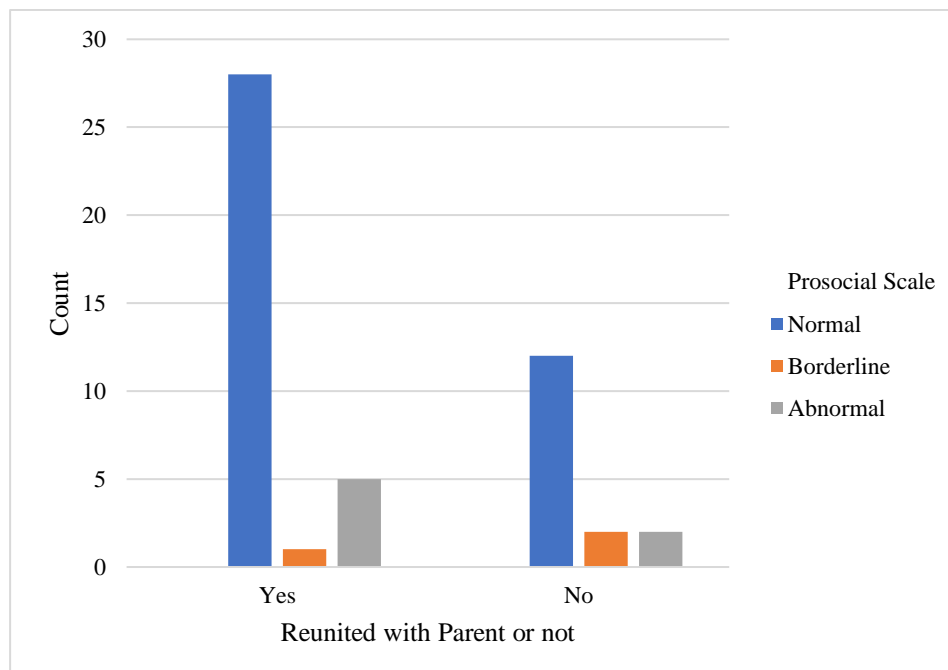
Table 64

Chi-Square Tests of the Relationship between Reunited with Parent or not and Prosocial

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.768 ^a	2	0.413
Likelihood Ratio	1.623	2	0.444
Linear-by-Linear Association	0.056	1	0.813
N of Valid Cases	50		

Note. Intercorrelations of Reunited with Parent or not and Prosocial are not significant. *a.* 4 cells (66.7%) have expected count less than 5 ($p = .413$). The minimum expected count is .96.

Figure 31

Relationship between Reunited with Parent or not and Prosocial

3.2.36 Relationship between reunited with parent or not and total difficulties.

Moreover, while scrutinizing whether the fact of having reunited with parent or not interfered on the Total Difficulties presented by the participants the crosstab exhibited inquisitive numbers. Table 65 discloses the crosstabulation count of the relationship between Reunited with Parent or Not and Total Difficulties in terms of “Abnormal”, Borderline” and Normal”.

According to the results shown in Table 65, of the 34 participants who reunited with their parents 14 presented problems associated with Total Difficulties, 10 were found within the Borderline categorization and 10 did not present Total Difficulties. However, while analyzing the results of those who did not reunite with their parents, nine presented Total Difficulties, two were found within the Borderline categorization and five did not present Total Difficulties.

However, the Chi-Square tests of the relationship between Reunited with Parent or Not and Total Difficulties shown on Table 66 exhibited that the P value is greater than 0.05 ($p = 0.397$) thus, there is no significant relationships between the variables.

Figure 32 shows the relationship between Reunited with Parent or Not and Total Difficulties in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 65

Crosstabulation of the Relationship between Reunited with Parent or not and Total Difficulties

Count		Total Difficulties Scale			Total
		Normal	Borderline	Abnormal	
Reunited with Parent	Yes	10	10	14	34
	No	5	2	9	16
Total		15	12	23	50

Table 66

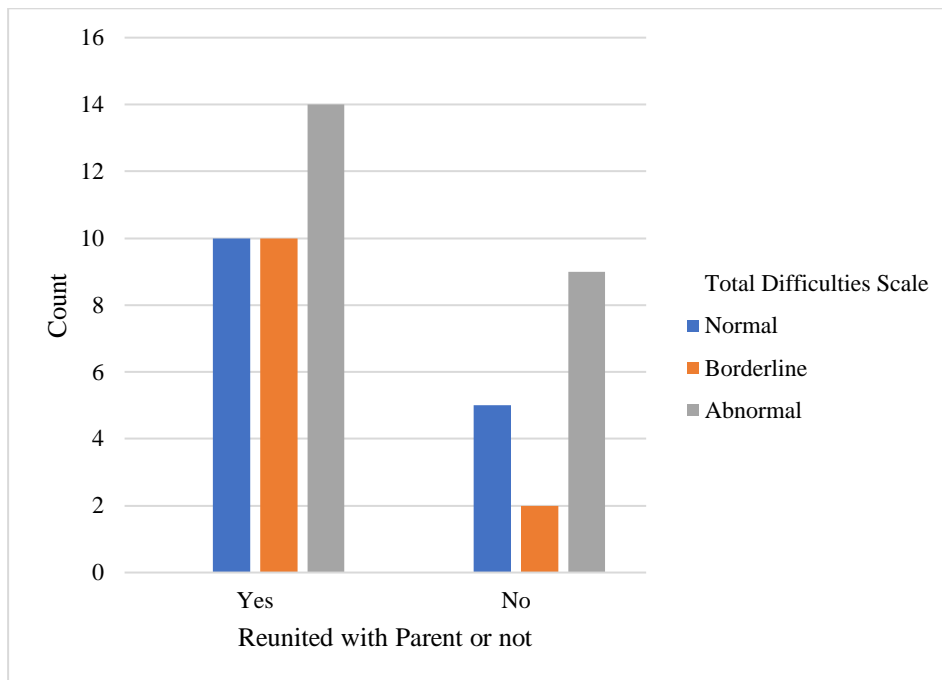
Chi-Square Tests of the Relationship between Reunited with Parent or not and Total Difficulties

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.846 ^a	2	0.397
Likelihood Ratio	1.989	2	0.370
Linear-by-Linear Association	0.254	1	0.614
N of Valid Cases	50		

Note. Intercorrelations of Reunited with Parent or not and Total Difficulties are not significant. *a.* 2 cells (33.3%) have expected count less than 5 ($p = .397$). The minimum expected count is 3.84.

Figure 32

Relationship between Reunited with Parent or not and Total Difficulties



3.2.37 Relationship between separated from mother, father or both and emotional problems.

While assessing whether there was an association between the results regarding Emotional Problems and the fact that the participant was left behind by mother, father or both parents, the crosstab results are interesting. Table 67 discloses the crosstabulation count of the relationship between Separated from Mother, Father or Both Parents and Emotional Problems in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 67, of the 35 participants who were left by their mothers, 22 presented “Abnormal” results associated with Emotional Problems, three of them were found within the “Borderline” categorization and 10 did not present Emotional Problems.

While speaking about those who were separated from their fathers, of the total six participants four presented “Abnormal results associated with Emotional Problems and two did not present Emotional Problems. Conversely, of the nine participants who were separated from both parents, four presented “Abnormal” results, one was found within the “Borderline” categorization and four did not present Emotional Problems.

But, the Chi-Square tests show that the P value is greater than 0.05 ($p = 0.804$) consequently, these numbers are not significant. Table 68 reveals the Chi-Square Tests of the relationship between Separated from Mother, Father or Both Parents and Emotional Problems.

Figure 33 divulges the relationship between Separated from Mother, Father or Both Parents and Emotional Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 67

Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Emotional Problems

Count		Emotional Problems Scale			Total
		Normal	Borderline	Abnormal	
Separated from Mother, Father or Both Parents	Separated from Mother	10	3	22	35
	Separated from Father	2	0	4	6
	Separated from Both Parents	4	1	4	9
Total		16	4	30	50

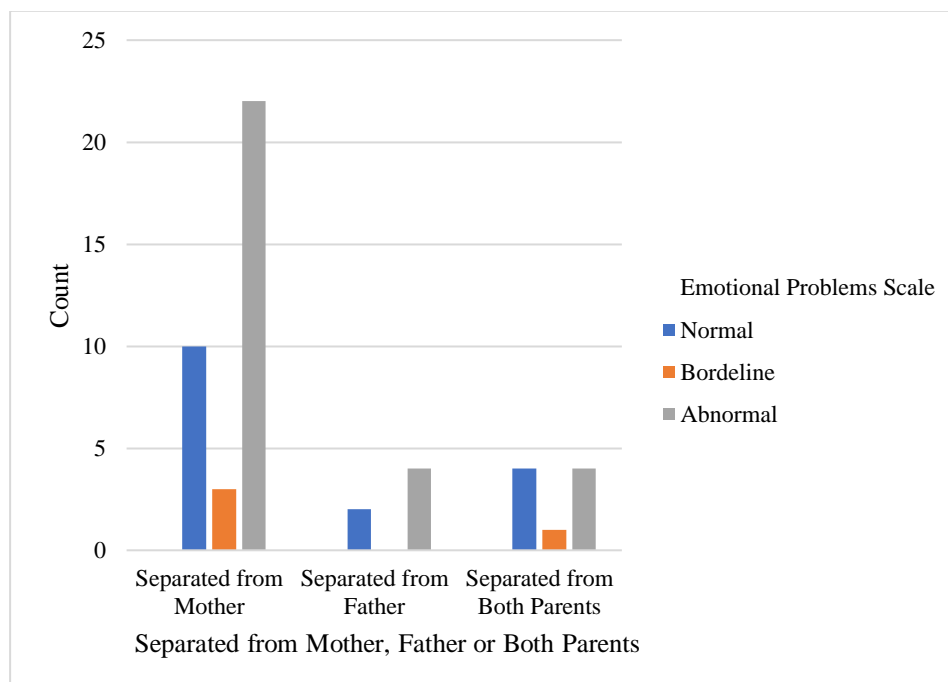
Table 68

Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Emotional Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.626 ^a	4	0.804
Likelihood Ratio	2.085	4	0.720
Linear-by-Linear Association	0.851	1	0.356
N of Valid Cases	50		

Note. Intercorrelations of Separated from Mother, Father or Both Parents and Emotional Problems are not significant. *a.* 6 cells (66.7%) have expected count less than 5 ($p = .804$). The minimum expected count is .48.

