

Theses and Dissertations

2008

Iranian Americans and the MMPI-2: considering cultural factors in the assessment of psychopathology

Negar Shekarabi

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>

Recommended Citation

Shekarabi, Negar, "Iranian Americans and the MMPI-2: considering cultural factors in the assessment of psychopathology" (2008). *Theses and Dissertations*. 13.
<https://digitalcommons.pepperdine.edu/etd/13>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact Katrina.Gallardo@pepperdine.edu, anna.speth@pepperdine.edu, linhgavin.do@pepperdine.edu.

Pepperdine University
Graduate School of Education and Psychology

IRANIAN AMERICANS AND THE MMPI-2: CONSIDERING CULTURAL
FACTORS IN THE ASSESSMENT OF PSYCHOPATHOLOGY

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Psychology

by

Negar Shekarabi

November, 2008

Daryl M. Rowe – Dissertation Chairperson

(signature page)

TABLE OF CONTENTS

	Page
DEDICATION	vi
ACKNOWLEDGEMENTS	vii
VITA	viii
ABSTRACT	xv
Chapter I. Introduction	1
Background of the Problem	1
Purpose and Importance of Study	1
Research Questions	2
Chapter II. Literature Review	3
Iranian Americans and Their Worldview	3
Language and religion	3
Family and community	4
History	4
Iranian immigrants	7
Iranian American identity	9
Iranian Americans and Mental Health	11
Iranian Cultural Phenomena that May Influence MMPI-2 Performance	16
Tarrof	16
Iranian dysphoric affect	17
The MMP-2 and Cross-Cultural Research	19
The MMPI-2 and Asian populations	20
The MMPI-2 and Latino populations	20
Summary	22
Chapter III. Methodology	24
Overview	24
Participants	24
Research Approach and Design	24
Instruments	25
Procedures	26
Data Management and Data Analysis	29
Chapter IV. Results	32

Descriptive Analysis	32
Statistical Analysis	33
Chapter V. Discussion	38
Acculturation and the MMPI-2 Validity Scales	38
Acculturation and the MMPI-2 Clinical Scales	41
Immigration and the MMPI-2	45
Methodological Limitations	46
Conclusion and Recommendations	48
REFERENCES	51
APPENDIX A: Cultural Lifestyle Inventory	54
APPENDIX B: Demographic Questionnaire	61
APPENDIX C: Telephone Screening Script	64
APPENDIX D: Script for Contacting Professors	67
APPENDIX E: Recruitment Flyer	69
APPENDIX F: Recruitment Email	71
APPENDIX G: Consent Form	75
APPENDIX H: Administration Script	78
APPENDIX I: Request for Summary	80
APPENDIX J: Referral List	82

LIST OF TABLES

	Page
Table 1: CLSI and Berry's Acculturation Categories	15
Table 2: Demographic Characteristics of Participants.	33
Table 3: CLSI Dominant Cultural Lifestyle Tendency Frequencies	34
Table 4: Spearman's rho correlations for MMPI-2 validity scales by CLSI	36
Table 5: Spearman's rho correlations for MMPI-2 clinical scales by CLSI	36

DEDICATION

I dedicate this dissertation to my grandfather, Mohammad Mehdi Aghai, whose presence in my life profoundly shaped and influenced the paths I have chosen. I have passion because of you and your place is greatly missed in our lives.

ACKNOWLEDGEMENTS

I would like to acknowledge and thank my immediate and extended family as well as my amazing friends and coworkers, whose support throughout this journey has sustained me. My husband, Hamid, has always been my cheerleader reminding me that I can complete everything I start. My mother, father, and older sister have never hesitated to express their support and pride which has always kept me going even when my resolve wavered. I am especially indebted to Dr. Daryl Rowe. I can't imagine this dissertation being done under the guidance of any other mentor. His passion for the subject matter was always infectious as were his reminders that being "unabashedly culture-specific and making no apologies for it" is a good thing.

Most importantly, I wish to thank those who participated in this project both as research subjects, committee members, and consultants and without whose help I could not have achieved this goal. I especially thank Dr. Bill Lafitte who, as a statistics consultant, advised and guided me with patience.

VITA

Negar Shekarabi, M.A.

EDUCATION

- 2004- Present *Pepperdine University*
Graduate School of Education and Psychology
Los Angeles, CA
Doctoral Student (expected graduation date 2008)
Psy.D. (APA-accredited program in clinical psychology)
- 2002-2004 *Pepperdine University*
Graduate School of Education and Psychology
Irvine, CA
Master of Arts in Psychology (M.A.)
- 2000-2002 *University of California, Irvine*
School of Social Science, Cognitive Science Department
Irvine, CA
Bachelor of Arts in Psychology (B.A.)
- 1998-2000 *Irvine Valley College*
Irvine, CA
Associate of Arts in Psychology (A.A.)
-

ACADEMIC AFFILIATIONS

- 2005-Present *MRTL- Multicultural Research and Training Lab*
Pepperdine University; West LA Campus
Graduate School of Education and Psychology
Active Member
- 2004- 2005 *Associated Student Government*
Pepperdine University
Graduate School of Education and Psychology
Offices Held: First Year Student Representative, Third
Year Student Representative
- 2000-2002 *Iranian Cultural Club of UC Irvine (ICC of UCI)*
Active Member
-

AWARDS AND HONORS

- 2008 *Graduated with Honors*
Pepperdine University

2004	<i>Graduated with Honors</i> Pepperdine University
2000	<i>Dean's List</i> University of California, Irvine
1998	<i>Honored Volunteer</i> Network of Iranian Professionals of Orange County (NIPOC)

PROFESSIONAL AFFILIATIONS

2005-Present	<i>California Psychological Association</i> Graduate Students Division
2004-Present	<i>American Psychological Association</i> Student Affiliate
2003-Present	<i>Psi Chi National Honor Society in Psychology</i> Active Member

CLINICAL TRAINING

9/2007-Present	<i>University of California, Riverside Counseling Center</i> <i>Pre-doctoral Intern</i> ; Supervisors: Elizabeth Mondragon, Psy.D. and Brad Compliment, Ph.D. Duties: Conduct brief and long term individual and group therapy with diverse undergraduate and graduate students with a variety of presenting problems including: academic anxiety, cultural concerns (ethnic and sexual identity), relationship concerns, adjustment concerns, depression, social anxiety, generalized anxiety, eating disorders, substance use, and prior sexual abuse and trauma; conduct weekly intake evaluations and diagnostic assessment and referral services; participate in outreach and professional training; 40 hours per week.
9/2006- 7/2007	<i>Harbor-UCLA Medical Center</i> <i>Adult Assessment, Doctoral Practicum</i> Supervisor: Carol Edwards, Ph.D. Duties: Psychological assessment of inpatient and outpatient referrals; scoring, interpretation and report writing; providing feedback to referring therapist and patient. Assessment batteries include but are not limited to

the Rorschach, MMPI-2, WAIS-III, MCMI-III as well as projective measures.

- 8/2005-Present *USC Student Counseling Center, Doctoral Practicum*
Supervisor: Robert Briones, Psy.D.
Duties: Interns participate in providing short term therapy, group counseling, clinical assessment and testing, diversity awareness and cultural competency, outreach and consultation and crisis intervention.
Conduct weekly intake evaluations and diagnostic assessment and referral services; serve as a process observer for Women's Group; participate in outreach and professional training; 16-20 hours per week.
- 9/2004-6/2005 *Seeds University Elementary School (UES), Doctoral Practicum*
Supervisor: Jeffrey Jacobs, Ph.D.
Duties: Conduct classroom and playground observations of students using various observations methods; provide individual therapy to elementary school children; lead group therapy focusing on social skills building; consult with parents, teachers, and other psychological staff of UES; 10 hours per week.

