Validity & Reliability of Present State Examination-10 (Short-Arabic Version) in a Sample of Egyptian Psychiatric Patients

Thesis

Submitted for partial fulfillment of

Ph.D. Degree in Psychiatry

by

Nagwan Mohamed Madbouly

(M.B., B.Ch., M.Sc.)

Under Supervision of

Prof. Dr. Emad Hamdi Ghoz

Professor of Psychiatry

Faculty of Medicine, Cairo University

Prof. Dr. Suaad Sayed Moussa

Professor of Psychiatry

Faculty of Medicine, Cairo University

Dr. Hanan Anwer El Shennawy

Associate Professor of Psychiatry

Faculty of Medicine, Cairo University

Faculty of Medicine

Cairo University

2012

Abstract

Background: The Short Arabic version of the PSE-10 has been developed in conjunction with a large scale epidemiological survey of the prevalence of mental disorders in Southern Egypt. **Aim of the study:** To assess the validity and inter-rater reliability of the Short Arabic form of the PSE-10 so as to introduce it as a research instrument for Egyptian based mental health studies. **Methods:** 175 subjects were assessed by two trained psychiatrists in this version of the PSE-10 to perform the reliability study. The subjects include 50 healthy volunteers as controls, 50 subjects with mood disorder, 50 subjects with anxiety disorder and 25 subjects with psychotic disorder. All subjects were diagnosed according to the structured clinical interview for DSM-IV Axis I disorders to perform the validity study. **Results:** PSE had 90% sensitivity and 73% specificity in detection of the specific mental disorders included in the study. On average, this version of the PSE-10 had substantial to almost perfect inter-rater reliability and internal consistency. **Conclusion:** The Short Arabic PSE-10 is a valid and a reliable interview with adequate levels of internal consistency. The Short Arabic version is less time consuming, and still retains the core symptoms required to reach a diagnosis of the common mental disorders

Keywords: Validity - Reliability - Inter rater - Short Arabic PSE-10,

Acknowledgment

I would like to start by thanking God for continuing this work specifically and for all success in my life generally.

I am greatly honored to express my deep gratitude to **Prof. Dr. Emad Hamdi**, Professor of Psychiatry, Faculty of Medicine, Cairo University.

He gave me much of his time, experience, meticulous constructive advice and support. His fatherhood attitude, patience and encouragement were indispensable for the completion of this work.

I would like to express my sincerely felt and profound gratitude to **Prof. Dr. Suaad Moussa**, Professor of Psychiatry, Faculty of Medicine, Cairo University for her guidance and valuable suggestions.

I would like to express my particular gratitude to **Dr. Hanan El-Shennawy**, Associate Prof. of Psychiatry, Faculty of Medicine, Cairo University for her support, encouragement and valuable advices.

A special tribute is owed to **all my colleagues especially the assistant lecturers** in the Psychiatry department, Faculty of Medicine, Cairo University for their keen interest, friendly attitude and participation in this study.

Similarly, a special tribute is owed to **all the subjects (patients & controls) who participated** in this study. They gave me much of their time and patience.

Finally, I would like to thank all my professors, my colleagues and all the members of Psychiatry Department in Cairo University.

Index

List of Abbreviations

ADAMHA	Alcohol, Drug Abuse and Mental Health Administration
ANOVA	Analysis of variance
BSE	Bovine spongiform encephalopathy
CAPI	Computer-Assisted Personal Interview
CAPSE	Computer-assisted PSE version
CAPSE10.2	Computer Assisted PSE, Version 10.2
CAS-CV/CAS-I	Computer-Assisted SCID
CCMD-3	Third Chinese Classifications of Mental Disorders
CHS	Clinical History Schedule
CIDI	Composite International Diagnostic Interview
DIB	Diagnostic Interview for Borderline
DIS	Diagnostic Interview Schedule
DSM	Diagnostic and Statistical Manual of Mental Disorders
DSM-IV	The fourth edition of Diagnostic and Statistical Manual of Mental Disorders
DSM-IV-TR	The fourth edition of Diagnostic and Statistical Manual of Mental Disorders (text revision)
GAF	Global Assessment Functioning Scale
GC-3	Third Cuban Glossary of Psychiatry
GHQ	General Health Questionnaire
GLADP	Latin American Guide for Psychiatric Diagnosis
HS	Highly significant
ICD-10	Tenth Revision of the International Classification of Diseases and Related Health Problems
ICIDH	International Classification of Impairments, Disabilities and Handicaps
ICIDH-2	International Classification of Impairments, Activities and