Figure 33

Relationship between Separated from Mother, Father or Both Parents and Emotional Problems

3.2.38 Relationship between separated from mother, father or both and conduct problems.

While evaluating whether there was an association between the results regarding Conduct Problems and the fact that the participant was left behind by mother, father or both parents, the crosstab results are informative. Table 69 divulges the crosstabulation count of the relationship between Separated from Mother, Father or Both Parents and Conduct Problems in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 69, of the 35 participants who were left by their mothers, 18 presented “Abnormal” results associated with Conduct Problems, three of them were found within the “Borderline” categorization and 14 did not present Conduct Problems.

Whereas speaking about those who were separated from their fathers, of the total of six participants two presented “Abnormal” results associated with Conduct Problems, one was found in the “Borderline” categorization and three did not present Conduct Problems. On the hand, of the nine participants who were separated from both parents, four presented “Abnormal” results, one was found within the “Borderline” categorization and four did not present Conduct Problems.

However, in Table 70 the Chi-Square Tests of the relationship between Separated from Mother, Father or Both Parents and Conduct Problems disclose that the P value is greater than 0.05 ($p = 0.930$) thus, there is no significant relationship between the variables.

Figure 34 shows the relationship between Separated from Mother, Father or Both Parents and Conduct Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 69

Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Conduct Problems

Count		Conduct Problems Scale			Total
		Normal	Borderline	Abnormal	
Separated from Mother, Father or Both Parents	Separated from Mother	14	3	18	35
	Separated from Father	3	1	2	6
	Separated from Both Parents	4	1	4	9
Total		21	5	24	50

Table 70

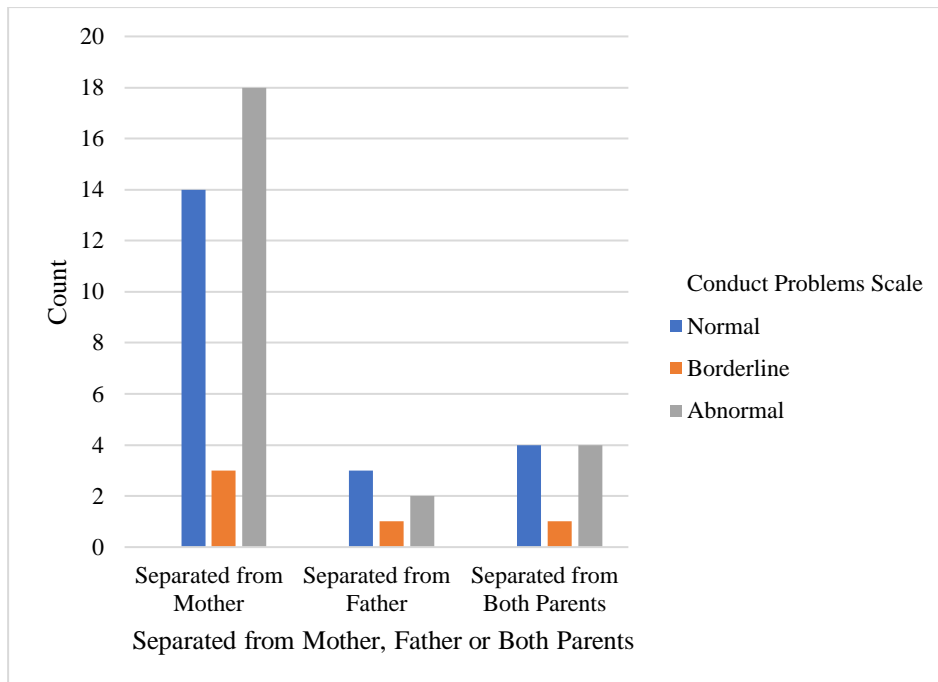
Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Conduct Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.865 ^a	4	0.930
Likelihood Ratio	0.850	4	0.932
Linear-by-Linear Association	0.214	1	0.644
N of Valid Cases	50		

Note. Intercorrelations of Separated from Mother, Father or Both Parents and Conduct Problems are not significant. *a.* 7 cells (77.8%) have expected count less than 5 ($p = .930$). The minimum expected count is .60.

Figure 34

Relationship between Separated from Mother, Father or Both Parents and Conduct Problems



3.2.39 Relationship between separated from mother, father or both and hyperactivity.

While evaluating whether there was an association between the results regarding Hyperactivity and the fact that the participant was left behind by mother, father or both parents, the crosstab results are thought provoking. Table 71 divulges the crosstabulation count of the relationship between Separated from Mother, Father or Both Parents and Hyperactivity in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 71, of the 35 participants who were left by their mothers, 16 presented “Abnormal” results associated with Hyperactivity, two of them were found within the “Borderline” categorization and 17 did not present Hyperactivity. Hence, 51.43 percent of the children who were left by their mothers had problems regarding Hyperactivity.

Although speaking about those who were separated from their fathers, of the total of six participants none of them presented “Abnormal” results associated with Hyperactivity, three were found in the “Borderline” categorization and three did not present Hyperactivity. Conversely, of the nine participants who were separated from both parents, two presented “Abnormal” results, one was found within the “Borderline” categorization and six did not present Hyperactivity.

In this case, in Table 72, the Chi-Square tests of the relationship between Separated from Mother, Father or Both Parents and Hyperactivity reveal that the P value is less than 0.05 ($p = 0.015$) thus, these numbers are significant thus, there is a correlation between these variables.

Figure 35 discloses the relationship between Separated from Mother, Father or Both Parents and Hyperactivity in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 71

Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Hyperactivity

Count		Hyperactivity Scale			Total
		Normal	Borderline	Abnormal	
Separated from Mother, Father or Both Parents	Separated from Mother	17	2	16	35
	Separated from Father	3	3	0	6
	Separated from Both Parents	6	1	2	9
Total		26	6	18	50

Table 72

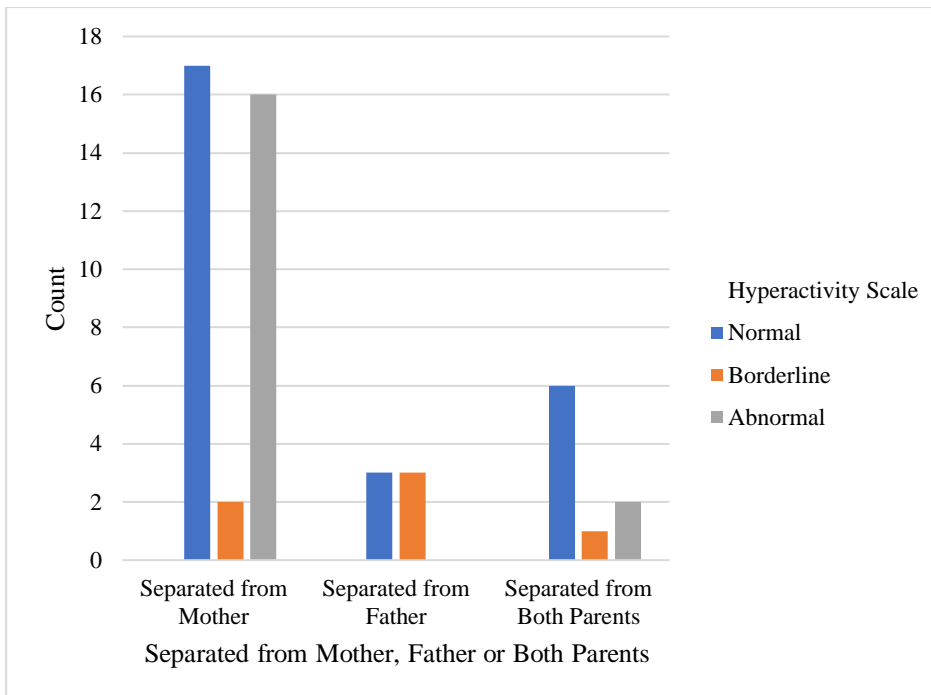
Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Hyperactivity

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.386 ^a	4	0.015
Likelihood Ratio	11.583	4	0.021
Linear-by-Linear Association	1.929	1	0.165
N of Valid Cases	50		

Note. Intercorrelations of Separated from Mother, Father or Both Parents and Hyperactivity are significant. *a.* 7 cells (77.8%) have expected count less than 5 ($p = .015$). The minimum expected count is .72.

Figure 35

Relationship between Separated from Mother, Father or Both Parents and Hyperactivity



3.2.40 Relationship between separate from mother, father or both and peer problems.

Whilst assessing whether there was an association between the results regarding Peer Problems and the fact that the participant was left behind by mother, father or both parents, the crosstab results are explanatory. Table 73 discloses the crosstabulation count of the relationship between Separated from Mother, Father or Both Parents and Peer Problems in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results exposed in Table 73, of the 35 participants who were left by their mothers, 17 presented “Abnormal” results associated with Peer Problems, one was found within the “Borderline” categorization and 17 did not present Peer Problems.

But, speaking about those who were separated from their fathers, of the total of six participants two of them presented “Abnormal” results associated with Peer Problems, one was found in the “Borderline” categorization and three did not present Peer Problems. On the other hand, of the nine participants who were separated from both parents, seven presented “Abnormal” results, no one was found within the “Borderline” categorization and two did not present Peer Problems.

The Chi-Square tests of the relationship between Separated from Mother, Father or Both Parents and Peer Problems, as shown in Table 74, uncover that the P value is greater than 0.05 ($p = 0.223$) therefore, there is no correlation between these variables.