RESEARCH EXPERIENCE

- 9/2004-Present *Iranian-Americans and the MMPI-2: Considering Cultural Factors*
Original Research; Primary Investigator
Doctoral Dissertation Project
Chair: Daryl Rowe, Ph.D.
Research Approach and Design: The intent of the study will be to gain an understanding about Iranian Americans' performance on the MMPI-2. Of particular concern is the validity of the MMPI-2 with members of this cultural group due to the fact that the standardization sample of the MMPI-2 did not include Iranian Americans. This descriptive study will involve a correlational design to investigate the extent to which variations in one factor correspond with variations in one or more other factors as is the case in acculturation and/or demographic factors predicting performance on the MMPI-2 validity scale scores and MMPI-2 clinical scales; the explanatory variable (Mertens, 2005) will be the level of acculturation of Iranian American participants. The outcome variables will be the scores on the validity and clinical scales of the MMPI-2.

Significant differences from the standardization sample of the MMPI-2 validity and clinical scales will be analyzed.

6/2001-11/2001

UCI Child Development Center

Irvine, CA

Research Assistant

Supervisor: Timothy Wigal, Ph.D.

Duties: Screening potential candidates for a study on medication for childhood and adult ADHD, guanfacine; screening included interview, ECT administration, height, weight and blood pressure assessment; serving as a monitor for child study volunteers on study dates; preparing paperwork for study days; maintaining study paperwork; 10 hours per week.

ASSESSMENT EXPERIENCE

Have administered and/or written reports and provided feedback for the following measures:

Minnesota Multiphasic Personality Inventory-2
Thematic Apperception Test
Rorschach Inkblot Method (Exner system)
Projective Drawings
Wechsler Adult Intelligence Scale-3rd Edition
Bender Motor Gestalt Test
Beck Depression Inventory
Wechsler Intelligence Scale for Children-3rd Edition

TEACHING EXPERIENCE

1/2008

Co-Instructor, University of California, Riverside

Working with Anxious students

Professional Development course

Education and Development Department

This workshop is designed to increase awareness of anxiety and anxiety disorders among college students; a workshop to explore the impact of anxiety and anxiety disorders on college campuses; discussion of the common ways in which anxiety and anxiety disorders are experienced, the difference between normal anxiety and what we call a disorder, and ways in which staff members can reach out to anxious students.

1/2008

Co-Instructor, University of California, Riverside

Psych 198g Group Internship Psychology, Winter 2008

This course serves as an applied introduction to clinical and social service work. The content of the course focuses on helping skills as applied to the fields of clinical and counseling psychology. The internship experience serves as an illustration for much of the knowledge offered in the classroom setting and encourages the integration of academic information with practical experience.

9/2006- 5/2007 *Teaching Assistant, Existential/Humanistic Psychotherapy Course, Dr. Elkins*
Graduate School of Education and Psychology, Pepperdine University; Coordinated grading of assignments and provided student support regarding course materials.

RELATED WORK EXPERIENCE

3/2001-8/2004 *The Reading and Language Center*
Irvine, CA
Educational Therapist
Supervisor: Roberta Coppersmith
Duties: Conducting one-on-one educational therapy sessions with children with learning and cognitive disabilities; use of various programs designed to address specific learning disabilities (LindaMood Bell Phonemic Awareness, Visualizing and Verbalizing, Intercept by Learning Technics, On Cloud Nine Math); pacing and creating lesson plans for individual students; training and mentoring new clinicians.

PROFESSIONAL DEVELOPMENT AND SPECIALIZED TRAINING

10/2006-7/2007 *Forensic Issues Seminar*
Harbor-UCLA Medical Center
Department of Psychology
Michael Maloney, Ph.D., ABPP
Sarah Hough, Psy.D.

9/2006-7/2007 *Advanced Assessment Seminar: Rorschach*
Harbor-UCLA Medical Center
Department of Psychology
Carol Edwards, Ph.D.

10-11/2004 *Administration of the ADIS: Anxiety Disorders Inventory*
Schedule Training
Jeff Woods, Ph.D.
UCLA

- 10-11/2004 *Cognitive-Behavioral Therapy with Children with Anxiety Disorders Training – The Coping Cat Manualized Treatment*
 Jeff Woods, Ph.D.
 UCLA
- 12/2002 *Intercept Program by Learning Technics Training*
 A Physio-neuro Approach to Learning Readiness
 Trained at the Reading and Language Center, Irvine, CA
- 4/2001 *Visualizing and Verbalizing Program Training*
 Educational Therapy Intervention for Reading Comprehension
 Trained at the Reading and Language Center
 Irvine, CA
- 3/2001 *LindaMood Bell Phonemic Awareness Program Training*
 Educational Therapy Intervention for Dyslexia
 Trained at the Reading and Language Center
 Irvine, CA

PROFESSIONAL PRESENTATIONS/OUTREACH

- 5/2008 *Working with Middle Eastern Clients*
 The Counseling Center at UCR – Staff
 Two hour presentation on Middle Eastern clients was given to the psychological staff of the Counseling Center at UCR
 Topics covered included cultural worldview, religion, and the client-therapist relationship.
- 9/2007 *Suicide Awareness and Prevention*
 UC Riverside Counseling Center
 R.A. Training
- 11/2007 *Working with Distressed Students*
 UC Riverside Counseling Center
 Anthropology T.A. Training
- 2/2007 *Considering Culture in a Formal Diagnostic Formulation*
 Multicultural Research and Training Lab
 Pepperdine University
 Discussion Leader and Presenter
- 10/2006 *Building a Multiculturally Competent Professional Community*

Multicultural Research and Training Lab
Pepperdine University
Panel Presenter: “Culturally Congruent and Valid
Psychological Assessment Methods with Diverse
Populations.” Provided a presentation and discussion on
current research findings in psychological assessment with
culturally diverse groups.

10/2005

Working with Iranian-American Clients
USC Student Counseling Center – All Staff Meeting
One hour presentation on Iranian-American clients was
given to the psychological staff of the USC Student
Counseling Center. Topics covered included cultural
worldview, religion, and the client-therapist relationship.
Presentation was organized together with Dr. Timmy Lee,
Charles Couchman, M.A., and Afrouz Shaye, Practicum
Counselor.

LANGUAGE PROFICIENCY

Fluent in spoken Farsi

ABSTRACT

Psychological assessment is essential for the purposes of diagnosis and case conceptualization, design and implementation of therapeutic interventions, and referral decisions for adjunctive services. The development of assessment tools that are culturally appropriate and meet the needs of diverse ethnic groups within the United States are necessary to ensure clinical decisions are made with data that are culturally valid for these groups. Of specific interest in this dissertation is the Iranian-American population, which has grown substantially in the United States over the last two decades. The Minnesota Multiphasic Personality Inventory (MMPI-2) is one of the most commonly used assessment tools utilized by psychologists in measuring psychopathology. In spite of its wide use, little is known about the appropriateness of the MMPI-2 with the Iranian-American population. This descriptive study involved a correlational design that investigated the extent to which demographic factors and/or the level of acculturation of Iranian American participants corresponded with variations in scores on the validity and clinical scales of the MMPI-2. Significant differences from the standardization sample of the MMPI-2 validity and clinical scales were analyzed. It was found that those Iranian Americans who were less acculturated to U.S. culture performed higher on scale L, 2, and 0 of the MMPI-2. Interpretations of these scales by mental health professionals should be done so with caution. Iranian specific cultural phenomena such as the practice of *tarrof*, Iranian dysphoric affect, and the process of immigration should be used to help understand MMPI-2 findings where possible.

