Arabic Psychological Tests and Their English Versions

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By

Ahmed M. Abdel-Khalek

Cambridge Scholars Publishing

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This book first published 2020

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

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ISBN (10): 1-5275-5973-4
ISBN (13): 978-1-5275-5973-8

To Nadia, Mira, Sherif, and Tarek, with love.

Whatever exists at all exists in some amount.

Thorndike (1918)

Anything that exists in amount can be measured.

McCall (1939)

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PREFACE[1]

Measurement is a very important procedure and an indispensable element of science. In physical sciences, the CGS system of measurement is an essential one. It is a variant of the metric system of measurement of physical units, which uses the centimeter as the unit of length, the gram as the unit of mass, and the second as the unit of time. It was initially proposed in 1832 by the German mathematician Carl F. Gauss (1777–1855). The CGS system was eventually replaced by the MKSA system: Metre, Kilogram, Second, and Ampere. Other CGS units are the Dyne for force and the Erg for work.

In psychology, testing and assessment are also crucial subjects. As Thorndike stated in 1918: "Whatever exists at all exists in some amount". In 1939, McCall completed this statement by saying: "Anything that exists in amount can be measured". The development of psychological tests and scales was inspired by the works of the founding fathers, including Wundt, Ebbinghaus, Galton, J. M. Cattell, Binet, Spearman, Woodworth, Thorndike, Terman, Wechsler, Otis, and Strong, among other pioneer psychologists.

Based on the sustained efforts of many psychologists, a wealth of tests and scales have become available to assess personality, intelligence, abilities, achievement, attitudes, as well as psychopathological traits, symptoms, and disorders (see the Mental Measurement Yearbook from the Buros Center for Testing) (Carlson, Geisinger, & Jonson, 2017).

Measurement remains an important concern for the progress of psychology, as a basic science and as a field of application. Development of psychological research and practice would not be possible without sound assessment and measuring procedures. Judd and McClelland (1998) stated that "The conceptual advances in science frequently follow measurement advances…. For the discipline as a whole to advance and develop, measurement must be a focus of collective attention" (p. 180).

At the international level, the vast majority of psychological tests and scales available for research and application are published in English. In Arab countries, the majority of psychological tests and scales are translations of mainly American or British Scales. It is the contention of the present researcher that there is a great need to develop and validate

[1] To avoid repetition, all the references of the chapters were collected in the references section at the end of the book.

psychological scales in Arabic by Arabic speaking psychologists, with good translations into English, to address the increasing uses of psychological tests and scales in research and application, as well as the growing interest in cross-cultural studies. This book presents psychological scales developed in this direction, i.e., they were constructed and validated in Arabic and, subsequently, several cycles of translation and back-translation of the scale items gave rise to equivalent English versions.

Furthermore, the populations of Western industrialized countries in Europe and North America nowadays include emigrants and refugees originally from Arab countries, who do not speak or understand the English language. In this case bilingual Arabic and English scales become desirable. By bilingualism in this instance, I mean two separate and equivalent versions of the same scale: one in Arabic for the participant who does not understand English, and the other for the researcher or practitioner who does not understand Arabic.

An example of the benefits of the two versions of any given scale is the master's thesis by Seher Öztürk (2019) entitled: *The evaluation of psychological adjustment and acculturation process of Syrian adolescents in Turkey: Altindag sample, Ankara*. In her thesis, she administered several scales in Arabic, because the participants did not know Turkish. The scales included the ASH, developed by the present researcher (see Chapter 4 in this book).

The present book contains a collection of scales in both Arabic and English. In addition to English, some scales have German, Spanish, Persian, Turkish, and Chinese translations. These versions are also included in this book. Most chapters were previously published in scientific peer-reviewed journals, whereas some are new and were specifically written for this book.

All the chapters of this book contain personality and psychopathology scales and questionnaires, since self-reports and questionnaires play a prominent role in psychological research and practice, as they are simple and cost less than other methods of assessment. Furthermore, these scales are suitable in survey and epidemiological studies with large samples.