Figure 36 shows the relationship between Separated from Mother, Father or Both Parents and Peer Problems in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 73

Crosstabulation of the Relationship with Separated from Mother, Father or Both Parents and Peer Problems

Count		Peer Problems Scale			Total
		Normal	Borderline	Abnormal	
Separated from Mother, Father or Both Parents	Separated from Mother	17	1	17	35
	Separated from Father	3	1	2	6
	Separated from Both Parents	2	0	7	9
Total		22	2	26	50

Table 74

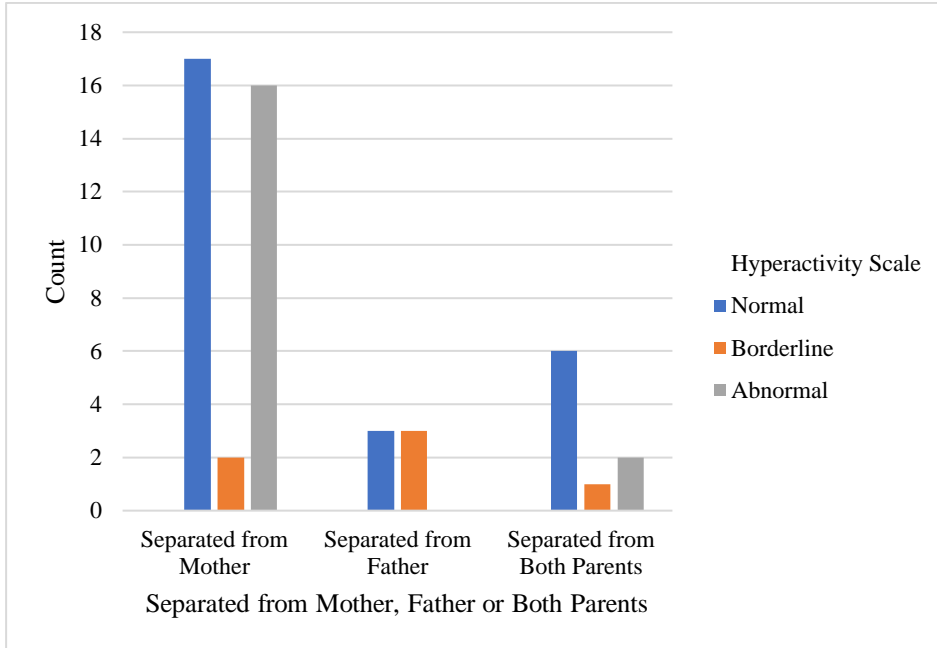
Chi-Square Tests of the Relationship with Separated from Mother, Father or Both Parents and Peer Problems

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.698 ^a	4	0.223
Likelihood Ratio	5.115	4	0.276
Linear-by-Linear Association	1.690	1	0.194
N of Valid Cases	50		

Note. Intercorrelations of Separated form Mother, Father or Both Parents and Peer Problems are not significant. *a.* 7 cells (77.8%) have expected count less than 5 ($p = .223$). The minimum expected count is .24.

Figure 36

Relationship between Separated from Mother, Father or Both Parents and Peer Problems



3.2.41 Relationship between separated from mother, father or both and prosocial.

Whereas evaluating whether there was an association between the results regarding Prosocial and the fact that the participant was left behind by mother, father or both parents, the crosstab results are explanatory. Table 75 reveals the crosstabulation count of the relationship between Separated from Mother, Father or Both Parents and Prosocial in terms of “Abnormal”, “Borderline” and “Normal”.

According to the results shown in Table 75, of the 35 participants who were left by their mothers, six presented “Abnormal” results associated with Prosocial, two of them were found within the “Borderline” categorization and 27 did present “Normal” results regarding Prosocial.

On the other hand, while speaking about those who were separated from their fathers, of the total of six participants no one presented “Abnormal” results associated with Prosocial, no one was found in the “Borderline” categorization and six did present “Normal” results regarding Prosocial. Conversely, of the nine participants who were separated from both parents, one presented “Abnormal” results, one was found within the “Borderline” categorization and seven presented “Normal” results regarding Prosocial.

The statistical assessment that evaluates whether these results are significant or not clarifies it all. The Chi-Square tests the relationship between Separated from Mother, Father or Both Parents and Prosocial, exposed in Table 76, uncover that the P value is greater than 0.05 ($p = 0.692$) therefore, there is no correlation between these variables.

Figure 37 reveals the relationship between Separated from Mother, Father or Both Parents and Prosocial in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 75

Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Prosocial

Count		Prosocial Scale			Total
		Normal	Borderline	Abnormal	
Separated from Mother, Father or Both Parents	Separated from Mother	27	2	6	35
	Separated from Father	6	0	0	6
	Separated from Both Parents	7	1	1	9
Total		40	3	7	50

Table 76

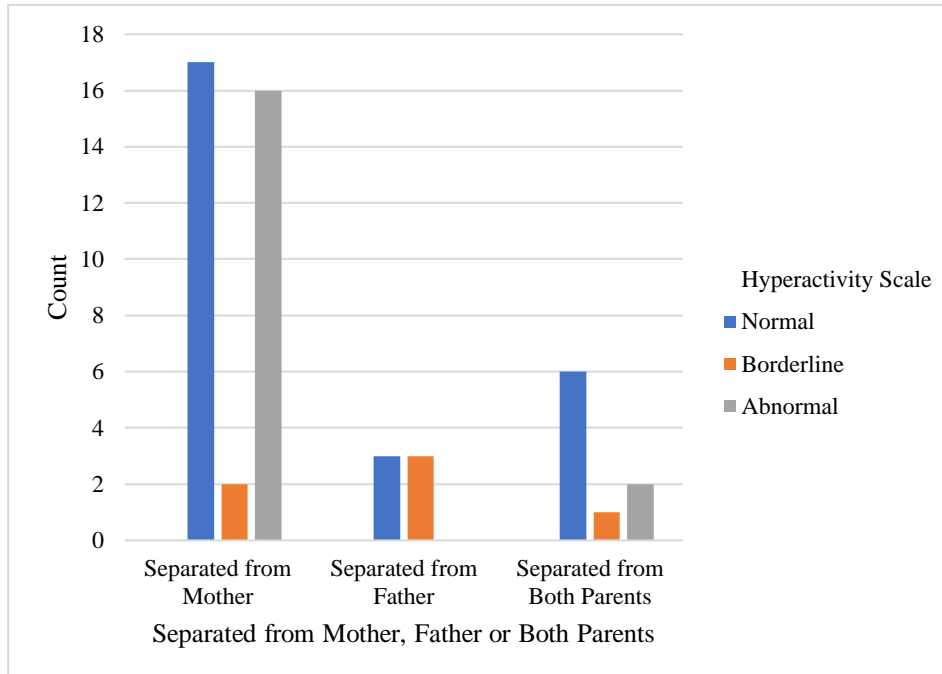
Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Prosocial

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.238 ^a	4	0.692
Likelihood Ratio	3.325	4	0.505
Linear-by-Linear Association	0.297	1	0.586
N of Valid Cases	50		

Note. Intercorrelations of Separated from Mother, Father or Both Parents and Prosocial are not significant. *a.* 7 cells (77.8%) have expected count less than 5 ($p = .692$). The minimum expected count is .36.

Figure 37

Relationship between Separated from Mother, Father or Both Parents and Prosocial



3.2.42 Relationship between separated from mother, father or both and total difficulties.

While examining whether there was an association between the results regarding Total Difficulties and the fact that the participant was left behind by mother, father or both parents, the crosstab results are fascinating. Table 77 divulges the crosstabulation count of the relationship between Separated from Mother, Father or Both Parents and Total Difficulties in terms of “Abnormal”, “Borderline” and “Normal”.

The results exposed in Table 77 show that, of the 35 participants who were left by their mothers, 20 presented “Abnormal” results associated with Total Difficulties, added by five of them who were found within the “Borderline” categorization. Ten

participants did present “Normal” results regarding Total Difficulties. This indicates that 71.4 percent of those who were left by their mothers presented Total Difficulties.

However, while speaking about those who were separated from their fathers, of the total of six participants one presented “Abnormal” results associated with Total Difficulties, four of them were found in the “Borderline” categorization and one did present “Normal” results regarding Total Difficulties.

Conversely, of the nine participants who were separated from both parents, two presented “Abnormal” results, three of them were found within the “Borderline” categorization and four presented “Normal” results regarding Total Difficulties.

The statistical assessment that evaluates whether these results are significant or not elucidates it all. In Table 78, The Chi-Square tests of the relationship between Separated from Mother, Father or Both Parents and Total Difficulties unearth that the P value is less than 0.05 ($p = 0.034$) therefore, these numbers are really significant. As a consequence, it can be concluded that there is a correlation between these variables.

Figure 38 shows the relationship between Separated from Mother, Father or Both Parents and Total Difficulties in terms of “Normal”, “Borderline” and “Abnormal” categorizations.

Table 77

Crosstabulation of the Relationship between Separated from Mother, Father or Both Parents and Total Difficulties

Count		Total Difficulties Scale			Total
		Normal	Borderline	Abnormal	
Separated from Mother, Father or Both Parents	Separated from Mother	10	5	20	35
	Separated from Father	1	4	1	6
	Separated from Both Parents	4	3	2	9
Total		15	12	23	50

Table 78

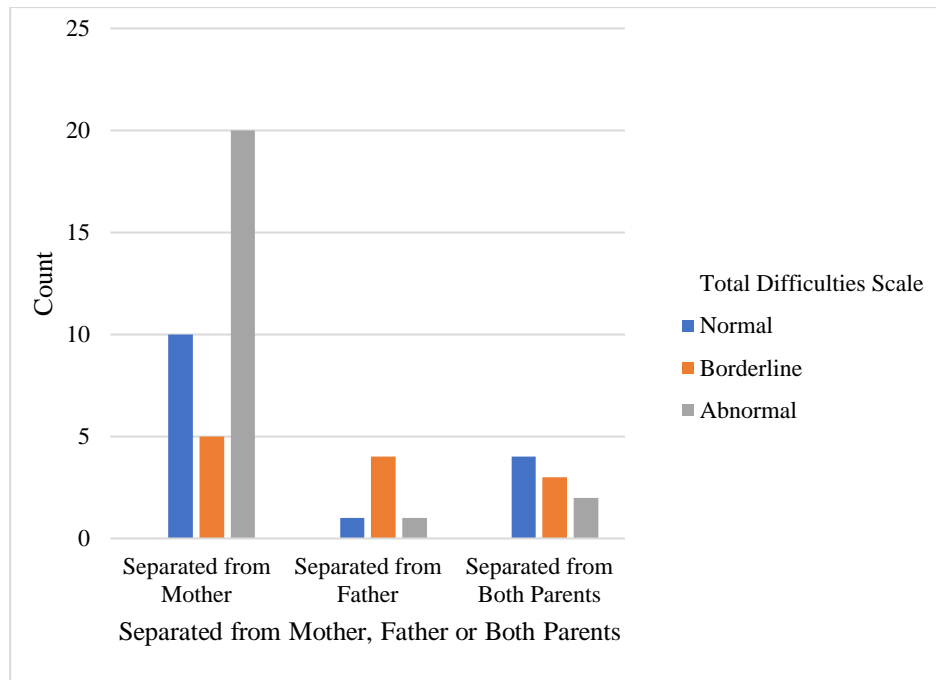
Chi-Square Tests of the Relationship between Separated from Mother, Father or Both Parents and Total Difficulties

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.432 ^a	4	0.034
Likelihood Ratio	9.685	4	0.046
Linear-by-Linear Association	2.691	1	0.101
N of Valid Cases	50		

Note. Intercorrelations of Separated from Mother, Father or Both Parents and Total Difficulties are significant. *a.* 6 cells (66.7%) have expected count less than 5 ($p = .034$). The minimum expected count is 1.44.

