BEHAVIORAL PROBLEMS IN CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT

Thesis

Submitted for Partial Fulfillment of M.D. Degree
In Phoniatrics

By Salma Hassan Youssof

M.B., B.Ch., M.Sc. Faculty of Medicine – Ain Shams University

Supervised by

Prof. Dr. Mona Hegazi

Professor of Phoniatrics
Faculty of Medicine - Ain Shams University

Prof. Dr. Hassan Hosny Ghandour

Professor of Phoniatrics
Faculty of Medicine - Ain shams University

Prof. Dr. Ghada Abd El-Razek

Professor of Psychiatry
Faculty of Medicine - Ain shams University

Dr. Dina Ahmed Elsayed Elrefaie

Lecturer of Phoniatrics
Faculty of Medicine - Ain shams University

Faculty of Medicine
Ain Shams University
2018

List of Contents

	Title	Page
•	List of Abbreviations	I
•	List of Tables	III
•	List of Figures	VIII
•	Introduction	1
•	Aim of the Work	5
•	Review of Literature	
	Chapter 1: Specific language Impairment	6
	Chapter 2: Behavioral problems in Childre	en 30
	Chapter 3: Assessment Procedures of Behavioral Problems in Children	54
	Chapter 4: Co-occurrence of language and behavioral problems	
•	Subjects and Methods	93
•	Results	104
•	Discussion	161
•	Summary	179
•	Conclusion and Recommendations	183
•	References	185
•	Appendix (I)	224
•	Appendix (II)	228
	Arabic Summary	

List of Abbreviations

ADHD	.Attention deficit hyperactivity disorder
ADOS	.the Autism Diagnostic Observation Schedule
APA	.American Psychiatric Association
ASD	.Autism Spectrum Disorder
BASC	.The Behavior Assessment System for Children
BESS	.The Behavioral and Emotional Screening System
BRCs	.behavior record cards
CARS	.The Childhood Autism Rating Scale
CBCL	.Child behavior checklist
CD	.conduct disorder
CPRS	.The Conner's Parent Rating Scale
CTRS	.The Conner's Teacher Rating Scale
DICA-IV	.the Diagnostic Interview for Children and Adolescents–IV
DLD	.Delayed language development
DMDD	.Disruptive Mood Dysregulation disorder
DSM	.Diagnostic and statistical manual of mental disorders
ECBI	.The Eyberg Child Behavior Inventory
EEG	.Electro-encephalo-graphy
ESP	.the Early Screening Project
GARS	.The Gilliam Autism Rating Scale

G-SLIGrammatical SLI

ICDInternational Classification of Diseases

ICDThe International Classification of Diseases

List of Abbreviations

IQIntelligence Quotient

K-SADS-PLThe Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children--Present and Lifetime Version

LDDlanguage development disorders

M.I.N.I. KIDThe Mini International Neuropsychiatric Interview for children and adolescent

M-CHAT/ F.....The Modified Checklist for Autism in Toddlers, Revised with Follow-Up

MR.....Mental retardation

NSS......Neurological Soft Signs

ODD.....oppositional defiant disorder

PIQPerformance IQ

PKBSThe Preschool and Kindergarten Behavior Scales

PLS.....Preschool Language Scale

P-valueProbability of values

SAM.....the Social Adaptation Model

SD.....Standard Deviation

SDM.....The Social Deviance Model

SSBD	The Systematic Screening for Behavior Disorders
SSD	somatic symptom disorder
SSIS-RS	The Social Skills Improvement System Rating Scales
The Conners	S EC Conners Early Childhood
TRF	The Teacher's Report Form
	List of Tables
Table No.	Title Page
Table (1):	Clinician's speech intelligibility rating scale. This scale was put in Arabic version
Table (2):	Comparison between the studied groups regarding genders
Table (3):	Comparison between genders regarding internalizing, externalizing and total behavioral problems
Table (4):	Comparison between genders regarding emotional reactive, anxiety problem, somatic complaint and withdrawn in group (I) (SLI)
Table (5):	Comparison between genders

regarding attention problems and

Comparison between the studied

Table (6):

aggressive behavior 108

groups regarding sleep problem...... 109

SLI.....Specific language impairment

Table (7):	Comparison between the studied groups regarding age
Table (8):	Frequency of internalizing problems, externalizing and total behavioral problems among group (I) (SLI)
Table (9):	Frequency of internalizing problems, externalizing and total behavioral problems among group (II) (control) 113