I would like to thank the original publishers of the articles in the peer-reviewed international journals for their kind permission to republish them. Many thanks to Cambridge Scholars Publishing, the publisher of this book, for their cooperation. Thanks are also due to Ms. Ala'a Said Rashid, Ph.D. candidate in Alexandria University for her help in transferring PDF texts to Word documents. Furthermore, I would like to thank Ms. Aya Ahmed Hasan, Ph.D. candidate; Ms. Yomna Kamal, Ms. Yossra Kamal, and Mr. Mohammed Elsayed, M.A. candidates in Alexandria University for their

assistance. It would not have been possible to publish this book without the great effort of Ms. Dahlia Eldeeb who compiled and edited all the chapters.

I hope that the present book, particularly the psychological scales, would be useful to specialists and practitioners in psychology, psychiatry, and social sciences.

Ahmed M. Abdel-Khalek, Ph.D.
Professor of Psychology
Alexandria University, Egypt

LIST OF ABBREVIATIONS

α: Cronbach alpha reliability
A: Agreeableness
ABFPI: Arabic Big Five Personality Inventory
ACDI: Arabic Children's Depression Inventory
ASCFS: Arabic Scale of Chronic Fatigue Syndrome
ASDA: Arabic Scale of Death Anxiety
ASH: Arabic Scale of Happiness
ASHB: Arabic Scale of Health Behaviors
ASI: Arabic Scale of Insomnia
ASIR: Arabic Scale of Intrinsic Religiosity
ASMH: Arabic Scale of Mental Health
ASOC: Arabic Scale of Obsession-Compulsion
    R-ASOC: Revised Arabic Scale of Obsession-Compulsion
ASOP: Arabic Scale of Optimism and Pessimism
BAI: Beck Anxiety Inventory
BDI: Beck Depression Inventory
BF: Big Five
BFM: Big Five Model
C: Conscientiousness
CAC: Compulsive Activity Checklist
CAD: Childhood and adolescent depression
CDI: Children's Depression Inventory
CES-D: Center for Epidemiologic Studies-Depression Scale
CFA: Confirmatory Factor Analysis
CFI: Comparative Fit Index
CFS: Coefficient of factor similarity
CFS: Chronic Fatigue Syndrome
CI: Confidence interval
CR: Critical ratio
d: Effect size
DAS: Death Anxiety Scale
    RDAS: Revised Death Anxiety Scale
    TDAS: Templer's Death Anxiety Scale
DDS: Death Depression Scale
DDiS: Death Distress Scale

DIS: Difficulty initiating sleep
DMS: Difficulty maintaining sleep
DOS: Death Obsession Scale
DS: Disrupted sleep
DSM-III: Diagnostic and Statistical Manual of Mental Disorders (3rd edition)
DSM-III-R: Diagnostic and Statistical Manual of Mental Disorders (3rd edition)-Revised
DSM-IV: Diagnostic and Statistical Manual of Mental Disorders (4th edition)
DSM-5: Diagnostic and Statistical Manual of Mental Disorders (5th edition)
E: Extraversion
EMA: Early morning awakenings
EPQ: Eysenck Personality Questionnaire
JEPQ: Junior Eysenck Personality Questionnaire
FANS: Factorial Arabic Neuroticism Scale
FSS: Fear Survey Schedule
GAD: Generalized Anxiety Disorder
h^2: Communalities
HM: Happiness Measure
HSC: Hopkins Symptom Checklist
HSC-D: Hopkins Symptom Checklist-Depression Scale
HSCL: Hopkins Symptom Checklist
ICD-10: 10th International Classification of Disease
ICSD: International Classification of Sleep Disorders
IPIP-NEO: International Personality Item Pool- Neuroticism-Extraversion-Openness
I-R*r*: Item remainder correlation
KUAS: Kuwait University Anxiety Scale
S-KUAS: Spanish version of the Kuwait University Anxiety Scale
L: Lie
LL: Love of Life
LLS: Love of Life Scale
LOI: Leyton Obsessional Inventory
LOT: Life Orientation Test
M: Mean
MCADS: Multidimensional Child and Adolescent Depression Scale
Mdn: Median
MMPI: Minnesota Multiphasic Personality Inventory
MOCI: Maudsley Obsessive Compulsive Inventory
N: Neuroticism
N: Sample size
n: Subsample size