Figure 38

Relationship between Separated from Mother, Father or Both Parents and Total Difficulties



3.2.43 Percentage of emotional problems, conduct problems, hyperactivity, peer problems, prosocial and total difficulties.

To provide a summary of the scenario of the categorization of the participants on all SDQ Scale in terms of being “Normal”, “Borderline” and “Abnormal”, based on the results shown in Table 79 there is a prevalence of numbers that suggests a substantial indication of abnormality in the Emotional Symptoms, Conduct Problems, Peer Problems, Hyperactivity and Total Difficulties.

Emotional Problems “Abnormal” results appeared in 60 percent of the studied populace, Conduct Problems showed in 48 percent of the participants, Hyperactivity “Abnormal” results appeared in 36 percent of the participants, Peer Problems were found in 52 percent and regarding Total Difficulties “Abnormal” results were unveiled in 46 percent of this populace.

However, the indication that these problems exist is even greater when the “Borderline” occurrence is investigated in this populace. Total Difficulties are disclosed in 24 percent of the participants, Hyperactivity appears in 12 percent of the studied sample, Conduct Problems is shown in 10 percent of them, Emotional Problems are shown in eight percent of the participants and Peer Problems in four percent of them.

Surprisingly, the Prosocial Problems “Abnormal” results appear in only 14 percent of the participants, followed by six percent of them in the “Borderline” categorization. When looking at the percentage of those within a “Normal” categorization, the results show that 80 percent of them have no problems in the Prosocial area.

Figure 39 portrays the scenario of how the participants are emotionally and behaviorally affected for it illustrates the categorization of the participants on all SDQ scales, Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties in terms of the percentage of being “Normal”, “Borderline” and “Abnormal”.

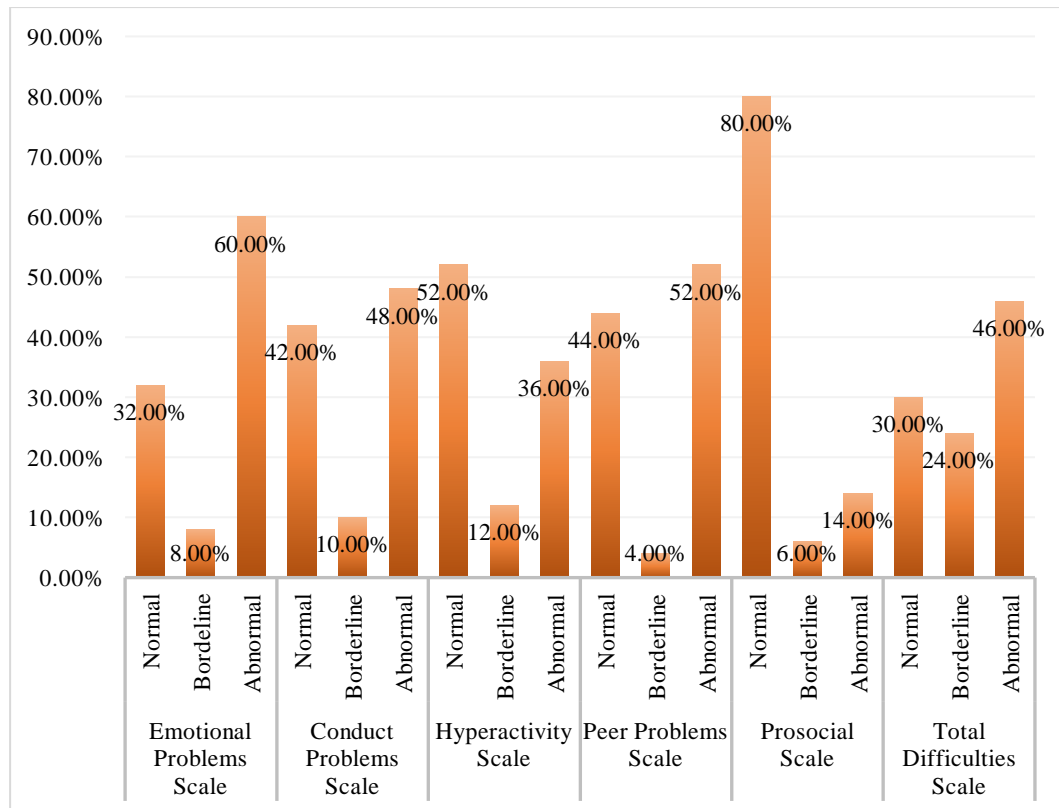
Table 79

Percentage of Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties

		Total %
Emotional Problems	Normal	32.00%
	Borderline	8.00%
	Abnormal	60.00%
Conduct Problems	Normal	42.00%
	Borderline	10.00%
	Abnormal	48.00%
Hyperactivity	Normal	52.00%
	Borderline	12.00%
	Abnormal	36.00%
Peer Problems	Normal	44.00%
	Borderline	4.00%
	Abnormal	52.00%
Prosocial	Normal	80.00%
	Borderline	6.00%
	Abnormal	14.00%
Total Difficulties	Normal	30.00%
	Borderline	24.00%
	Abnormal	46.00%

Figure 39

Percentage of Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties



3.2.44 Inter-item correlations between emotional problems, conduct problems, hyperactivity, peer problems and prosocial.

When all combined results of the Strengths and Difficulties Questionnaire (SDQ) were examined, interesting correlations were found between the scales: Emotional Symptoms, Conduct Problems, Hyperactivity, Peer problems and Prosocial Behavior. The Total Difficulties scale was not included in this assessment to analyze intercorrelations because Total Difficulties is a scale that is calculated by summing up the following four scales: Emotional Problems, Conduct Problems, Hyperactivity and

Peer Problems. Prosocial is not included in the calculation of the Total Difficulties because it is about strengths not difficulties.

Table 80 reveals the inter-item correlations between Emotional Problems, Conduct Problems, Peer Problems and Prosocial Problems. In this study, the Pearson's correlations coefficient was used to scrutinize the strength of these relationships, to inspect if there was a significant correlation between the mentioned variables.

The chosen Test was Two-tailed because it is non-directional and examines whether one independent scale affects the other. Table 80 shows which correlations are significant by showing where the Two-tailed is significant with the P value at 0.05 level and when the Two-tailed is significant with the P value at 0.01 level.

The results showed in this Table disclose that the strongest positive correlation found is between Prosocial and Peer Problems, with the Pearson's correlation coefficient, r , which measures the strength of the relationship between two variables being $r = 0.451$. This is based on the sample size ($N = 50$) of left behind children and its Two-tailed significance ($p = 0.001$). The P value is at 0.01 level and, in this case, it is less than 0.01.

The second strong positive correlation is between Emotional Problems and Hyperactivity ($r = 0.336$). This is based on the sample size ($N = 50$) of left behind children and its Two-tailed significance ($p = 0.017$). The P value here is at 0.05 level for it is less than 0.05.

Moreover, the next strong positive correlation is between Conduct Problems and Hyperactivity ($r = 0.331$). This is based on the sample size ($N = 50$) of left behind children and its Two-tailed significance ($p = 0.019$). Once more the P value here is less than 0.05 therefore, it is at the 0.05 level.

Then, the last strong correlation found is between Prosocial and Conduct Problems ($r = 0.327$). This is based on the sample size ($N = 50$) of left behind children and its 2-tailed significance ($p = 0.021$). The P value is less than 0.05 which means that this relationship is significant.

Table 80

Inter-Item Correlations between Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems and Prosocial Problems

		Emotional Problems	Conduct Problems	Hyperactivity Scale	Peer Problems	Prosocial
Emotional Problems	Pearson Correlation	1	0.004	.336*	0.154	-0.115
	Sig. (2-tailed)		0.980	0.017	0.287	0.425
	N	50	50	50	50	50
Conduct Problems	Pearson Correlation	0.004	1	.331*	0.103	.327*
	Sig. (2-tailed)	0.980		0.019	0.477	0.021
	N	50	50	50	50	50
Hyperactivity	Pearson Correlation	.336*	.331*	1	0.191	0.205
	Sig. (2-tailed)	0.017	0.019		0.183	0.154
	N	50	50	50	50	50
Peer Problems	Pearson Correlation	0.154	0.103	0.191	1	.451**
	Sig. (2-tailed)	0.287	0.477	0.183		0.001
	N	50	50	50	50	50
Prosocial	Pearson Correlation	-0.115	.327*	0.205	.451**	1
	Sig. (2-tailed)	0.425	0.021	0.154	0.001	
	N	50	50	50	50	50

Note. Correlations between: Emotional Problems and Hyperactivity ($p = .017$), Conduct Problems and Hyperactivity ($p = .019$), Prosocial and Conduct Problems Difficulties ($p = .021$) are significant. *. Correlations are significant at the 0.05 level (2-tailed). Correlations between Prosocial and Peer Problems are significant ($p = .001$). **. Correlation is significant at the 0.01 level (2-tailed).

Furthermore, in the material collected in the conducted interview, several participants informed a range of behavioral and psychological symptoms. According to the information given by various participants, health professionals and/or physicians had diagnosed them, at some point in their lives, with at least one or a mixture of a few problems out of this following range of symptoms: anxiety disorder, panic attacks, eating disorders, psychotic like experiences, depression, low self-esteem issues, loneliness, suicide ideation and the use of alcohol and/or drugs.

Nonetheless, the most common problem amongst all participants was anxiety disorder. On top of that, a large number of participants who self-responded the questionnaire mentioned the word “trauma” by stating that, for them, the separation was considered a traumatic experience they still have to cope with.

CHAPTER 4:

Discussion

This research aimed to provide insight into the possible psychological consequences of the experiences of being a child left behind, with the objective of providing recommendations for immigration policies. The populace utilized in this study was Brazilian immigrants who left their children in Brazil and immigrated to the United States. The Strength and Difficulties Questionnaire (SDQ) was utilized to assess psychological information of the left behind children who were left in Brazil. Some of those participants were, actually, the left behind children who already reunited with their parents and are living in the United States.

It is relevant to say that the indicators found in this research should not be matched across other immigrant groups of populations without being prudently assessed and reevaluated on their particularities. However, this study offers significant

information because it corroborates what scholars have found about the association between emotional and behavioral problems of left behind children and parental migration. It does confirm that the children who are left behind because of parental migration really develop mental health issues.