	Participation
IDCL	International Diagnostic Checklists
IGC	Item Group Checklist
IGDA	International Guidelines for Diagnostic Assessment
IPDE	International Personality Disorders Examination
IPPP	Institutional Program of Psychiatry for the Person
k	Kappa
LEAD	Longitudinal, Expert, All Data
M-CIDI	Munich version of the CIDI
MDD	Major depressive disorder
MDI	Major Depression Inventory
MINI	Mini International Neuropsychiatric Interview
n	Number
NIMH	National Institute of Mental Health
NPV	Negative Predictive value
NS	Non-significant
OCD	Obsessive compulsive disorder
OPD	Operationalized Psychodynamic Diagnostics System
PAS	Personality Assessment Schedule
PC	Personal computer
PID	Person-Centred Integrative Diagnosis
PPV	Positive Predictive value
PSE	Present State Examination
PSE-10	The tenth edition of the Present State Examination
PTSD	Post-traumatic stress disorder
RDC	Research Diagnostic Criteria
RDI	Renard Diagnostic Instrument

S	Significant
SADS	The Schedule for Affective Disorders and Schizophrenia
SADS-C	Change version of The Schedule for Affective Disorders and Schizophrenia
SADS-L	Lifetime version of The Schedule for Affective Disorders and Schizophrenia
SCAN	Schedules for Clinical Assessment in Neuropsychiatry
SCID	Structured Clinical Interview for DSM
SCID-CV	Clinician Version of Structured Clinical Interview for DSM
SCID-I	Structured Clinical Interview for DSM-IV Axis I Disorders
SCID-I/NP	Non-patient Edition of SCID
SCID-I/P	Patient Edition of SCID
SCID-II	Structured Clinical Interview for DSM-IV Axis II Personality Disorders
SCID-SCREEN-PQ	Screening version of the SCID
SD	Standard deviation
SEM	Standard error of measurement
SPSS	Statistical Package for the Social Sciences
UAE	United Arab Emirates
WHO	World Health Organization
WPA	World Psychiatric Association

List of Tables

List of Figures

Introduction

Diagnosis is one of the most central concepts in psychiatry and medicine. It describes the whole clinical condition of the patient in a way that is helpful for effective treatment and health promotion. Consequently, it is also a fundamental concept for clinical training and clinical research. Furthermore, it informs the conceptualization of what a case is and the methodology for its assessment in epidemiology and public health (IGDA Workgroup, WPA, 2003).

The philosopher and historian of medicine Pedro Lain-Entralgo (1982) cogently argues that diagnosis is more than just identifying a disorder (nosological diagnosis) and more than distinguishing one disorder from another (differential diagnosis); it is in fact understanding thoroughly what goes on in the mind and the body of the person who presents for care. This understanding must be considered in the context of the history and culture of each patient to be meaningful (Lain-Entralgo, 1982).

In present-day psychiatry, classification has become even more important than it is in many other medical specialties. The knowledge about the etiology of most psychiatric conditions is still unsatisfactory. Multiple factors acting together at a given time seem to be a more likely explanation than a single causative factor. It is still not known how to measure these complex interactions between different factors. Reliable laboratory tests and radiological diagnostic procedures are relatively few. Most of the time, for the diagnosis, a clinician has to depend on a good history and mental state examination. Under these circumstances, a reliable system of classification becomes a priority without which it is not

possible to communicate with others, or to plan research or even to efficiently organize the treatment of the patient and compare it with others. In this sense, classification has become the common language of communication in psychiatry today (Murthy and Wig, 2002).