NEO-FFI: Neuroticism-Extraversion-Openness Five-Factor Inventory
NEO-PI-R: Neuroticism-Extraversion-Openness Personality Inventory-Revised
O: Openness
OC: Obsession-compulsion
OCD: Obsessive Compulsive Disorder
OCI: Obsessive Compulsive Inventory
OCP: Obsessive compulsive personality
OCPD: Obsessive Compulsive Personality disorder
OCS: Obsessive Compulsive Scale
OHI: Oxford Happiness Inventory
P: Psychoticism
PANAS: Positive and Negative Affect Schedule
PI: Padua Inventory
PSG: Polysomnographic
PSS: Positive Self Scale
PTSD: Post-traumatic Stress Disorder
r: Correlation
r_{it}: Item rest of test correlation
r_{11}: Test-retest reliabilities
RDFS: Reasons for Death Fear Scale
RMSEA: Root Mean Square Error of Approximation
RSES: Rosenberg Self-Esteem Scale
SCL-90: Symptom Checklist-90
SCL: Symptom Checklist
SCL-90-D: Symptom Checklist 90-Depression Scale
SD: Standard deviation
SE: Standard error
SEM: Standard Error of Measurement
SHS: Subjective Happiness Scale
SSI: Somatic Symptoms Inventory
SSI-S: Short form of the Somatic Symptoms Inventory
STAI: State-Trait Anxiety Inventory
STAI (T) : State-Trait Anxiety Inventory-Trait Subscale
SWB: Subjective Well-Being
SWLS: Satisfaction with Life Scale
t: *t*-test
TLI: Tuker Lewis Index
WB: Well-Being
Y-BOCS: Yale-Brown Obsessive-Compulsive Scale

PART I

POSITIVE PSYCHOLOGY SCALES

CHAPTER ONE

THE DEVELOPMENT AND VALIDATION OF THE ARABIC SCALE OF OPTIMISM AND PESSIMISM[1]

Abstract

The main objective of the present study was to construct and validate the ASOP. The item pool was constructed based on an open-ended question. Then, seven Ph.D. holders served as referees to estimate the content or face validity of each item. This procedure led to the retention of 51 and 49 items for optimism and pessimism, respectively. Item-remainder correlations resulted in keeping the items with significant and high correlations (25 and 21 items for optimism and pessimism, respectively). Several cycles of principal component analysis led to the deletion of the items with low loadings. The result was 15 items for optimism and 15 for pessimism. Each item is answered on a five-point intensity scale. Cronbach's alpha and retest reliabilities were high, as were the criterion-related, convergent, and factorial validities. Descriptive statistics for 18 Arab countries, as well as US and Indian samples, were reported. It was concluded that the ASOP has good psychometric characteristics in Arab, Indian, and US college students.

Introduction

> "Part of being optimistic is keeping one's head pointed toward the sun, one's feet moving forward." Nelson Mandela.

Consistent with the growing interest in positive psychology in the past few decades (Seligman M. E., 2002; Seligman, Steen, Park, & Peterson, 2005), research studies on optimism have burgeoned and received increasing amounts of interest. Thus, many researchers conducted studies in this field (Peterson, 2000). Optimism, the rose-colored glasses, is the belief that good things will happen. Optimists tend to see the best, i.e., they have

[1] This chapter was specifically written for this book.

positive expectations about the future. On the other hand, pessimism is the belief that bad things will happen. Pessimists tend to see the worst, i.e., they have negative expectations about the future. Therefore, optimism and pessimism are very influential traits that affect the way people perceive and live their lives (Carver & Connor-Smith, 2010).

The most popular definition of optimism and pessimism is as follows: a generalized positive and negative expectancies regarding future outcomes, as a general tendency to expect that one will experience positive versus negative events in the future (Scheier & Carver, 1985). On the other hand, Dember, Martin, Hummer, Howe, and Melton (1989) defined those constructs more broadly as a positive and negative outlook on life, i.e., the present and the future.

A person can be optimistic in regard to a specific area of life (e.g., expecting a successful marriage) but pessimistic regarding other aspects (e.g., money). However, some people have a consistent tendency to think, feel, and behave in an optimistic or pessimistic manner toward most aspects of their lives. An optimistic person sees good things everywhere, whereas the pessimist observes mainly the negative aspects of everything around him/her. However, successful living requires a fine balance between optimism and pessimism (Hecht, 2013).