4.1 Results related to objective and hypothesis 1: Age and psychological problems.

In this study, the mean age of the participants was 20.16 years old. Although, no study was found in the literature that pointed out for an association between age and psychological problems, in this research the objective was to explore this possibility in this sample. The hypothesis was that age would determine more symptomatic problems regarding emotional development in left behind children.

While investigating whether there was an association between age and the following scales, Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties, no relationship was found between them. These results endorse what Ling et al., (2015) found in their study. They say that, there is no key influence of age and time on isolation or behavioral difficulties presented by left behind children.

Despite the fact that there was no study found in the literature that investigated the relationship between age and questionnaires responded by parents or self-responded, tests were run to examine this matter. Since, this study used the two different categories of respondents, it was interesting to learn more about it.

The hypothesis was that a relationship could be found between the variables. While investigating whether there was a significant correlation between the ages of

the participants and the questionnaire being responded by parents or self-responded, the results indicate that this relationship is not relevant.

4.2 Results related to objective and hypothesis 2: Gender and psychological problems.

In order to explore the relationship of gender and psychological problems in this sample, statistical such as frequency, Chi Square tests and crosstabulation between the variables were used. The results showed that there was a slight prevalence of females being left behind by their parents since, in this populace, 58 percent were females and 42 percent were males.

The results confirmed the hypothesis of this study that girls would be more affected than boys. While reviewing whether there was a relationship between gender and Emotional Problems the results point out that there is a significant association between these variables. While considering Emotional Problems, females had a relevant higher score within the abnormal categorization compared to males and the Chi-Square Tests show that these results are significant since the P value is less than 0.05 ($p = 0.039$).

To explain it better, of the 29 participants who were females 20 presented abnormal results while of the 21 participants who were males, only 10 were found within the abnormal categorization. These results corroborate what Tang et al., (2019) found in their research. The scholars uncovered that left behind girls were more vulnerable regarding emotional problems than the left behind boys. Furthermore, Faisal and Turnip (2019) found in their study that girls are more affected than boys if the migrant parent is the father.

However, statistics revealed that no significant association was found between gender and the other scales such as, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties.

4.3 Results related to objective and hypothesis 3: Years of separation and psychological problems.

The mean separation period of time between left behind children and their parents in this sample was 7.33 years. This is, undeniably, a considerable amount of time for a child to be separated from their parents.

However, in the present studied populace, the situation can be even more delicate because, in some cases, this separation is still ongoing since, according to the results gathered at the time of the assessment of this study, not all children who were left behind have met their parents. Only 68 percent of the participants reunited with their parents while 32 percent was still living in Brazil, separated from their parents. Thus, we explore the separation period of time between left behind children and their parents and a possible connection with the emotional and behavioral problems in this populace.

Viet Nguyen (2016), in his study found that “The negative effect on children tends to be higher for long-term parental migration than short term parental migration” (p - 230). This is completely fathomable because the possible harmful impact of this separation can be built and grown over the years.

Hence, based in the literature, the hypothesis of this current study was that the longer the period, the greater the chances of emotional damages. The results were somehow bewildering because the ANOVAs performed did not show significant differences.

It was unforeseen and quite surprising that this variable, years of separation, did not have a significant association with the psychological related scales. Viet Nguyen (2016), suggests that long term parental migration seems to be really damaging for left behind children.

4.4 Results related to objective and hypothesis 4: Questionnaires responded by parents or self-responded and psychological problems.

No scientific work was found in the literature testing questionnaires responded by parents or self-responded and thus, there is no indication that there is a relationship between questionnaires responded by parents or self-responded and the frequency of psychological problems. As in this study there was the opportunity to assess these two categories of respondents, it was pertinent to explore and learn about a likely connection between the variables hence, the frequency, statistics, Chi-Square tests and crosstabulation of the relationship between these variables were run.

First it was important to know the percentage of parents who responded the questionnaires and the percentage of left behind children who were self-respondents in this sample. The results point out that 66 percent of the questionnaires was responded by a parent while the participants who self-responded the questionnaires characterize 34 percent of the sample.

The hypothesis was that the questionnaires responded by parents would indicate the presence of more symptomatic problems regarding the emotional development in left behind children when compared to the left behind children who self-responded the questionnaires since, the participants who self-responded the questionnaire had already the chance to meet their parents.

Thus, to explore conceivable relationships between responded by parent or self-responded questionnaires and each of the following scales, Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties statistical tests were run. Chi-Square tests indicate that the only significant association found was between responded by parent or self-responded questionnaires and Prosocial since the P value is less than 0.05 ($p = 0.040$).

Based on the 33 questionnaires responded by parents, seven left behind children had abnormal results regarding Prosocial, three participants were found within the “Borderline” categorization and 23 participants had no problems regarding Prosocial. While comparing these results with those found within the group of participants who self-responded the questionnaires, the information gathered is quite intriguing. All 17 participants who self-responded the questionnaires presented “Normal” results.

The overall results did not confirm the hypothesis of this study as there is no scenario of more problems in the emotional and behavioral areas in the questionnaire responded by parent compared to those self-respondents, except regarding prosocial abilities.

Many factors may have contributed to this outcome. For instance, the fact that all participants who self-responded the questionnaire already reunited with their parents may have positively interfered in the way they are socializing. Another assumption to be raised here is that those who self-responded the questionnaire are talking about themselves and therefore, they know better how to portray who they are and how they feel. This assertive can be valid while evaluating the other scales, as well.

4.5 Results related to objective and hypothesis 5: Separation from mother, father or both and psychological problems.

In order to explore if the child was separated from mother, father or both and learn whether there was a connection between these variables and the likelihood of psychological problems in this sample, the frequency, statistics and cross-tabulation tests were run. The findings in this study point out that 70 percent of the children were left behind by their mothers, 12 percent was separated by the migration of the father and 18 percent suffered the separation from both parents. These findings resonate with a study conducted in China by Faisal and Turnip (2019), who found that 60 percent of the children were left behind by their mothers.

The hypothesis, according to what was found in the literature, was that children, in terms of migration, would be more prone to be left by their mothers and would present more psychological problems. Thus, while investigating a possible relationship between each of the following scales, Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties Emotional Problems, and the fact that the participant was left behind by mother, father or both parents, the results are fascinating. It was found that there are relevant correlations between separated from mother and Hyperactivity and also separated from mother and Total Difficulties.

Regarding Hyperactivity, the more expressive results found rely on the fact that of the 35 participants who were left by their mothers, 16 presented “Abnormal” results added by two of them who were found within the “Borderline” categorization. This means that 51.43 percent of the children who were left by their mothers had problems regarding Hyperactivity. The Chi-Square tests, in this case, confirm the association because the *P* value is less than 0.05 ($p = 0.015$).

On the other hand, of the six participants who were left by their fathers, no one presented abnormal results. Contrariwise, of the nine participants who were separated from both parents, two presented “Abnormal” results added by one who was found within the “Borderline” categorization. In this case, separated from both parents, it is relevant to highlight that the mother is also absent.

Regarding Total Difficulties which gives an overall picture of the psychological health of the participants because it sums up the scores of the following scales, Emotional Problems, Conduct Problems, Hyperactivity and Peer Problems, the results found were actually anticipated and expected from what it has been found in the literature review. This current study unveils a significant correlation between being left behind by the Mother and the presence of Total Difficulties. The Chi-Square tests endorse the association with the P values being less than 0.05 ($p = 0.034$).

While analyzing the results, of the 35 participants who were left by their mothers, 20 presented “Abnormal” results associated with Total Difficulties added by five of them who were found within the “Borderline” categorization. This specifies that 71.4 percent of those who were left by their mothers presented Total Difficulties.

Conversely, while speaking about those who were separated from their fathers, of the total of six participants, one presented “Abnormal” results related to Total Difficulties, four of them were found in the “Borderline” categorization and one did present “Normal” results regarding Total Difficulties.

And yet, of the nine participants who were separated from both parents, two presented “Abnormal” results, three of them were found within the “Borderline” categorization and four presented “Normal” results regarding Total Difficulties.

Again, it is pertinent to highlight that in this case the mother is also a parent who left the child behind.

Based on the results attained in this study, it can be easily concluded that being left by the mother can be really detrimental on the level of Hyperactivity presented by left behind children and more importantly, on the Total Difficulties showed by them. These outcomes coincide with what other researchers have found in their studies and confirm the hypothesis of this study.

The authors mainly suggest that being left by the mother can produce greater damage in the emotional health. However, there are others researchers who go beyond and add that these damages can occur in the educational area as well.

For example, Xu et al., (2019) investigated the role of the mother versus father absence and the left behind children's academic achievements, cognitive aptitudes, and emotional health. The results of their research revealed that households without a mother was negatively associated with problems such as depression and difficulties at school for the left behind children, while households with absent fathers was infrequently linked with negative aftermaths.

But, it is important to address that the authors sustained that the disparities of parenting practices probably played a relevant role on the outcome of the problems presented by left behind children, regardless whether there was an absence of the mother or the father.

Moreover, another team of scholars, Vanore et al., (2015), while examining parental migration in Moldova, Romania, and the psychological health of left behind children, concluded that the absence of mothers occasionally results in worse psychosocial outcomes for their left behind children.

4.6 Results related to objective and hypothesis 6: Reunited with parents or not and psychological problems.

It was not found in the literature nothing that indicate a relationship between questionnaires responded by parents or self-responded and children reunited with parent or not but, in this study, there were two groups of respondents, questionnaires responded by parents and self-respondents hence, to explore whether the participants in the two categories had reunited with their parents or not, statistical tests were run.

While examining whether the participants who self-responded the questionnaire had reunited with their parents or not, a crosstabulation examination confirmed that all of them reunited with their parents but not all parents who responded the questionnaire about their LBC met their children at the time of the assessment.

All 17 participants who self-responded the questionnaires, reunited with their parents and of the 33 parents who responded the questionnaire, 17 have met their children while 16 did not meet. Statistics were run and they proved the significance of this relationship. These results are totally understandable because all those who self-responded the questionnaire are already living in the United States and if that happened it means that they were able to reunite with their parents. It confirms the hypothesis of this study, that all participants who self-responded the questionnaire met their parents.

Although, it was not found in the literature any evidence that there is a relationship between the fact that the left behind children reunited with their parents or not and the frequency of psychological problems, the frequency, statistics, Chi-Square tests and crosstabulation of the relationship between these variables were used to explore any possible connection.

The hypothesis was that if the children reunited with their parents that would present less psychological problems. The rationale was that the reunion could have had a healing effect in left behind children since the parent was able to end the separation.