Chapter I

Introduction

Background of the Problem

Psychological assessment is essential for the purposes of diagnosis and case conceptualization, design and implementation of therapeutic interventions, and referral decisions for adjunctive services. Psychologists working in the United States will undeniably work with individuals of varied ethnic backgrounds as a result of the increasingly multi-cultural society in which we live. The development of assessment tools that are culturally appropriate and meet the needs of diverse ethnic groups within the United States are necessary to ensure clinical decisions are made with data that are culturally valid for these groups. This issue is particularly critical in that these decisions may have a profound influence on the lives of these individuals. Of specific interest in this dissertation is the Iranian-American population, which has grown substantially in the United States over the last two decades. By the late 1980s, the Iranian population in Los Angeles alone was estimated to be between 200,000 and 400,000 people (Kheirkhah, 2003). Recent estimates contend that out of 1 million Iranians residing in the United States, as of 1998, 600,000 of them live in Southern California (Gillis, 2000).

Purpose and Importance of Problem

The growing number of Iranian Americans in the U.S. increases the likelihood of psychologists providing services to this population. Yet, the research that addresses the mental health needs of this population remains limited, and literature that addresses the psychological assessment of this population, specifically, is even bleaker. The Minnesota

Multiphasic Personality Inventory (MMPI-2) is one of the most commonly used assessment tools utilized by psychologists in measuring psychopathology (Nagayama, Bansal, & Lopez, 1999). In spite of its wide use, little is known about the appropriateness of the MMPI-2 with the Iranian-American population. Literature searches in the PsychInfo and PsyArticles databases resulted in zero findings with regard to the MMPI-2 and Iranians. This study proposes to investigate the performance of Iranian-Americans on the MMPI-2 in an effort to better understand the relevance of culture in the measurement of psychopathology for this particular population. One starting point for beginning to establish Iranian specific MMPI norms, making recommendations about special considerations to yield with this population, and identifying cultural factors that may affect how Iranian test-takers respond to items would be to look at the validity of the MMPI-2 with this population. Specifically, this investigation will determine if a relationship exists between the MMPI-2 validity scale scores and level of acculturation.

Research Questions

The specific questions that will be examined in this study are as follows:

1. Among individuals who identify themselves as Iranian Americans, what is the relationship between level of acculturation and MMPI-2 validity scale scores?
2. Among individuals who identify themselves as Iranian Americans, what is the relationship between level of acculturation and MMPI-2 clinical scale scores?

Chapter II

Literature Review

To provide a more in-depth understanding of the cultural issues that may influence performance on the MMPI-2 for the Iranian American population, the following bodies of literature are reviewed: (a) the worldview of Iranian Americans, (b) immigration and other culture-specific experiences that may influence the mental well-being of Iranian Americans, (c) acculturation and mental health, (d) Iranian-specific phenomena that may influence performance on the MMPI, (e) psychological assessment and culture, and (f) cross-cultural research with the MMPI/MMPI-2.

Iranian Americans and Their Worldview

An understanding of the Iranian-American community, the culture from which they emanate, the perceptions and values they embrace, and their approach to acculturating to mainstream American culture is necessary to evaluate the appropriateness of using particular psychological testing instruments with this population, as well as to discern the validity of the testing data and its interpretation.

Language and religion. Iran is one of the few countries in the Middle East whose language is not Arabic. Iranians speak Farsi, which is one of the oldest known languages, dating back to the 6th century B.C. (Johnson, 2001). Iranians are predominantly Muslim (92.5% of the Iranian population) and most Iranian Muslims are Shiite (Johnson, 2001). Shiite beliefs include the seven pillars of faith (confession of faith, ritualized prayer, almsgiving, fasting, pilgrimage to the holy city of Mecca, crusade to protect Islamic

lands, and the requirement to do good works and avoid evil thoughts), and a belief in the Imamate institution, which is the distinction between Shiite and Sunni Muslims. The Imamate institution states that the successors of Mohammad are important spiritual and political leaders. Shiites believe Mohammad's son, Ali, was appointed as the first to succeed his father, and therefore, revere him and all of his descendants (Johnson, 2001). Iranians are generally fatalistic in their orientation to the world. They often use the term "enshallah," meaning "God willing," to express that God is ultimately in control of their lives (Johnson, 2001).

Family and community. Iran, like many non-Western cultures, values collectivism. The culture defines both people and emotional experiences in relational terms (Mezzich, Kleinman, Fabrega & Parron, 1996). The family, one's social network, and the existence of a familiar communal surrounding are core to defining oneself in Iranian culture. The loss or perceived loss of these supportive elements are mourned freely by Iranians, which from a Eurocentric perspective, may appear excessive (Mezzich et al., 1996).

The family is generally the most important aspect of Iranian life. The immediate and extended family members offer support and guidance to one another, help sustain the family's identity, and provide a sense of security knowing that one another exists. In return, each individual family member is bound by respect and deference to his/her family (Johnson, 2001). It is commonplace that elder members of the family will play an integral role in an individual's choice of marriage partners, child rearing practices, career choices, and financial decisions (Johnson, 2001). Children are taught to express anger only amongst their peers and to hide negative emotions from their parents or authority

figures (Mobed, 1996). The respect that is encouraged in the family context generalizes to the way Iranians interact with others outside the family as well. It is traditional for Iranians to stand when someone enters a room, and, again, when they exit (Johnson, 2001). Men are viewed as discourteous if they sit while a woman stands; therefore, it is a common practice for a man to give his seat to a woman. If the woman refuses to sit, a respectful Iranian man will choose to stand and leave the seat empty. Mostofi (2003) identified the main components of Iranian American identity – through a questionnaire of 23 Iranian-Americans living in Los Angeles, San Diego, and Irvine – to be family, education, hospitality, and artistic traditions. Despite the limited sample, this study supports the importance of family in the cultural identity of Iranian-Americans.

History. The history of Iran is one of numerous foreign invasions due to its strategic location (Gillis, 2000). The region was invaded by Aryans in the 2nd century B.C. The Aryans brought with them a distinctive culture and the religion of Zoroastrianism to Iran. Zoroastrianism is the first known religion, dated to the first millennium B.C. and was the main religion practiced by Persians throughout its ancient history (Shafii, 1997). Since the Aryan invasion, numerous ethnic, religious, cultural, and political forces have swept through the region. The Persian Empire was established in 550 A.D. during the rule of the Achaemenid Dynasty. The region known as the Persian Empire extended from Egypt to India (Shafii, 1997). Until the Arab invasion in 640 A.D., which marks the end of the empire, many contributions to ancient civilization can be credited to the Persians, such as the circulation of silver, gold, and copper coins, and involvement of women in higher status professions (Shafii, 1997).

In the 7th century, Arabs invaded Iran at which point the teachings of Muhammad were brought to the region (Gillis, 2000). By the 11th century, Islam was the dominant religion of Iran, as the majority of the natives converted from Zoroastrianism (Gillis, 2000). At the time of the Arab invasion, the Persian Empire was in a state of civil war and exploitation of the lower classes by the ruling elite resulted in little resistance to the Arab forces (Shafii, 1997). The Arabs and the new religion they brought with them were initially welcomed and many Persians converted voluntarily (Shafii, 1997). Soon, however, Persians grew weary of the oppression of their culture as experienced through Arab destruction of Persian palaces, buildings, colleges, libraries, and the replacement of Persian language with Arabic (Shafii, 1997). Over centuries of struggle, Persians were able to preserve what was left of their pre-Islamic traditions and integrated these traditions with those of Muslim Arabs (Shafii, 1997). The Iranian desire to retain their cultural individuality as separate from Arab culture is thought to have begun at this time and it is argued that this nationalistic identity has also been maintained by modern Iranian immigrants who live abroad in an effort to maintain their cultural heritage (Mostofi, 2003).