Recent decades have witnessed considerable advances in the methodology of psychiatric diagnosis. These have included a more systematic and reliable description of disorders, and multi-axial schemas for addressing the frequent plurality of the patient's clinical problems and their biopsychosocial contextualisation. On the other hand, compelling arguments have been made about the need to enhance the validity of these diagnostic formulations by attending to symbols and meanings that are pertinent to the identity and perspectives of individual patients. Furthermore, in the increasingly multicultural world in which we live, it is essential to strive for an effective integration of universalism (which facilitates professional communication across centers and continents) and local realities and needs (which address the uniqueness of the patient in his or her particular context) (Tasman, 2000).

One of the roots of the World Psychiatric Association (WPA) project to develop the International Guidelines for Diagnostic Assessment (IGDA) can be found in the dedicated collaboration between the World Health Organization and WPA, through its Executive Committee and its Section on Classification and Diagnostic Assessment towards the development of the *Tenth Revision of the International Classification of Diseases and Related Health Problems* (ICD-10) (World Health Organization, 1992), the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) (American Psychiatric Association, 1994), recent Chinese classifications of mental disorders (CCMD-3) (Chinese Medical Association, 1995), the *Third Cuban Glossary of Psychiatry* (GC-3)

(Otero, 2000) and the *Latin American Guide for Psychiatric Diagnosis* (GLADP) (Berganza, et al., 2001).

So far, there is general acceptance on the ICD and DSM. This rests on the merits of their descriptive and operational approach towards diagnosis. These classifications have greatly facilitated practice, teaching and research by providing better delineation of the syndromes. The absence of etiological information linked to brain physiology, however, has limited understanding of mental illness and has been a stumbling block to the development of better classifications (Üstün et al., 2002).

The new generation of epidemiological studies has focused on specific diagnostics. Among instruments developed are the Research Diagnostic Criteria (Feighner et al., 1972), the Diagnostic Interview Schedule (DIS) (Robins et al., 1981), the Present State Examination (PSE) (Wing et al., 1974), the Structured Clinical Interview for DSM-III (SCID) (Spitzer et al., 1987), the Composite International Diagnostic Interview (CIDI) (Robins et al., 1988), and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) (Wing et al., 1990).

In Europe, the SCAN has evolved from the older Present State Examination. SCAN itself is a set of instruments aimed at assessing and classifying psychopathology in adults. The four instruments include PSE-10 (the 10th edition of the Present State Examination), the SCAN glossary, which defines the symptoms; the Item Group Checklist (IGC) for symptoms that can be rated directly (for example from case notes), and the Clinical History Schedule (CHS). This instrument provides diagnoses according to both ICD-10 and the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) criteria. The interview itself is semi-structured, the aim being to

encapsulate the clinical interview while minimizing its vagaries. There are probe questions with standard wording to elucidate the psychopathological symptoms, defined in the glossary and accompanied by severity ratings. Where there is doubt, the interviewer can proceed to a free-style interview to clarify the feature further and may, if necessary, include the patient's phraseology in questioning to enhance clarity. It is designed for use by psychiatrists or clinical psychologists, thereby utilizing clinical interviewing skills in evaluating each symptom. The symptoms ratings, provided they have been identified as defined in the glossary, are then entered into a computer algorithm and a computer diagnosis obtained according to either classification. The role of the interviewer is thus to rate symptoms rather than make diagnoses. SCAN can generate a current diagnosis, a lifetime diagnosis or a representative episode diagnosis. The use of mental health professionals in interviewing with SCAN makes this an expensive method but has the advantage of approximating the 'gold standard' diagnosis achieved by clinical interview (Wing, 1996).