While crossing the variables reunited with parent or not and each of the following scales, Emotional Problems, Conduct Problems, Hyperactivity, Peer Problems, Prosocial and Total Difficulties, the results found were completely unanticipated. It was presumed that those who have reunited with their parents should be in a better overall condition in terms of emotional and/or behavioral conditions when compared to the left behind children who are still separated from their parents.

In this study, results enlighten that there is no significant correlation between these variables hence, they do not confirm the hypothesis that the children who reunited with their parents would have less psychological problems. Various hypothesis can be raised to explain the phenomenon. For instance, it can be assumed that the possible damages presented by this populace have already been installed and developed over the years regardless whether the left behind children were able to reunite with their parents or not. The harmful power of separation, of the abandonment can leave its indelible marks.

4.7 Results related to objective and hypothesis 7: Emotional problems.

In order to explore the existence of emotional problems in this populace, the frequency, statistics and Chi-Square tests were run. The results showed that 60 percent of the participants showed signs of abnormality regarding emotional symptoms which can be more aggravated when it is added with other eight percent of them who were defined in the borderline range.

The hypothesis was that this populace would present emotional symptoms. The results of the current study confirmed the hypothesis and corroborate what studies like those conducted by Kirchner et al., (2011), Man et., (2017), Su et al., (2013), whose results suggest that left behind children will suffer emotional symptoms.

4.8 Results related to objective and hypothesis 8: Conduct problems.

In order to explore the incidence of conduct problems in this sample, the frequency, statistics and Chi-Square tests were run. The results revealed that 48 percent of the populace presented signs of abnormality plus the 10 percent of them who were found within the borderline range of abnormality.

The results confirmed the hypothesis that was that this populace would present conduct symptoms. Studies such as those conducted by Wang et al., (2017), show results that indicate behavioral problems in left behind children due to migration.

4.9 Results related to objective and hypothesis 9: Hyperactivity.

In order to explore the occurrence of hyperactivity in this populace, the frequency, statistics and Chi-Square tests were run. Hyperactivity difficulties are also expressively present within this populace with 36 percent showing signs of abnormality added with other 12 percent of them who were found in the borderline range of abnormality.

The hypothesis is that left behind children will present more problems related to hyperactivity. In the literature, it was not found a study that specified hyperactivity in left behind children. Scholars such as Graham and Jordan (2011), Liang et al., (2017) Longobardi et al., (2017) point out to emotional and behavioral problems in

left behind children and, hyperactivity is one possible element that can be included in those categories.

4.10 Results related to objective and hypothesis 10: Peer problems.

In order to explore the existence of peer problems in this populace, the frequency, statistics and Chi-Square tests were run. The results found showed that 52 percent of them showing signs of abnormality regarding peer problems plus the four percent of them who were found in the borderline range of abnormality.

The results confirmed the hypothesis of this study, that left behind children would present peer problems and more importantly, they corroborate what scholars have said about it. Peer problems can be expressed by situations of bullying victimization and other difficulties endured by left behind children. Zhang et al., (2019) informed about it. They found in their study that left behind children had higher level of victimization that non-left behind children.

4.11 Results related to objective and hypothesis 11: Prosocial.

In order to explore the occurrence of prosocial difficulties in this populace, the frequency, statistics and Chi-Square tests were run and, while assessing the prosocial scale in this studied populace, curious results were found. Only 20 percent of the participants showed any signs of problems in this area, with 14 percent of them showing signs of abnormality added with other six percent of them found within the borderline range. In sum, 80 percent of the studied group have no problems concerning Prosocial.

This phenomenon is attention-grabbing and can be explained by the fact that left behind children might rely too much on other people such as, relatives, teachers,

coaches, and others to compensate for their parents' absence, which eventually can lead to other problems since not everyone is equipped to furnish them with all they need. On top of that, there is a risk for the child to get along with children with behavioral difficulties, which might interfere with or reinforce any awkward behavior the LBC may already present.

The results did not confirm the hypothesis that left behind children would present difficulties regarding prosocial abilities. The literature found indicates that. Jia and Tian (2010), Su et al., (2013) and Faisal and Turnip (2019) suggest the presence of loneliness in left behind children in their study. However, loneliness may not be related to lack of social abilities.

4.12 Results related to objective and hypothesis 12: Total difficulties.

In order to explore the existence of total difficulties in this populace, the frequency, statistics and Chi-Square tests were run and the numbers show interesting results. Regarding Total Difficulties, 46 percent of the participants showed signs of abnormality which is aggravated when it is added the 24 percent of the participants within the borderline range of abnormality. It is relevant to elucidate that Total Difficulties scale, in reality, provides an overall perspective of the emotional and behavioral situation of the participant.

All these results definitely confirm the hypothesis of this study that the left behind children would present total difficulties and more importantly, they corroborate what other studies conducted by authors such as, Allen et al., (2015), Chang et al., (2019), Cheng and Sun (2014), Dai and Chu (2016), Faisal and Turnip (2019), Gao et al., (2010), Graham and Jordan (2011), Jia and Tian (2010), Mazzucato et al., (2015), Wickramage et al., (2015), Huang et al., (2018), and others

found in the literature review for this study, who convey that there is, in fact, a connection between parental migration and the development of emotional and behavioral problems in left behind children.

4.13 Results related to objective and hypothesis 13: Percentage of emotional problems, conduct problems, peer problems, hyperactivity, prosocial and total difficulties.

In order to provide a summary, a general picture of the situation of the left behind children in this sample, in terms of emotional problems, conduct problems, hyperactivity, peer problems, prosocial ability and total difficulties, statistics were run and all results were put together.

The results in each area was already reported here in the previous sections. All participants showed difficulties and signs of abnormality in most areas. These results support what authors like Graham and Jordan (2011), Liang et al. (2017) Longobardi et al., (2017) have found linking left behind children to problems in their mental health state.

While speaking about all scales, the results suggest a considerable indication of abnormality in the Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems, and Total Difficulties. The warning that these problems happen is even greater when the “Borderline” scores is calculated in the mentioned scales. Thus, it is confirmed that a significant percentage of the studied populace present problems in all scales. This endorses the hypothesis of this study that, there is, in fact, an impact of parental migration on emotional health of left behind children.

However, concerning Prosocial, as it was discussed before, an insignificant part of the populace, only 14 percent of the participants, presented “Abnormal” results

and six percent was found within the “Borderline” categorization. This can be explained by the fact that left behind children will try to compensate for their parents’ absence by occupying this void throughout the connection and attachment to other people.

4.14 Objective and Hypothesis 14: Inter-item correlations between emotional problems, conduct problems, peer problems, hyperactivity and prosocial ability.

In order to explore the inter-item correlations between the following scales, Emotional Symptoms, Conduct Problems, Hyperactivity, Peer problems and Prosocial Behavior were analyzed and all combined results of these items were examined to investigate whether there were correlations between them.

The hypothesis was that, in left behind children, if there is a problem in one particular area, that will increase the chances to have a problem in other areas, as well. For instance, if there are difficulties in the prosocial ability that will indicate that there will be a problem in the conduct, peer, hyperactivity, or emotional area. All studies found point out to psychological problems in left behind children due to parental migration. Therefore, it is pertinent to learn whether there are correlations between the various aspects of psychological problems.

The scale Total Difficulties was not included in this assessment because it is the sum of the following scales that designate problems such as, Emotional Symptoms, Conduct Problems, Hyperactivity and Peer Problems. Prosocial is not included in the computation of the Total Difficulties because it is about strengths not difficulties. The intercorrelation test was used to investigate whether one scale

affected the other, that is, if one psychological or behavioral area could intervene positively or negatively in the other.

The Pearson's correlations coefficient was utilized to examine the strength of these relationships, to investigate if there was a significant correlation between the mentioned items. It is pertinent to explain that the Pearson's correlation coefficient, the r , functions as a measure of the strength of the relationship between two variables, according to Field (2018).

The author explains that a correlation between two items is considered significant statistically speaking if its "Sig. (2- tailed)" is less than 0.05. This indicates a perfect ascending linear relation, according to the author. It means, for instance, that higher scores on one variable is related to higher scores on the other. Because of that, the chosen test utilized in this study was the Two-tailed since it is non-directional and assesses whether and how one independent scale affects, positively or negatively the other.

The results revealed that the strongest positive correlation found was between Prosocial and Peer Problems. In this case, the Pearson's correlation coefficient $r = 0.451$ and the Two-tailed significance, where the P value is at 0.01 level because it is less than 0.01 ($p = 0.001$), corroborated the significance between the variables. It means that, as the scores of "Abnormal" results of "Prosocial" increase, so do the problems with the peers.

The second strong positive correlation found was between Emotional Problems and Hyperactivity. In this case, the Pearson's correlation coefficient $r = 0.336$ and the Two-tailed significance, where the P value is at 0.05 level because it is less than 0.05 ($p = 0.017$), showed that there is, actually, a significant relationship

between the variables. Hence, it can be easily concluded that the more problems in the Emotional area, the more difficulties are related to Hyperactivity.

Another strong positive strong correlation was found between Conduct Problems and Hyperactivity. The Pearson's correlation coefficient $r = 0.331$ and the Two-tailed significance, where the P value is at the 0.05 level for it is less than 0.05 ($p = 0.019$), proved the strength of the relationship between the variables. Thus, the more Conduct Problems the more difficulties are associated with Hyperactivity.

The last strong positive correlation found was between Prosocial and Conduct Problems. The Pearson's correlation coefficient $r = 0.327$ and the Two-tailed significance, where the P value is at the 0.05 level because it is less than 0.05 ($p = 0.021$), showed the significant association between the variables. So, according to the results, if there are problems in the social area problems in the behavior area are likely to occur.

This inter-item matrix shows a form of trend indicating significant positive intercorrelations between some items. However, it is pertinent to ponder, that this inter-item matrix relationship can, actually, be influenced by many other factors that was not controlled or examined in this study such as, the parenting skills of the caregivers of the left behind children, the children's school environment, the people who can serve as role models to the children like relatives, teachers and coaches and early health and/or behavioral intervention programs the child could possibly had, the quality of the communication between the absent parent and the left behind children, among other things.

4.15 What was not assessed in this study.

Unfortunately, information about who the child was left with while the parent migrated was not included in this study because in many cases, after their parents migrated to the United States, the children's caregiver was changed. For instance, some of them were initially left with a maternal grandparent and later was moved to live under the care of another relative. There were several similar stories.

This can be really detrimental for the emotional overall condition of the left behind children since, that it can be understood as another significant loss for them. Besides, the mentioned changes can imply that the child will be raised without the necessary consistency in terms of rules, boundaries, supervision nor the notion that they are wanted and loved.