After a string of invasions by Genghis Khan and Tamarlane, Iran entered a period in its history when native rulers began to control the country (Gillis, 2000). The first native rulers were the Safavids who ruled from the 16th century until approximately 1736 (Gillis, 2000). Shah Ismail was the first Safavid ruler and he established Shiitism as the state religion, which has become a distinctive part of the Persian identity in the Middle East (Gillis, 2000). After the Safavids and until the 1920s, the Qajar's, a Turkish tribe,

ruled Iran. The Qajar dynasty also marks the arrival of Europeans in Persia (Shafii, 1997).

In the early 1920s, Reza Shah became the first ruler of the Pahlavi monarchy (Gillis, 2000). In 1935, Mohammad Reza Pahlavi, the second Pahlavi family ruler, changed the country's name from Persia to Iran (Gillis, 2000). The country experienced strong Western influences during the rule of Mohammad Reza Pahlavi due to the new position in the world market it found itself thrust into. Iran owns 10% of the world's oil reserves and was now a significant postwar world market player (Gillis, 2000). Pahlavi attempted to educate, Westernize, and modernize Iran (Mobed, 1996). Despite the economic growth that Iran experienced under the Pahlavi dynasty, there was widespread religious and political opposition to the Shah's rule and programs--especially SAVAK, the hated internal security and intelligence service (Shafii, 1997). After many months of popular protests against the rule of the Shah, Mohammad Reza Pahlavi was forced to flee the nation in 1979. After a period of internal competition over the future of Iran, the struggle was eventually won by the alliance led by the Ayatollah Khomeini who supported making Iran a theocratic state (Gillis, 2000). On February 1, 1979, Khomeini returned from France (after 15 years in exile in France, Turkey, and Iraq), overthrew the Shah's government, and became Iran's Supreme Leader (Shafii, 1997).

The new government was extremely conservative. It nationalized industry and restored Islamic traditions in culture and law (Shafii, 1997). The new Islamic regime increased authoritarianism, advocated a strong adherence to Islamic laws, and rejected Western and American doctrines (Mobed, 1996). Western influences were banned and the existing pro-West elite was quick to join the Shah in exile. There were clashes

between rival religious factions and brutal repression quickly became commonplace (Shafii, 1997). When the Shah of Iran was deposed and Iran became an Islamic state, 1 million Iranians seeking religious freedom, political asylum, or educational opportunities immigrated to the United States (Gillis, 2000).

Iranian immigrants. Describing Iranian immigrants to the United States as a group can be a difficult task due to the wide range of heterogeneity that exists in this population with regard to virtually every demographic realm and experience pre- and post-immigration (Mostofi, 2003). Iranians in the United States come from a range of political backgrounds such as working-class traditional families, Westernized bourgeoisie, persecuted intellectuals, oppressed minorities, and educated workers (Mostofi, 2003). Religious and ethnolinguistic variety among Muslim, Jewish, Baha'i, Zoroastrian, Christian, Turkish, Armenian, Kurdish, and Assyrian groups from Iran can also be found (Mostofi, 2003). Different lifestyles in Iran as well as different experiences before, during, and after the revolution, which may have led to immigration, are represented in these groups (Mostofi, 2003).

Despite the diversity represented in the Iranian immigrant community, the term "Diaspora" is often used to describe their experience. Diaspora refers to groups that immigrate to various locations, usually forced into mass migration, while maintaining a tie to the country of origin (Mostofi, 2003). Diaspora communities share many compositional characteristics such as: (a) a retained memory, vision, or myth about the homeland; (b) a belief that complete acceptance into the host county is not possible, leading to possible feelings of isolation and alienation; (c) a view of the ancestral home as the true and ideal home with the feeling that they or future generations should

eventually return; (d) a belief in maintaining the homeland's safety and prosperity; and a continued sense of relationship to the homeland (Safran, 1999). Based on this definition, Iranian immigrants as a group can be considered a diaspora. After the revolution, Iranian immigrants migrated to the United States, Canada, and Europe where they share a collective memory of their homeland, and feel unsettled in their adopted nations, though they have been successful in assimilating (Mostofi, 2003). Iranians also continue to relate to their homeland and have the desire to return for visits and extended stays (Mostofi, 2003).

Iranian-American identity. Mostofi (2003, 2003) describes the Iranian-American identity as a dual identity that is a unique mixture of American notions of freedom and liberty and Iranian cultural traditions and concepts of family that are continuously being blended and amalgamated. American identity is viewed as a civic identity or nationalism which is open and voluntaristic with no specifically strong culture (Mostofi, 2003). This allows for the existence of an alternative identity based on cultural ties (Mostofi, 2003). The heterogeneous Iranian-Americans Diaspora has constructed an Iranian-American identity through cultural experiences that are neutral to religious and political differences (Mostofi). Included in this are the celebration of *No Ruz* (the Iranian New Year), *Chahrshambeh-yi soori* (the last Wednesday of the year), *Seezdeh beh dar* (the thirteenth day of spring), *taarof* and *roodarvasi* (forms of etiquette which will be discussed more fully), and *dowreh* (social gatherings).

Iranian-Americans have managed to succeed economically in comparison to other immigrant groups in the United States. This is, in part, due to education being a core value of Iranian culture (Mostofi, 2003). Though initial declines in status are often

experienced immediately after immigration, most Iranian-Americans have managed to maintain a comparable or an improved standard of living for themselves (Mostofi, 2003).

Traditional Iranian families are historically patrilineal, patriarchal, and based in male supremacy, socializing children to a double standard with regard to gender and male privilege (Hannasab & Tidwell, 1996). In Iran, girls are traditionally encouraged to speak and laugh rarely, be obedient, and preserve their innocence while boys are expected to command and protect, be independent, and achieve status in society (Hannasab & Tidwell, 1996). Though many aspects of Iranian culture moved towards modernization before the Islamic revolution, these patriarchal patterns persisted, creating a significantly different set of expectations for the interaction between young Iranian women and men in terms of sex, dating, intimate relationships, and gender roles than what is commonly practiced in the United States (Hannasab & Tidwell, 1996).

Hannasab and Tidwell (1996) surveyed 81 Iranian American women living in Los Angeles about their views on sex roles and intimate relationships. Using the Attitude Toward Women Scale (AWS) and Sexual and Premarital Attitude Inventory (SPAI), Hannasab and Tidwell explored what demographic factors correlated with less traditional Iranian and more Westernized views about sex roles and sexual attitudes. The results indicated a positive relationship between the length of time since immigration to the United States and more Westernized views about sex roles and intimate relationships (Hannasab & Tidwell, 1996). Also positively related to Westernized views was level of education, with higher levels of education corresponding with less traditionally Iranian views. Hojat et al. (1999) also found a trend toward more Westernized attitudes about premarital sex, child rearing, and family attitudes when comparing Iranian Americans to

Iranians living in Iran. Though Iranian Americans endorsed more permissive attitudes toward premarital sex, more tolerance toward homosexuality, and greater acceptance of marital dissolution, they shared the same traditional views about family loyalty as Iranians living in Iran (Hojat et al., 1999). Mahdi (2001) explored Iranian American women's perceptions of gender roles in particular and found that within this cultural group, female attitudes and perceptions about gender issues such as equality of men and women, dating, marriage, divorce, sex, women's status, and raising children more closely resemble mainstream Western values than those of Iranian American men.

