

# The Biology of Personality Disorders

A Thesis submitted for  
the partial fulfillment of Master Degree  
in Neuro Psychiatry

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ  
قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا  
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ  
صَدَقَ اللَّهُ الْعَظِيمُ  
(سورة البقرة الآية ٢٢)





# Dedication

TO  
my beloved mother  
and father,  
for their warm affection, patience,  
support, and for always being there  
when I needed them.





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## List of Abbreviations

PD	Personality disorder
BC	Before Christ
BPD	Borderline personality disorder
SPD	Schizotypal personality disorder
CSF	Cerebrospinal fluid
CPT	Continuous performance task
TPQ	tridimensional personality questionnaire
TPI	Temperament and character inventory
PET	Positron emission tomography
SPECT	Single photon emission computed tomography
5-HIAA	5 Hydroxy indole-acetic acid
CT	Computed tomography
MRI	Magnetic resonance imaging
fMRI	Functional Magnetic resonance imaging
5-HT	5-hydroxy tryptamine
GABA	Gamma amino butyric acid
ACh	Acetyl Choline
NE	Nor epinephrine
MHPG	3- Methyl 4- hydroxy phenyl glycol
WAIS-R	Wechsler Adult Intelligence Scale -Revised
HVA	Homovanillic acid
BDHI	Buss-Dunkee Hostility Inventory
CNS	Central nervous system
MMPI	Minnesota Multiphasic personality inventory
PRL (d,l-1-fen)	Prolactin response to d,l-1-fenfluramine
m-CPP	meta chlorophenyl piperazine
PRL (m-CPP)	Prolactin response to m-CPP
d,l-1-fen	fenfluramine
TPH	Tryptophan hydroxylase
DA	Dopamine
REM	Rapid eye movement
HPA-axis	Hypothalamic pituitary adrenal axis
DST	Dexamethasone suppression test
MDD	Major depressive disorder
Grs	Glucocorticoids receptors
LD-DST	Low dose dexamethasone suppression test

## List of Abbreviations (Cont.)

mRNA	Messenger RNA
CRH	Cortisol releasing hormone
ACTH	Adrenocorticotrophic hormone
PRL FEN	Prolactin response to fenfluramine challenge
MRS	Magnetic resonance spectroscopy
rCBF	Regional cerebral blood flow
BOLD (fMRI)	Blood oxygen level dependent fMRI
CML	Cathomeatal line
WCST	Wisconsin Card Sorting test
NIMH	National institute of mental health
VMA	Valinyl mandelic acid
CS	Conditioned signal
UCS	Unconditioned signal
MAO	Monoamine oxidase
DES	Dissociative experience scale
SCL-90	Symptom checklist 90
VAMS	Visual analogue mood scale
ALS	Affective lability scale
GBI	Gervat behavior inventory
SSRIs	Selective serotonin reuptake inhibitors
MAOIs	Monoamine oxidase inhibitors
QOL	Quality of life
CNG	Contingent negative variation
PREE	Partial reinforcement extinction effect
ERP	Early receptor potential