4.16 Left behind children mental health information provided by the participants during the interview.

According to the information obtained during the interview, most participants suffer from a series of psychological and behavioral problems. They mentioned that health mental professionals and/or physicians had diagnosed them, at some point in their lives, with at least one or a combination of a few problems out of this following range of symptoms: anxiety disorder, panic attacks, eating disorders, psychotic like experiences, loneliness, depression, low self-esteem issues, suicide ideation and the use of alcohol and/or drugs.

Nonetheless, the most common problem amongst all participants, according to what was informed was anxiety disorder. On top of that, a large number of participants who self-responded the questionnaire mentioned the word "trauma" by stating that, for them, the separation was considered a traumatic experience they still have to cope with.

These singularities mentioned by the participants of this study, resonate with the findings of several researchers. Generally, all literature reviewed for this research disclosed that parental migration causes negative repercussions on the overall mental health of left behind children. Among others, Gao et al., (2010), Man et al., (2017), and Zhan at al., (2019), divulge that parental migration causes an impact on the left behind children's psychological health.

For instance, Dai and Chu (2016), Tomsa and Jenaro (2015), Cheng and Sun (2014) suggest that left behind children present more problems related to anxiety and low self-esteem than non-left behind children because of parental migration. Moreover, anxiety was mentioned by the majority of the participants of this study.

In addition, according to Liang et al., (2017), Cheng and Sun (2014), left behind children suffer more frequently from depression than non-left behind children. Furthermore, regarding the use of alcohol, Gao et al., (2010) point out that parental migration seems to be a risk factor for unhealthy behavior such as substance abuse. The same group of authors substantiate that left behind children were more prone to suicide ideation when compared to non-left behind children.

Loneliness in left behind children was another problem cited in the reviewed literature. Loneliness can be related to depression symptoms and was also largely mentioned by the participants during the interview that was conducted for this study. Faisal and Turnip (2019), Jia and Tian (2010) and Su et al., (2013), avowed loneliness as one nuisance experienced by left behind children.

It is relevant to address that, although the prosocial scores found in this study point out that mainly there is no problem in the social area of the participants, this does not mean that an individual who is suffering from emotional distress, abandonment, does not feel lonely.

Schmahl et al., (2004), draw the attention to the fact that trauma can be generated by abandonment and that is exactly what several participants of this study avowed they have experienced. They mentioned that they suffered the abandonment by the parent who migrate, and disclosed that they often relive the experience of the agony, desperation of being left behind.

Many of them compared themselves to their siblings or other children who did not have to undergo a separation by a parent who migrated and did not take them along. According to them, the reenactment of the trauma is usually followed by pain, anger, feelings of loneliness and low self-esteem.

In sum, this populace, the left behind children of Brazilian immigrants in the United States, presented signs of meaningful psychopathological symptoms due to parental separation. The results of this study absolutely corroborate what other researches have implied. It does confirm that the children who are left behind because of parental migration really develop mental health issues.

CHAPTER 5:

CONCLUSION

5.1 The outcome of this study

Providentially, in this research, it was possible to see relevant results within the studied populace indicating problems within the investigated following areas: Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems and Prosocial Behavior. Also, according to the study's findings, girls seem to be more prone to develop emotional symptoms than boys and yet, being separated by the mother seems

to be more harmful because of the hyperactivity problems and the total difficulties presented by left behind children.

Based in these results, it is conceivable to conclude that parental migration negatively interferes in the emotional development of left behind children. This definitely confirms the hypothesis of this study and upholds what other research have revealed. Unquestionably, further studies should be carried out in order to validate these results.

Hopefully, this study could shed light over the matter and can furnish policymakers and the health and educational system with significant information on the topic. New conceivable solutions and policies can be offered with the purpose of minimizing the damage for both parts on top of the creation of programs to reunite families sooner rather than later.

5.2 How useful this study can be?

The consequences of this separation do not only affect the left behind children and their parents. Without a doubt, society suffers the impact because it will have to deal with the mental health issues and behavioral problems developed by these children. This is not only an immigrant problem or left behind children's problem, it is the community problem, as well. It is everyone's responsibility.

Scholars found that there are factors that affect boundary ambiguity in transnational families and challenges to family reunification (Solheim & Ballard, 2016, p. 341). While researching and dealing with transnational families, the authors draw the attention to the fact that an ambiguous theoretical lens can be very hand. Surely, it is not easy to deal with transnational families, their peculiarities and

subsequent difficulties but, having an open mind and trying to know the transnational families' idiosyncrasies in depth can help a lot.

Longobardi et al., (2017), called the attention to the necessity of a good immigration program by saying that "Immigration policies should be based not only on admittance to emergency refuge centres but also on assessing the subjects and providing them with psychological support for the traumas experienced in order to achieve a successful integration process in the host society" (p. 87).

As it was pointed out by Guan and Deng (2109), a whole community intervention program can be a very good instrument to help dealing with the emotional health and behavioral problems most LBC often endure. That was an innovative approach developed by some communities in China with the purpose to ameliorate left behind children's well-being.

The mentioned study evaluated the Children's Companion Mother Program (CCPM) implemented by those communities, and found remarkable positive results. It works. Those intervention programs were actually helping to enhance the overall health of left behind children.

Another team of researchers in China, Lu et al., (2019) affirmed that the caregiver plays a very important role in the well-being of left behind children. Hence, the caregiver's emotional health, parenting skills, practices and commitment to LBC can be crucial to lessen the negative impact parental migration brings to the children.

The information brought by this current study confirms the assertion of other studies in which parental migration actually causes an emotional impact in the development of LBC. Optimistically, the results of this project will initiate further learning and research behind the impact of the separation between parents and their

children. This may be helpful for society in general and particularly for immigrants planning to move.

With this being said, various programs may be created and implemented to help ameliorate the well-being of left behind children. For instance, awareness campaigns in mental health and educational systems can be quite useful.

Awareness campaigns can act as a providential resource to attract the attention of the immigrants to the problem. The topics can be very wide-ranging in relation to this subject. For instance, it can be very beneficial, the creation of wakefulness campaigns to inform potential immigrants that, in fact, parental migration causes a decisive impact on the emotional and physical health of left behind children.

In this study many immigrants commented that they initially believed that if their children were cared by their grandparents, they would be well emotionally speaking, only to found out later that this was not true. Moreover, there are parents who think that if they are calling their children every day, their bond is strong and entirely preserved and this compensates for their absence. Many of them declared this in the interview.

Other campaigns may include in what way and when to immigrate, whether the parents decide to take their children along or not and yet, how to prepare those who will take care of the LBC whilst the parents are absent. Speaking about caregivers, mindfulness programs with them can be very helpful. It is relevant for the caregivers to learn and understand their crucial role in the emotional development of the left behind children. It is a great responsibility and commitment. In addition, the caregivers' mental and physical health should be monitored and treated very carefully since they play a pivotal role while raising left behind children.

Moreover, the educational system can participate and create special programs for the children who were left behind. Embracing those kids with compassion and genuine care can ameliorate their well-being. For instance, awareness campaigns and intervention programs led by teachers and counselors at school that involve paying a closer attention to the fact that left behind children are more prone to suffer bullying and other challenges such as presenting emotional and behavioral problems can be very beneficial.

The health system, as a whole, can participate too by developing responsiveness campaigns for pediatricians, physicians, nurses and all those who work in the mental health area about the subject. With that information, health workers can work better with those who are affected by offering them with a holistic and more individualized treatment.

Besides, non-profit organizations that work with immigrants and/or psychological/mental health services can benefit from the information provided in this study to design special programs to help immigrants and their left behind children.

Furthermore, the department of the government that oversees children and families in each state of the United States, can have a distinct role in this process, helping parents to reunite with their left behind children. They usually oversee and take care of any difficulties endured by families, particularly the children.

Explaining it better, in the case an immigrant is officially and legally settled in the country, after they are registered in the immigration system and they get their permanent residency, they usually are able to bring their children to live with them in the United States. Thus, at this point, the cited governmental department of the pertinent state should be assessed.

The mentioned organization can actively participate with the creation, implementation and monitoring of programs to help in the process of reunification of the left behind children and their parents soon after those children arrive in the United States. Nowadays, they are only called after the parents and their children are having difficulties.

Those families do usually dream with the moment of reunification without having a clue of what they are about to face. The constant and frequent phone calls, the video calls, the provision of more dignified life conditions and the shipping of gifts do not make up for the parents' absence and the painful sentiments of abandonment.

When it is time to reunite, parents and their children will sadly have to come to the realization that between them there is a lack of intimacy and the bonds are not that strong because of the distance. In addition, the parental authority will probably be questioned and anger and resentment might be silently present and this can make it difficult to build a healthy and good relationship.

They do not actually know each other as they believed they knew each other. Numerous participants of this study, parents and participants who were left behind children, mentioned what is described here.

Last but not least, it is relevant to mention the role of the United States' immigration system in this matter. Based on the premise that if immigration is better equipped with a vital information of what can negatively affect those involved in the immigration process they can dynamically act to prevent indescribable damages.

Since, this study confirms that parental migration, in truth, causes a real negative impact on the emotional health of left behind children, immigration can help creating policies to help assist LBC and their parents in this matter thus, they can

reunite as soon as possible. This ought to be the main purpose: to reunite children with their parents as fast as possible. Indeed, the optimal and ideal situation is to see all children being able to be raised by their parents.

There were some quite moving stories narrated by the participants. One participant of this study whereas describing how she used to bite herself in the adolescence, she said “while I bit myself I felt an excruciating pain, I exhausted my anger and a pain sucked the biggest pain, which was the feeling of being abandoned”.

Furthermore, two participants, siblings, who responded the questionnaire met their mother after over five years of separation. According to them, during their mother’s time in America, she worked really hard, did not have any vacation time and because of all this sacrifice, determination and courage she was able to build and completely furnish an excellent house for the family in Brazil.

Also, the siblings were sent to private schools and they were provided with a good nutrition. In sum, the left behind children’s overall life conditions completely changed after their mother went to America in order to work and provide for them.

The siblings confessed that, before their mother decided to migrate to the United States, they all lived in poor and undignified conditions. Unfortunately, only three months after their mother returned to the native country and they were all, finally, happily able to reunite, she was murdered. Today, the young adults live in the United States and questioned if it was really worth it, all their mother’s sacrifice to give them a better life. They unveil that that had deprived them of the most important thing: each other’s company because their mom was gone for so long.