Iranian Americans and Mental Health

Some of the literature points to the immigration experience as having an influence on the mental health of Iranian-Americans (Askari, 2003; Ghaffarian, 1998; Kheirkhah, 2003). Kheirkhah (2003) discusses a study done by Bozorgmehr and Sabagh in 1987 that attempted to determine the most important reasons Iranians immigrate to the United States. They found that 70% of the Iranian-Americans who identified themselves as exiles (people who left Iran against their will with the intention of returning) in their study indicated the Islamic Revolution, political persecution, and the Iran-Iraq war as reasons for leaving Iran. Of those who identified themselves as immigrants (people who left Iran with the intention of remaining in the U.S.), 66% identified these same reasons for leaving Iran. Regardless of the intention of the individual, it appears the Islamic Revolution, and the aftermath of war and persecution that resulted, is key to the immigration of many Iranians to the United States.

Migration, in general, is stressful and places the migrants at a higher risk for physical and mental health problems (Askari, 2003). For Iranians, the stress experienced

as immigrants is intensified because they, as a culture, have a history of dealing with the threat of permanent displacement from their country of origin and have successfully avoided doing so (Kheirkhah, 2003). Knowledge of Persian history illustrates that the Iranian people have often been conquered and influenced by different cultures, ethnic groups, and religions (Askari, 2003; Kheirkhah, 2003). Value is placed on their ability to tolerate their conquerors and the persecution that was inflicted upon them without leaving their native land. Persian literature illustrates the distaste for living in exile experienced in this culture. Kheirkhah quotes many Iranian poets and scholars who speak of exile. Living in exile is referred to as “imprisonment,” and “between life and death.” Living in an unfamiliar host country is viewed as “un-welcome here and un-wanted there...physically here, mentally there” (Kheirkhah, 2003 p. 82). Thus, for Iranians, immigrating is an experience that is felt deeply and with reluctance, which may potentially affect the psychological well being of Iranian-Americans.

Askari (2003) provides a list of issues to consider when working clinically with an Iranian-American client. Being aware of these issues may lead to a better understanding of the presenting problem and the context that has prompted help seeking. First, it is important to assess how the client is coping with the move from one’s home land, where they were securely surrounded by family and friends, to a country where he/she may be alone with no available support system. Another important consideration is to note any dramatic change to one’s socioeconomic situation and the influence such a change may have on his/her current condition. Another issue worthy of consideration is how the client is dealing with moving from a society in which he/she is a member of the majority to one in which now one has minority status. These types of considerations raise

clinical issues such as the need to engender a feeling of “acceptance” as a part of the therapeutic experience. Furthermore, attention may need to be given to the attitudes these individuals might harbor toward other refugees from Iran as well as other countries.

Askari (2003) also identified issues that may affect the therapeutic relationship between Iranian American clients and their therapists. The Iranian view of therapists can vary from distrust to idealization. In general, this is a culture that tends to be more skeptical about the quality of services one might receive from a mental health professional. In fact, Iranians are known to be “doctor shoppers” (Askari, 2003). The members of the family will often have a say in the client’s decision to work with a particular therapist, and the quality of care will often be monitored by them as well. Family members may also encourage the client to seek therapy elsewhere if they do not perceive an improvement in the client’s condition. Thus, therapists may experience Iranian clients as non-compliant, but generally, these clients are neither resistant nor conforming (Askari, 2003).

Ghaffarian (1998) explored the process of acculturation among Iranian Americans to determine if a relationship exists between an individual’s level of acculturation and other demographic factors, particularly mental health. Level of acculturation was measured using Mendoza’s Cultural Life Style Inventory (CLSI) for Mexican-Americans which was adapted for use with Iranian Americans. The CLSI is a self-report instrument designed to measure type and degree of acculturation in Mexican American adolescents and adults. The instrument: (a) measures levels of acculturation on five relatively orthogonal dimensions (intra-family language usage, extra-family language usage, social affiliations and activities, cultural familiarity and activities, and cultural identification and

pride); (b) generates separate estimates of cultural resistance, cultural incorporation, and cultural shift; and (c) identifies dominant or non-dominant cultural lifestyle tendencies (Mendoza, 1989). The CLSI measures the process of acculturation using three different components: (a) cultural shift, which is a substitution of native customs with alternate cultural norms; (b) cultural incorporation, which is an adaptation of customs from both native and alternate cultures; (c) and cultural resistance, which is an active or passive resistance to alternate cultural norms while maintaining native customs (Ghaffarian, 1998). Cultural eclecticism is also measured and assigned if none of the three components of the composite cultural lifestyle tendencies can be assigned. Cultural eclecticism is described as an alteration of native and alternate cultural practices to create a unique subcultural entity (Ghaffarian, 1998).

These acculturation components are similar to Berry's (1980) four different acculturation strategies. According to Berry, a group or individual must answer for themselves, "Is my cultural identity of value to be retained?" and "Are positive relations with the dominant society to be sought?" (p.13). The following forms of acculturation are used based on the answer to those questions: assimilation, integration, rejection, and deculturation. Assimilation and integration are the strategies used when the desire to have positive relations with the dominant society are present (Berry, 1980). In assimilation the native culture is substituted with the culture of the larger society. This is similar to the cultural shift component measured on the CLSI by Ghaffarian (1998). With integration, the native culture is maintained while simultaneously adapting to the culture of the larger society. This is similar to the cultural incorporation component of the CLSI.

With groups or individuals who do not desire positive relations with the larger society, negative types of acculturation are utilized (Berry, 1980). Rejection is an intentional withdrawal from the larger society and this is similar to the cultural resistance component measured by the CLSI. When a group or individual is out of cultural or psychological contact with either their native culture or the larger society, marginalization was identified as the acculturation strategy being utilized by Berry. This is similar to the fourth component described by the CLSI, cultural eclecticism.

Table 1

CLSI and Berry's Acculturation Categories

CLSI Categories	CLSI Attributes Categories (Berry, 1980)	Traditional Acculturation Categories
Cultural Shift	Substitution of native customs with alternate cultural norms	Assimilation
Cultural Incorporation	Adaptation of customs from both native and alternate cultures	Integration
Cultural Resistance	Resistance to alternate cultural norms while maintaining native customs	Rejection
Cultural Eclecticism	Alteration of native and alternate cultural practices to create a unique subcultural entity	Marginalization

Ghaffarian (1998) found that Iranian Americans who were more acculturated, and displayed the positive acculturation strategies, particularly those within the cultural shift

component and cultural incorporation component, displayed higher levels of mental health as measured by the Warheit and Buhl's Anxiety Scale, Depression Scale, and Psychosocial Dysfunction Scale. Cultural shift refers to the most highly acculturated group of individuals who substitute native customs with alternative cultural norms while cultural incorporation refers to the adaptation of customs from both native and alternative cultures (Ghaffarian, 1998). Also correlated with higher levels of mental health was age, with younger Iranian Americans reporting significantly better mental health, as measured by Western measures of functioning (Ghaffarian, 1998). Level of education and length of residence in the United States were similarly correlated positively with level of acculturation and mental health; the more education obtained and/or the longer the individual resided in the United States, the more likely they are highly acculturated and experiencing fewer mental health problems (Ghaffarian, 1998). Similarly, Wiking, Johansson, and Sundquist (2004) examined self-reported health among immigrants from Iran, Turkey, and Poland in Sweden. A significant relationship was found between poor self reported health and poor acculturation and experiences of discrimination. Thus, the more acculturated the Iranian American, the more positive were their scores on western measures of psychological functioning. What seems clear is that judgments of mental health and psychological functioning are based on the tools utilized to make such assessments.