List of Tables

Table No.	Title	Page
Table (10):	Frequency of internalizing, externalizing and total behavioral problems among PS (Subgroup of SLI children)	
Table (11):	Frequency of internalizing, externalizing and total behavioral problems among PP (Subgroup of SLI children)	
Table (12):	Comparison between SLI and control group regarding internalizing, externalizing and total behavioral problems	117
Table (13):	One-way ANOVA examining differences among the control group and the SLI subgroups regarding internalizing, externalizing and total behavioral problems	118
Table (14):	Post Hoc multiple comparisons between the studied groups	119

Table (15):	Frequency of emotional, anxiety, somatic and withdrawn among SLI 120
Table (16):	Frequency of emotional reactive, anxiety, somatic complaint and withdrawn among group (II) (control) 122
Table (17):	Frequency of emotionally reactive, anxiety, somatic complaint and withdrawn among PS

List of Tables

Table No.	11tle P	age
Table (18):	Frequency of emotionally reactive, anxiety, somatic complaint and withdrawn among PP	. 125
Table (19):	Comparison between SLI and Control groups regarding emotionally reactive, anxiety, somatic complaint and withdrawn	. 127
Table (20):	Comparison between 2 subgroups of SLI (PP and PS) and control group regarding emotionally reactive, anxiety, somatic and withdrawal	. 129
Table (21):	Post Hoc multiple comparisons between the studied groups significance	. 131
Table (22):	Frequency of attention problems and aggressive behavior among SLI	132

Table (23):	Frequency of Externalizing items attention problems and aggressive behavior among group (II) (control) 133
Table (24):	Frequency of Externalizing items attention problems and aggressive behavior among PS
Table (25):	Frequency of Externalizing items attention problems and aggressive behavior among PP

List of Tables

Table No.	Title	Page
Table (26):	Comparison between SLI and contro group regarding attention and aggressive	
Table (27):	Comparison between control and PP and PS regarding attention and aggressive	
Table (28):	Post Hoc multiple comparisons between the studied groups significance	138
Table (29):	Frequency of sleep problem among group (I) and (II)	139
Table (30):	Frequency of sleep problem among PP and PS	141
Table (31):	Comparison between SLI and Control groups regarding sleep problem	
Table (32):	Comparison between the studied groups regarding sleep problem	144
Table (33):	Post Hoc multiple comparisons between the studied groups significance	
Table (34):	Correlation between receptive, expressive and total language standard score, internalizing, externalizing and total behavioral problems	
Table (35):	Correlation between receptive, expressive and total language standard score, internalizing behavioral problem items in SLI group	s

List of Tables

Table No.	Title Page
Table (36):	Correlation between receptive, expressive, total language standard score, externalizing items (attention and aggressive)
Table (37):	Correlation between receptive, expressive, total language scores and sleep problems
Table (38):	Correlation between phonology, internalizing, externalizing and total behavioral problem
Table (39):	Correlation between phonology, emotionally reactive, anxiety, somatic complaint and withdrawn 157
Table (40):	Correlation between phonology, attention and aggressive
Table (41):	Correlation between phonology and sleep

List of Figures

Figure No.	Title	Page
Fig. (1):	Social Adaptation Model	88
Fig. (2):	Social Deviance Model	90
Fig. (3):	CBCL 1 ½ - 5 empirically based scale for boys and girls	100
Fig. (4):	Bar chart representing comparison between the studied groups regarding gender	105
Fig. (5):	Bar chart representing comparison between genders regarding internalizing, externalizing and total behavioral problems	
Fig. (6):	Bar chart representing comparison between genders regarding emotional reactive, anxiety problem, somatic complaint and withdrawn in group (I) (SLI	I) 107
Fig. (7):	Bar chart representing comparison between gender regarding attention and aggressive	108
Fig. (8):	Bar chart representing comparison between genders regarding sleep	109
Fig. (9):	Bar chart representing comparison between the studied groups regarding age	110
Fig. (10):	Bar chart representing frequency of internalizing problems, externalizing	y S