Chang (2001) and Chang, Chang, and Sanna (2009) pointed out the adaptive nature of optimism and the maladaptive nature of pessimism. In general, optimism seems to be related to psychological benefits, such as life satisfaction, more positive affect, and fewer depressive symptoms. On the other hand, pessimism seems to be related to detriments, such as more depressive symptoms, negative affect, and psychological stress.

Carver (2014) enumerated the different benefits of optimism, including that it relates to greater psychological well-being, greater persistence in the pursuit of educational goals, better interpersonal relations, greater ease in forming social networks, and a better ability to inhibit negative emotions. Optimists work harder at close relationships, thus experiencing less interpersonal conflict, engaging in more health-promoting behaviors, and fewer health-damaging behaviors than pessimists. They are less likely to report drinking problems, to smoke, to be sedentary. They have better diets, in terms of fruit and vegetable consumption and dietary fat intake.

A meta-analytic review has shown that optimists are physically and psychologically better adjusted than pessimists (Rasmussen, Scheier, & Greenhouse, 2009). Optimists have less cardiovascular diseases (Boehm & Kubzansky, 2012) and improved immunological functioning (Srivastava, McGonigal, Richards, Butler, & Gross, 2006). Optimism has been positively related to subjective well-being and negatively related to several

diseases connected with stress, such as cardiovascular diseases (Nabi, et al., 2010).

Hecht (2013) suggested that optimism and pessimism are differentially associated with the two cerebral hemispheres. High self-esteem, a cheerful attitude that tends to look at the positive aspects of a given situation, as well as an optimistic belief in a bright future are associated with physiological activity in the left hemisphere. In contrast, a gloomy viewpoint, an inclination to focus on the negative part and exaggerate its significance, low self-esteem, as well as a pessimistic view on what the future holds are interlinked with neurophysiologic processes in the right hemisphere. Chang (1998; 2001) stated that optimism and pessimism exert a great deal of influence on decision-making, risk taking, and physical and mental health.

However, there is a body of literature indicating the opposite of the adaptiveness of optimism and maladaptiveness of pessimism. Optimism comes at a cost, whereas pessimism comes with certain rewards (Chang, et al., 2009). In a similar vein, some studies have identified some potential drawbacks of optimism (Schutz, Schall, & Koydemir, 2018). These studies have linked optimism with poorer health behaviors, because optimists underestimate their risk of developing physical problems. It is important to note that this, however, is the rare case (Chang, et al., 2009). Furthermore, studies indicating the positive benefits of optimism outnumber the negative ones.

The Dimensionality of Optimism and Pessimism

The dimensionality of optimism and pessimism was a subject of hot debate. Some researchers believe that they form a unidimensional construct, with optimism at one pole of the dimension and pessimism at the other; whereas other researchers argued that optimism and pessimism are distinct constructs (Kam & Meyer, 2012).

Marshall, Wortman, Kusulas, Hervig and Vickers (1992) empirically demonstrated that optimism correlated more strongly with extraversion than did pessimism, and that pessimism correlated more strongly with neuroticism than optimism. Therefore, many researchers treat optimism and pessimism as two different dimensions. (Kam & Meyer, 2012) proposed an explanation for Marshall et al.'s (1992) findings. That is, the valence (favorability) of an individual item in a scale causes optimism and pessimism to have differential correlations with extraversion and neuroticism. Kam and Meyer (2012) carried out a study on a large sample (N = 1,016) to control item valence and these correlations were reduced.

Some researchers argued that the bi-dimensionality of the construct composed of optimism and pessimism might be due to a method artifact. However, a large-scale study on the Revised Life Orientation Test indicated that this scale may be better viewed as a measure that taps this bi-dimensionality (Herzberg, Glaesmer, & Hoyer, 2006). Benyamini (2005) studied older adults suffering from arthritis and showed that high optimism and high pessimism could co-exist and interact in a single person. Dember (2001) stated:

> "Having a separate measure of each construct turns out to be not only psychometrically indicated, because optimism and pessimism scores are usually only moderately correlated, but also to offer additional predictive use because the two measures often correlate differentially with other variables" (p. 295).

In a recent study with Arab participants, Abdel-Khalek (2019) found that the correlations between the BF personality factors and optimism were not always the reverse of the correlations between personality and pessimism. These correlations differ in both statistical significance and magnitude. Therefore, the different associations of optimism and pessimism with personality factors may support the rationale of two distinct but correlated and relatively independent traits (Dember, 2001; Herzberg, el al., 2006; Marshall, et al., 1992; Zuckerman, 2003).