Iranian Cultural Phenomena that May Influence MMPI Performance

Tarrof - The concept of *Tarrof* lacks an English equivalent, but is a well understood and a frequently practiced aspect of Iranian culture. *Tarrof* consists of a set of ritualized phrases, euphemisms, honorifics, and behaviors that preserve dignity (Johnson,

2001). *Tarrof* is a practice that is markedly internalized in the Iranian culture. It is practiced as a rule, and individuals who do not practice *Tarrof* are commonly viewed as discourteous or uncultured (Johnson, 2001). *Tarrof* can take many forms. Examples are a hostess vastly underestimating the amount of time and effort she puts into preparing a meal, a guest announcing that it is time for them to leave because they have been a burden to their host, or a guest refusing offerings until being repeatedly urged to partake in the offering (Johnson, 2001). *Tarrof* is an elusive term and can include many specific ritualized interactions as well as more general concepts related to engaging in courteous behavior. *Tarrof* also requires that an individual should avoid expressing even the truth if it will cause emotional pain (Johnson, 2001). Mostofi (2003) identifies *Tarrof* as a cultural mannerism that is ethnically neutral, in that it is shared by Iranians regardless of religious affiliation or ethnic roots. *Tarrof* is a part of the Iranian identity that is shared by Iranian Muslims, Jews, Christians, as well as Iranian Armenians, Turks, and Assyrians (Mostofi, 2003). The implications of this cultural pattern on the test-taking attitude and approach to responding on the MMPI-2 by Iranian-Americans are unknown. Further investigation of its influence would serve an important purpose.

Iranian dysphoric affect. Psychiatric anthropologists have studied the interpretation of Iranian depressive illness and dysphoric affect. Dysphoria, when defined as sadness, grief, and despair is fundamental to the Iranian culture in that it is an emotion that is full of emblematic meaning (Good, Good, and Moradi, 1985, p.384). Sadness for Iranians is linked to personal depth as a sad person is considered a thoughtful person (Good et al., 1985, p. 385; Good & Good, 1988). Dysphoria has immense religious, secular, political, and personal connotations and significance in the Iranian culture. Grief,

despair, and the tragic can be found laid into the underpinnings of Iranian Shiism, secular traditions of writing and film, and political philosophy (Good et al., 1985, p. 387).

Dysphoria has immense religious, secular, political, and personal connotations and significance in the Iranian culture. Iranian Shiism incarnates a vision of tragedy and grief as a religiously provoked emotion signified by ritualized mourning ceremonies (Good et al., 1985 p. 387). For example, in bereavement there is no stigma attached to deep and demonstrative expressions of sadness. In fact, individuals are sometimes called upon to simulate sadness if others are monitoring their behavior as an indication of their level of grief and affection for the person they have lost (Good & Good, 1988). Secular Iranian literature, in the form of classic poetry and modern novels as well as film, often focus on melancholy and despair as their central themes (Good et al., 1985 p. 389). Iranian political philosophy has tragedy, injustice, and martyrdom central to it and the historical experience of the nation.

Iranians have a well developed affective dialogue related to sadness, loss, and grieving (Good & Good, 1988). There appears to be a culturally shaped perception of self-hood, in a ritualized tradition of religious grieving, and in a tragic view of history and society that is shared both in religious and secular sectors of Iranian culture (Good et al., 1985, p. 404). What is considered clinically significant depression or its equivalent takes a more diffuse form and is often referred to as *narahati* which means “discomfort” or “distress” and includes a wide range of mixed and undifferentiated anxiety and depression symptoms (Good et al., p. 392). Common forms of discourse that relate to *narahati* include: sadness and grief, anger, mistrust, and sensitivity (Good et. al, p. 404).

It emerges that due to the valuing of sadness and dysphoria in Iranian culture and the highly developed affective discourse around sadness, loss and grief that is essential to Iranian culture, the expression of the experience of depression may differ from the traditional Western conception clinical depression. The implication of Iranian dysphoric affect on the emotional expression and experience of depression and sadness among Iranian Americans and how it may relate to their performance on the MMP-2 is important to this study.

The MMPI-2 and Cross-Cultural Research

Research on the MMPI's applicability to ethnic groups in the United States has been conducted for decades. Cross-cultural research that addresses the performance of Asian and Latino individuals on the MMPI and MMPI-2 is the focus of this discussion because the immigrant and potential issues of English as a second language for both of these groups would best parallel the Iranian population. The MMPI and MMPI-2 have been studied in order to explore cultural differences more than any other psychometric measure (Nagayama et al., 1999). Nagayama et al. conducted a meta-analytic study of 25 comparative studies of African Americans, Latinos, and Caucasian Americans on their MMPI and MMPI-2 performance over 31 years. Their analysis concluded that differences found on the MMPI between these three ethnic groups are marginal. When cumulative effect sizes of differences on each of the clinical scales were examined, the African American and Latino participants scored higher on some scales and lower on others when compared to the Caucasian participants (Nagayama et al., 1999). They note that the differences that were found were not statistically robust on most of the scales, but there were two exceptions—scale 5 and L scale.

Scale 5 (masculinity-femininity) and L (lie) scale were the only scales that appeared to have robust effect sizes in terms of differences between ethnic groups in this study (Nagayama et al., 1999). Elevations on the L scale, which is a measure of the test-taker's attitude, indicate a defensive approach to answering questions on the MMPI. When compared to Caucasians, African Americans and Latinos scored higher on the L scale (Nagayama et al., 1999). Furthermore, African American females and Latino males scored lower on scale 5, which is a measure of the endorsement of traditional male and female attitudes, compared to their Caucasian counterparts (Nagayama et al., 1999). Lucio, Ampudia, Duran, Leon, and Butcher (2001) found a similar pattern in which the L scale was elevated and scale 5 was depressed when comparing the Mexican general population to the North American normative population of the MMPI-2.

The MMPI-2 and Asian populations. The general Asian and Asian American populations have been examined in terms of MMPI performance as well. The MMPI-2 has been translated into Chinese, Japanese, Korean, Tagalog, Thai, Vietnamese, and Hmong, using extensive and costly translation procedures (Butcher, Cheung, & Lim, 2003). Administering translated versions of the MMPI in Asian countries is an etic approach to psychopathology that assumes the same psychological constructs exist across all cultures (Nagayama et al., 1999). Elevations on many scales (F, D, Pt, and Sc) were found in the non-clinical Chinese population both in China and the United States when the Chinese translation was administered (Kwan, 1999). When Chinese psychiatric patients' MMPI-2 profiles were examined, more pronounced elevations were found (Kwan, 1999). Many ethnic or culture specific factors have been suggested as contributing to the scale elevations observed among the Chinese, such as the level of

acculturation, item familiarity, shame, and tolerance (Kwan, 1999). With the development of Chinese norms for the MMPI-2, these elevations decreased, both in the psychiatric and normal populations, because scores were being compared in relation to a culturally equivalent normative sample (Kwan, 1999).

The MMPI-2 and Latino populations. Using the Mexican-Spanish version of the MMPI-2 and Mexican norms, Lucio et al. (2001) found that the significant difference found between Mexican and American test-takers may be related more to test-taking attitude rather than psychopathology. Mexican test-takers tended to answer questions in a more defensive manner as indicated by the L scale (Lucio et al., 2001). The differences in the masculinity-femininity scale indicate that Mexican women tend to endorse less traditionally feminine attitudes and that Mexican men tend to endorse more traditionally masculine attitudes when compared to the American norms (Lucio et al., 2001). When the United States norms were used with the general Mexican population, many of the scales were found to be elevated (Lucio et al., 2001). Similar to the Kwan (1999) study, Lucio et al. found that using norms derived from the country in which the test will be administered results in T scores on the MMPI falling in the normal range. Studies that examine translated versions of the MMPI and the effects of using culture specific norms support the contention that psychopathology measures can be used with diverse cultures if they are suitably adapted (Lucio et al., 2001).