	List of Figures	
Figure No.	Title	Page
Fig. (11):	Bar chart representing frequency of internalizing problems, externalizing and total behavioral problems among group (II) (control)	g
Fig. (12):	Bar chart representing frequency of internalizing, externalizing and total behavioral problems among PS (Subgroup of SLI children)	114
Fig. (13):	Bar chart representing frequency of internalizing, externalizing and total behavioral problems among PP (Subgroup of SLI children)	116
Fig. (14):	Bar chart representing comparison between SLI and control group regarding internalizing, externalizing and total behavioral problems	
Fig. (15):	Bar chart representing comparison between the subgroups of group (1) SLI (PS and PP) and group (2) Control group regarding internalizing, externalizing and total behavioral problems	
Fig. (16):	Bar chart representing frequency of emotionally reactive, anxiety, somatic and withdrawn among group (I) (SLI)	121

and total behavioral problems among

Fig. (17):	Bar chart representing frequency of emotionally reactive, anxiety, somatic complaint and withdrawn among group (II) (control)
	List of Figures
Figure No.	Title Page
Fig. (18):	Bar chart representing frequency of emotionally reactive, anxiety, somatic complaint and withdrawn among PS 124
Fig. (19):	Bar chart representing Frequency of emotionally reactive, anxiety, somatic complaint and withdrawn among PP
Fig. (20):	Bar chart representing comparison between SLI and control groups regarding emotionally reactive, anxiety, somatic complaint and withdrawn 128
Fig. (21):	Bar chart representing comparison between 2 sub-groups of SLI (PP and PS) and control group regarding emotional, anxiety, somatic and withdrawn
Fig. (22):	Bar chart representing frequency of attention and aggressive among SLI 132
Fig. (23):	Bar chart representing frequency of attention and aggressive among group (II) (control)
Fig. (24):	Bar chart representing frequency of attention and aggressive in PS group 134

	attention and aggressive	135
Fig. (26):	Bar chart representing comparison between SLI and control group regarding attention and aggressive	136
	List of Figures	
Figure No.	Title	Page
Fig. (27):	Bar chart representing comparison between SLI and control group regarding attention and aggressive	137
Fig. (28):	Bar chart representing frequency of sleep problem among SLI	139
Fig. (29):	Bar chart representing frequency of sleep problem among control group	140
Fig. (30):	Bar chart representing frequency of sleep problems in PP	141
Fig. (31):	Bar chart representing frequency of sleep problems among PS	142
Fig. (32):	Bar chart representing comparison between SLI and Control groups regarding sleep problem	143
Fig. (33):	Bar chart representing sleep problem in SLI subgroups (PS and PP) and Control group	
Fig. (34a):	Correlation between receptive language and internalizing behavioral problem	

Fig. (25): Bar chart representing frequency of

Fig. (34b):	Correlation between receptive language and externalizing behavioral problem
Fig. (34c):	Correlation between receptive language and total behavioral problem
Fig. (34d):	Correlation between expressive language and internalizing behavioral problem
	List of Figures
Figure No.	Title Page
Fig. (34e):	Correlation between expressive language and externalizing behavioral problem
Fig. (34f):	Correlation between expressive language and total behavioral problem 147
Fig. (34g):	Correlation between total language and internalizing behavioral problem 148
Fig. (34h):	correlation between total language and externalizing behavioral problem 148
Fig. (34i):	correlation between total language and total behavioral problem 148
Fig. (35a):	Correlation between receptive language and emotionally reactive 150
Fig. (35b):	Correlation between receptive language and anxiety
Fig. (35c):	Correlation between receptive language and somatic complaint 150