Upon reaching the end of this study, after computing the results found and when faced with so many sad stories it is impossible not to be moved. A light in the tunnel appears and hope is then reborn with studies like those led by Zhang et al.,

(2019) who found that self-compassion and hope can be precious tools fighting depression and the one conducted by Guan and Den, (2019) about an existent community-based program that involved all people working together to improve the health conditions of left behind children.

Based on the gathered information obtained in this research, it can be inferred that it would be ideal to provide more dignified conditions to the countries that are still in development so, that migration to developed countries for the purpose of seeking decent living conditions would not be necessary or, in the case where migration is the best and wisest option, then appropriate conditions should be provided for parents and their children to be together. This is obviously a utopian scenario but one can always dream of a better world with real dignified conditions for everyone and science can help by showing the way.

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Appendix A: The Strengths and Difficulties Questionnaire SDQ: The Questionnaires

Strengths and Difficulties Questionnaire

P 4-17

For each item, please mark the box for Not True, Somewhat True, or Certainly True.

It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of how things have been for you over the last six months

Child's Name

Date of Birth.....

Male/ Female

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings			
Restless, overactive, cannot stay still for long			
Often complains of headaches, stomach-aches or sickness			
Shares readily with other children (treats, toys, pencils etc.)			
Often has temper tantrums or hot tempers			
Rather solitary, tends to play alone			
Generally obedient, usually does what adults request			
Many worries, often seems worried			
Helpful if someone is hurt, upset or feeling ill			
Constantly fidgeting or squirming			
Has at least one good friend			
Often fights with other children or bullies them			
Often unhappy, down-hearted or tearful			
Generally liked by other children			
Easily distracted, concentration wanders			
Nervous or clingy in new situations, easily loses confidence			

Kind to younger children
Often lies or cheats
Picked on or bullied by other children
Often volunteers to help others (parents, teachers, other children)
Thinks things out before acting
Steals from home, school or elsewhere
Gets on better with adults than with other children
Many fears, easily scared
Sees tasks through to the end, good attention span

Signature

Parent/Responsible

Today's Date

Thank you very much for your help!

@Robert Goodman 2009

Strengths and Difficulties Questionnaire S18+

For each item, please mark the box for Not True, Somewhat True, or Certainly True.

It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of how things have been for you over the last six months

Your Name

Date of Birth.....

Male/ Female

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings			
I am restless, I find it hard to sit down for long			
I get a lot of headaches, stomach-aches or sickness			
I usually share with others, for example food or drink			
I get very angry and often lose my temper			
I would rather be alone than with other people			
I am generally willing to do what other people want			
I worry a lot			
I am helpful if someone is hurt, upset or feeling ill			
I am constantly fidgeting or squirming			
I have at least one good friend			
I fight a lot. I can make other people do what I want			
I am often unhappy, depressed or tearful			
Other people generally like me			
I am easily distracted, I find it difficult to concentrate			
I am nervous in new situations. I easily lose confidence			

I am kind to children
I am often accused of lying or cheating
Other people pick on me or bully me
I often offer to help others (family members, friends, colleagues)
I think before I do things
I take things that are not mine from home, work or elsewhere
I get along better with older people than with people of my own age
I have many fears, I am easily scared
I finish the work I'm doing. My attention is good

Your signature

Today's Date

Thank you very much for your help!

@Robert Goodman 2009

Appendix B: The Strengths and Difficulties Questionnaire SDQ: B: The Scoring

Scoring the Strengths & Difficulties Questionnaire for age 4-17 or 18+

Before reporting the scoring instrument, it is pertinent to highlight that this tool is partly reproduced from the original of the Strengths & Difficulties Questionnaire Scoring for age 4-17 and 18+. The reason that it is not all reproduced here as the original is because, for this study, only a few methods and supplements of the SDQ were chosen to be used.

It is applicable to indicate that the “Internalizing and Externalizing” alternative scoring alternative method that is part of the original Scoring the SDQ and the Table of the scoring the SDQ Impact Supplement were not utilized in this study. That is why they are not included here. Additionally, the Newer 4-band categorization was not included in the Table 104, since, for this study, the chosen categorization was the original 3-band of the SDQ.

Also, the Teacher Completed SDQ responses that are comprised in the original Scoring instrument were not included here for the same reason. In this investigation, only parents and those who were once left behind by their parents responded the questionnaire.

In this research, Table B1 displays the scoring symptoms scores on the SDQ for 4-17-year-old and 18+ while Table B2 presents the categorizing the SDQ scores in terms of “Normal”, “Borderline” or “Abnormal”. All other written information, explanation and contents of the tables which guide the scorings are described as in the original.

The 25 items in the SDQ comprise 5 scales of 5 items each. It is usually easiest to score all 5 scales first before working out the total difficulties score. ‘Somewhat True’ is always scored as 1, but the scoring of ‘Not True’ and ‘Certainly True’ varies with the item, as shown below scale by scale. For each of the 5 scales the

score can range from 0 to 10 if all items were completed. These scores can be scaled up pro-rata if at least 3 items were completed, e.g. a score of 4 based on 3 completed items can be scaled up to a score of 7 (6.67 rounded up) for 5 items.

Note that the items listed below are for 4-17-year-olds, but the scoring instructions are identical for the similarly-worded '18+' SDQ.

Table B1

Scoring Symptom scores on the SDQ for 4-17-year old and 18+

	Not True	Somewhat True	Certainly True
Emotional problems scale			
ITEM 3: Often complains of headaches (I get a lot of headache)	0	1	2
ITEM 8: Many worries (I worry a lot)	0	1	2
ITEM 13: Often unhappy, downhearted (I am often unhappy)	0	1	2
ITEM 16: Nervous or clingy in new situations (I am nervous in new situations)	0	1	2
ITEM 24: Many fears, easily scared (I have many fears)	0	1	2
Conduct problems Scale			
ITEM 5: Often has temper tantrums or hot tempers (I get very angry)	0	1	2
ITEM 7: Generally obedient (I usually do as I am told)	2	1	0
ITEM 12: Often fights with other children (I fight a lot)	0	1	2
ITEM 18: Often lies or cheats (I am often accused of lying or cheating)	0	1	2
ITEM 22: Steals from home, school or elsewhere (I take things that are not mine)	0	1	2
Hyperactivity scale			
ITEM 2: Restless, overactive (I am restless)	0	1	2
ITEM 10: Constantly fidgeting or squirming (I am constantly fidgeting....)			
ITEM 15: Easily distracted, concentration wanders (I am easily distracted)	0	1	2
ITEM 21: Thinks things out before acting (I think before I do things)	2	1	0
ITEM 25: Sees tasks through to the end (I finish the work I am doing)	2	1	0
Peer problems scale			
ITEM 6: Rather solitary, tends to play alone	0	1	2

(I am usually on my own)			
ITEM 11: Has at least one good friend	2	1	0
(I have one goof friend or more)			
ITEM 14: Generally liked by other children	2	1	0
(Other people my age generally like me)			
ITEM 19: Picked on or bullied by other children	0	1	2
(Other children or young people pick on me)			
ITEM 23: Gets on better with adults than with other children			
(I get on better with adults than with people my age)	0	1	2
Prosocial scale			
ITEM 1: Considerate of other people's feelings	0	1	2
(I try to be nice to other people)			
ITEM 4: Shares readily with other children	0	1	2
(I usually share with others)			
ITEM 9: Helpful if someone is hurt	0	1	2
(I am helpful is someone is hurt)			
ITEM 17: Kind to younger children	0	1	2
(I am kind to younger children)			
ITEM 20: Often volunteers to help others	0	1	2
(I often volunteer to help others)			

Total difficulties score: This is generated by summing scores from all the scales except the prosocial scale. The resultant score ranges from 0 to 40, and is counted as missing if one of the 4 component scores is missing.

Table B2

Categorizing SDQ scores for 4-17-year-old and 18+

Original 3-band categorization			
	Normal	Borderline	Abnormal
Parent completed SDQ			
Total difficulties score	0-13	14-16	17-40
Emotional problems score	0-3	4	5-10
Conduct problems score	0-2	3	4-10
Hyperactivity score	0-5	6	7-10
Peer problems score	0-2	3	4-10
Prosocial score	6-10	5	0-4
Self-completed SDQ			
Total difficulties score	0-15	16-19	20-40
Emotional problems score	0-5	6	7-10
Conduct problems score	0-3	4	5-10
Hyperactivity score	0-5	6	7-10
Peer problems score	0-3	4-5	6-10
Prosocial score	6-10	5	0-4

Appendix C: The Interview

The Impact of Parental Migration on the Emotional Development of Left Behind
Children: A Study with Brazilian Immigrants in the United States

Liliane Clark - PhD Candidate at Universitat Jaume I, Spain

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This is a Study Projected for A Doctoral Thesis

CONSENT FORM AND BRIEF INTERVIEW

Dear Research Participant,

Immigrating to a different country infers on facing hardships but there is one specific problem that has to be endured by some immigrants: The children they had to leave behind. That occurs with certain regularity. The goal of this present study is to examine the impact of parental migration on the emotional development of left behind children. Hopefully, the results will help provide the policymakers, the health and also the educational system with noteworthy information on the topic. That may help bring new feasible solutions and policies to minimize the damage for both parts on top of the creation of programs to reunify those families sooner rather than later.

On top of responding the Strengths and Difficulties Questionnaire (SDQ) which is a developmental screening tool we need to obtain certain demographic variables information about the children and parents (age, occupation, gender, etc.) and the situation of each child (time without parent, main caregiver, etc.). It is pertinent to say that your personal information is confidential and follows the ethical standards of a research. It serves to gather relevant material data that will help analyze the main characteristics of the participants of this study.

Parent Name: _____

Mother _____ Father _____

Occupation: _____

Education Level:

Elementary ____ Middle School ____ High School ____ College Degree ____

Parent Name: _____

Mother _____ Father _____

Occupation: _____

Education Level:

Elementary ____ Middle School ____ High School ____ College Degree ____

Child's Name: _____

Education Level: _____

Elementary ____ Middle School ____ High School ____ College Degree ____

Current Age of the Child: _____

Separation Period of Time: _____

Has the Child Reunited with his/her parents? Yes ____ No ____

Caregiver's degree of kinship (grandparent, aunt, uncle, close friend):

Who is responding the survey? Parent ____ Caregiver ____ Child ____

Here, it will be included anything about their story, any mental issues, emotional or behavioral symptoms that the participant may want to share with the interviewer.

Email of the respondent: _____

By signing here, you agree that the information gathered and the Strengths and Difficulties Questionnaire (SDQ) you will respond can be utilized for this research.

Signature: _____