Canul and Cross (1994) conducted a study at the University of Washington that examined the relationship of acculturation and ethnic identity attitudes of Mexican-Americans to their performance on the MMPI-2. Forty-eight Mexican-American undergraduate students were given the MMPI-2 as well as a measure of racial identity

attitudes (Racial Identity Attitude Scale/RIAS-B) and a measure of acculturation (Acculturation Rating Scale for Mexican Americans/ARSMA). The study correlated acculturation and racial identity attitudes to the participant's performance on the L scale of the MMPI-2. In support of their predictions, "less-acculturated participants scored higher on the L scale, which indicates that they are not as open and frank in answering the MMPI-2 as more highly acculturated participants" (Canul & Cross, 1994, p. 743). In addition, pro-Anglo and anti-Mexican racial identity attitudes were correlated with lower L scale T scores. There are likely various sociocultural factors (age, gender, language proficiency, religiousness, social status, etc.) in addition to acculturation and racial identity that may influence the performance of ethnic groups on the MMPI-2.

A replication of the Canul and Cross (1994) study with Iranian-Americans in the place of Mexican-Americans would provide original data for a population that has not been the focus of research on the valid use of psychological assessment measures such as the MMPI. Mental health surveys of the Iranian American population indicate that mental health rates are comparable with international studies (Noorbala, Yazdi, Yasamy, Bagheri & Mohammad, 2004). Acculturation, age, gender, education, and length of residence in the United States have also been correlated with the mental health of Iranian Americans (Ghaffarian, 1998). In addition to level of acculturation and ethnic identity attitudes, expanding the view of cultural specific variables beyond basic sociodemographic information will facilitate the identification of other cultural and ethnic factors that could lead to differences in the MMPI-2 validity and clinical scales among Iranian Americans. The Canul and Cross (1994) study is valuable in its methodological approach to investigating this question because the relationship between MMPI-2 scores and level of

acculturation is considered in order to gain understanding about cultural factors and their relationship to test validity issues.

Summary

The research that has been conducted to establish the psychometric properties of measures for use with the Iranian-American community is non-existent to date. The MMPI-2, though the most widely used measure of psychopathology among mental health professionals, has yet to be empirically investigated with the Iranian-American community. The large estimates of Iranian immigrants and subsequent generations of their families living in the United States have swelled to approximately 1 million in 1998, with approximately 600,000 of them in California since 1979. The need for valid and reliable measures of psychological functioning is exceedingly important in a multicultural society such as the United States. Studies that have looked at between-group and within-group differences among many ethnic groups such as African Americans, Latinos, and Asian Americans have contributed to the field by demonstrating the importance of developing culture specific norms and appropriate translations and adaptations as well as identifying specific cultural issues that may cause differences in MMPI-2 profiles.

Chapter III

Methodology

Overview

In this chapter the following are discussed: (a) research approach and design, (b) the participants, (c) instrumentation, (d) procedures (recruitment, consent, research, and data collection and recording), and (e) data analysis.

Participants

The participants for this study were Iranian Americans residing in the greater Los Angeles and Orange County areas. Fifty participants were recruited with a final sample of 49 interpretable protocols. Protocols with a raw score of 10 or more items endorsed on the Lie scale and/or more than 10 unanswered items were eliminated from the study. The validity criteria for this study were based on the screening process used by Canul & Cross (1994). To qualify as members of the study, participants met the following criteria: (a) identified themselves or their parents as Iranian-American or Iranian, (b) were 18 years old and older, (c) denied a prior history of any serious emotional conditions that required hospitalization, (d) were able to read English at the 8th grade competency level.

Research Approach and Design

The intent of the study was to gain an understanding of Iranian Americans' performance on the MMPI-2. Of particular concern was the validity of the MMPI-2 with members of this cultural group due to the fact that the standardization sample of the MMPI-2 did not include Iranian Americans. The performance of Iranian Americans on the MMPI-2 has not been quantitatively studied and for that reason a correlational study

which explored the relationship between variables rather than making predictions was considered most appropriate (Mertens, 2005).

This descriptive study involved a correlational design that investigated the extent to which demographic factors and/or the level of acculturation of Iranian American participants corresponded with variations in scores on the validity and clinical scales of the MMPI-2 (Mertens, 2005). Significant differences from the standardization sample of the MMPI-2 validity and clinical scales were analyzed.

Instruments

Acculturation was measured by administering an acculturation scale. Mendoza's (1989) Cultural Life Styles Inventory (CLSI) (see Appendix A) for Mexican Americans was adapted for use with Iranian Americans by Shireen Ghaffarian (1998) and is the most applicable for this particular population. The CLSI is a self-report instrument designed to measure type and degree of acculturation in Mexican American adolescents and adults. The instrument: (a) measures levels of acculturation on five relatively orthogonal dimensions (intra-family language usage, extra-family language usage, social affiliations and activities, cultural familiarity and activities, and cultural identification and pride); (b) generates separate estimates of cultural resistance, cultural incorporation, and cultural shift; and (c) identifies dominant or non-dominant cultural lifestyle tendencies (Mendoza, 1989). Participants are assigned a dominant cultural lifestyle tendency (CR, CI, CS) or are assigned a cultural eclectic lifestyle tendency (CE) if no dominant style is identified. The reliability of the CLSI was tested by Ghaffarian (1998) with a sample of Iranian Americans. The internal consistency of the scale was measured using Cronbach's alpha. The internal consistency of the scale, including all 29 items, was acceptable ($\alpha = .71$).

The MMPI-2 was also administered in its entirety to each participant. The MMPI-2 is a standardized questionnaire of self-descriptions quantitatively scored to give a measurement of level of emotional adjustment and attitude toward test taking (Groth-Marnat, 2003). Each individual was also asked to complete a demographic questionnaire developed by the investigator that addressed: (a) immigration status, (b) gender, (c) religious affiliation, (d) age, (e) level of education, (f) occupation, and (g) exposure to mental health services (see Appendix B).

Procedures

Recruitment. The participants were recruited from several sources: (a) community colleges; (b) community, social, and/or professional groups; (c) advertisements in local Iranian newspapers; and (d) word of mouth or snowball sampling. Snowball sampling is a technique for developing a research sample where existing study subjects recruit future subjects from among their acquaintances (Mertens, 2005). Thus, the sample group appears to grow like a rolling snowball. This sampling technique is often used in hidden populations which are difficult for researchers to access (Mertens, 2005). Individuals interested in participating in the study were asked to contact the investigator via telephone or email. Through telephone or email individuals were screened to determine participation eligibility (see Appendices C & D). A separate telephone line and email address was established solely for this research study. A telephone script was used by the investigator to ask interested individuals about their eligibility (see Appendix C).

Recruitment at community colleges was done by contacting psychology course professors at El Camino College, Irvine Valley College, Rancho Santiago College, and West Los Angeles College asking them to inform students about the study and distribute

flyers (see Appendices D & E). Contact with professors was made via email and/or telephone.