The Present Study

In 1996, Abdel-Khalek developed the ASOP in two versions: Arabic and English and wrote an Arabic manual for this scale. From that date till now, over 60 research studies in different Arab countries administered the ASOP to various samples. Furthermore, a limited number of new Arabic scales used the ASOP as a criterion. In addition, a small number of studies used the English version of the ASOP on samples of US and UK college students.

The aim of the present research was to describe the development of the ASOP; its internal consistency; temporal stability; criterion-related, construct, and factorial validities; descriptive statistics; and the development of an equivalent English version of the scale; as well as some research studies using this scale.

Material and Method

The Development of the Scale

It is important to know, from the beginning, that the ASOP consists of two separate subscales, one for optimism and one for pessimism. The development of the ASOP was based on several steps, as follows: (a) the construction of the item pool, (b) the examination of the content or face validity, (c) the computation of the item-remainder correlation, and (d) a factor analysis.

Item pool. A sample (N = 212) of psychology undergraduates was requested to answer an open-ended question to construct the item pool. This question was as follows: "Think about some of the optimistic persons you know well. Then, write ten statements that accurately describe them and their general behavior, which disclose their optimism". The same was applied for pessimism. Two definitions were introduced to students, as follows: optimism is an auspicious outlook toward the future, which makes the person expect good things to happen, whereas pessimism is negative expectation of the coming events. It makes the person wait for the worst to happen.

The 212 male and female undergraduates wrote a huge number of responses. Then, the present researcher thoroughly investigated this big number of responses to delete the irrelevant, ambiguous, and repeated responses, and to edit the items for the sake of brevity, clarity, and so that each statement would only deal with one idea. Furthermore, the present researcher added a few more items. The preliminary version of the scale consisted of 119 and 95 items for optimism and pessimism, respectively.

Content or face validity. The last-mentioned items were forwarded to seven Ph.D. holders in psychology. They served as referees and were requested to review each item and to judge its suitability in assessing optimism and pessimism, by rating each on a five-point scale anchored by = *Does not assess optimism/pessimism* and 4 = *An excellent item to assess optimism/pessimism*. Based on the seven referees' ratings, the mean score for each item was computed. An arbitrary criterion for the retention of any given item was that it must obtain a mean score of 3 or 4. This procedure led to the retention of 51 and 49 items for optimism and pessimism, respectively.

Item-remainder correlation. The item-rest-of-test correlation was computed for the aforementioned items (51 & 49). All items with statistically

significant correlations ($p \leq .001$) were retained. In applying this criterion, 25 and 21 items were retained for optimism and pessimism, respectively.

Table 1-1: The two unrotated and oblique rotated (Oblimin) components of optimism.

Items*	Unrotated		Rotated	
	1	2	1	2
1	.580	-.330	-.065	-.706
2	.816	-.275	.129	-.774
3	.723	-.414	-.085	-.884
4	.761	-.401	-.048	-.890
5	.760	-.197	.189	-.652
6	.719	-.077	.307	-.489
7	.797	-.093	.331	-.551
8	.640	.443	.870	.161
9	.696	.343	.784	.014
10	.755	.039	.462	-.376
11	.696	.172	.585	-.185
12	.647	.285	.689	-.027
13	.678	.327	.756	.005
14	.746	.206	.653	-.173
15	.794	.087	.540	-.339
Eigen Value	7.845	1.153		
% of VAR	52.299	7.686		
Total VAR	59.985			

* See the items in Appendix 1-A.
Note: VAR: variance.

Factor analysis. A principal component analysis (SPSS Inc., 2009) was computed over different cycles. Items with low loadings on any of the factors were deleted. The result was 15 items for optimism and 15 items for pessimism, representing the final form of the two subscales (see Appendix 1-A).

Each item is answered on a five-point intensity scale anchored by 1 = *No* and 5 = *Very much*. The total scale score could range from 15 to 75, with higher scores indicating higher levels of optimism on the first scale or higher levels of pessimism on the second scale. There are no recoded items.

Procedure

The ASOP, along with other scales, were administered anonymously to small groups of undergraduates, in a classroom setting, during regular