Recruitment from community, social, and/or professional groups was done through the use of a recruitment flyer (see Appendix E). The recruitment flyer explained the purpose of the study, outlined inclusion and exclusion criteria for participation, and provided contact information of the investigator. The flyers were also sent to Iranian-American community magazines to be printed as an advertisement (see Appendix E). Copies of the recruitment flyer were posted in public settings (e.g. grocery stores, community colleges), and in key areas within Los Angeles and Orange County where Iranian residents reside. Individuals who contacted the investigator, in response to advertisements made in local Iranian newspapers or the flyers posted in public settings, were screened by the investigator to insure they qualified for inclusion in the study by means of the telephone screening (see Appendix C).

Recruitment through word of mouth was done via email (see Appendix F for email language) and flyer distribution (see Appendix E). Flyers identical to those used for recruitment through community, social and/or professional groups were emailed to a contact list compiled by the investigator of Iranian-American contacts. The email flyer was accompanied by a request that recipients forward the message to others. Those individuals who responded to the email recruitment expressing their interest in participating in the study were screened by means of the email screening message.

Administration. Administration took place at the Pepperdine University, Graduate School of Education and Psychology campuses in West Los Angeles and Irvine. All participants were given a packet with the following items: (a) a consent form (two

copies), (b) the demographic questionnaire, (c) the CLSI, (d) the MMPI-2, (e) the summary request form, and, (f) a list of referrals. No identifying information was kept to match the individual participants to the instruments administered. It was not the intention of the investigator to inform participants of their individual performance or to inform participants if MMPI-2 test results indicated areas of concern in psychological functioning. This was because the validity of the use of this instrument with the Iranian-American population has not yet been established and the meaning of such results have yet to be shown valid and reliable. Participants were informed that their participation was voluntary, and that they had the right to discontinue participation in the study at any time. A consent form was given to participants during the group administration (see Appendix G). Consent forms were checked for appropriate completion and then separated from the testing instruments to ensure anonymity of the participant. This study was reviewed and approved by the Pepperdine University Graduate and Professional Schools IRB.

Participants were instructed to complete the consent form and the summary request form (see Appendix I) and return them to the investigator in a blank envelope that was provided to them with the completed CLSI and MMPI-2. An effort was made to administer the tests to all individuals in groups. If participant's availability did not allow for them to attend a group administration appointment, the investigator set up an individual time to complete the study measures. The same procedures were followed in the case of individual administration as has been outlined for group administration (see Appendix H).

Data Management and Data Analysis

Identification numbers were used to organize the data to ensure the anonymity of the participants. MMPI-2 scores consist of eight validity scale scores (VRIN, TRIN, F, F(B), F(P), L, K, S) and ten clinical scale scores (Hs, D, Hy, Pd, Mf, Pa, Pt, Sc, Ma, and Si) (Groth-Marnat, 2003).

Two types of assessments are generated using the Cultural Lifestyle Inventory. A composite cultural life style profile was obtained by computing the proportion of items answered in a cultural resistant (CR), cultural incorporation (CI), and cultural shift (CS) fashion. The composite profile provided a global indicator of the extent to which an individual's cultural lifestyle reflected cultural resistance, cultural incorporation, and cultural shift tendencies. First, all responses to the items in the inventory were coded as CR, CI, CS, not applicable, or no response. Then, proportions were computed for items answered in a CR, CI, and CS fashion. Items that were left blank or answered with responses "f" (not applicable) or "g" (other language, ethnicity or culture) were not included in these computations.

Also, dominant and nondominant cultural lifestyle tendencies were identified by comparing CR, CI, and CS scores obtained through a z-test ($p < .05$). This provided an indicator of the extent to which an individual could be described by a single/dominant acculturation type or by an eclectic/nondominant acculturation type. Individuals who depicted dominance could be described as culturally resistant, incorporated, or shifted. Those who depicted nondominance were described as cultural eclectics (CE). Dominant and nondominant tendencies were determined by statistically comparing an individual's most frequent and second most frequent cultural life style tendency (CR, CI, CS scores).

When statistically significant differences were found between the two most frequent cultural lifestyle tendencies, a description of dominance with one of the acculturation fashions was assigned. Statistical significance was tested at the $p < .05$ level with the use of a z-test. When a statistically significant difference was not found cultural eclecticism (CE) was assigned. According to Ghaffarian (1989), the cultural lifestyle tendencies are best understood, as follows: (a) cultural resistance – an active or passive resistance to alternate norms while maintaining native customs, (b) cultural incorporation – an adaptation of customs from both native and alternate cultures, (c) cultural shift – a substitution of native customs with alternate cultural norms, and (d) cultural eclectic (also referred to as transmutation) – an alteration of native and alternate cultural practices to create a unique subcultural.

In this design the explanatory/independent variable (Mertens, 2005) is the level of acculturation of Iranian American participants. The outcome/dependent variables are the scores on the validity scales of the MMPI-2. Statistical analyses were three-fold. First, descriptive statistics for major scales and demographic comparisons were computed. A series of one-way ANOVAs was performed comparing the four levels of acculturation on the MMPI-2 scale scores. Lastly, Spearman's rank correlation coefficient was calculated between the four acculturation levels and each of the MMPI-2 validity and clinical scale scores.

Since previous research (Butcher et al., 2003; Kwan, 1999; Lucio et al., 2001; Nagayama et al., 1999) has demonstrated that the validity scales, particularly scale L of the MMPI-2 which measures defensiveness, may be elevated in relation to level of acculturation among diverse cultural groups, it is hypothesized that there will be a

negative correlation between L scale scores and acculturation for this population of Iranians – as acculturation increases, scores on the L scale (defensiveness) will decrease.

Specifically, the following hypotheses were tested:

1. Scores on the Lie scale of the MMPI-2 will increase as cultural resistance (CR) scores increase.
2. Scores on scale 2 (Depression) will increase as cultural resistance (CR) scores increase.

Cultural shift refers to the most highly acculturated group of individuals who substitute native customs with alternative cultural norms while cultural incorporation refers to the adaptation of customs from both native and alternative cultures (Ghaffarian, 1998).

Chapter IV

Results

Descriptive Analysis

There were 49 participants in the final sample for this study, 32 female and 17 male. Ages of the participants ranged from 19-70. The average age was 36.4 years old. Twenty-six (53%) of the participants had never been married, 17 (35%) were married, 5 (10%) were divorced, and 1 (2%) participant was widowed. Level of education of the sample ranged from some college to graduate school educations. Three (6%) participants had attended some college, 3 (6%) had completed community college or trade school, 25 (51%) were college or university graduates, and 18 (37%) had a graduate school education. Of the 49 participants 28 (57%) identified their religion as Muslim, 11 (22%) stated no religious affiliation, 6 (12%) were agnostic, 3 (6%) were Jewish, and 1 (2%) was Christian. A large majority of the sample, 45 (92%) participants, were born in Iran, 3 (6%) in the U.S. and 1 (2%) in Canada. The average age of immigration to the U.S. in the sample was 18 years old and the average number of years in the U.S. was 19 years.

Table 2

Demographic Characteristics of Participants

Demographic	N	%
Gender		
Female	32	65%
Male	17	35%
Marital Status		
Never Married	26	53%
Married	17	35%
Divorced	5	10%
Widowed	1	2%

(table continues)

Characteristic	N	%
Education		
Some college	3	6%
CC/Trade School	3	6%
College Graduate	25	51%
Graduate School	18	37%
Religion		
None	11	22%
Agnostic	6	12%
Jewish	3	6%
Christian	1	2%

Statistical Analysis

An initial analysis was conducted by identifying dominant and nondominant cultural lifestyle tendencies for each participant by comparing CR, CI, and CS scores. Individuals were separated into groups defined by dominance as culturally resistant, incorporated, or shifted. Those who depicted nondominance were described as cultural eclectics (CE). When statistically significant differences were found between the two most frequent cultural lifestyle tendencies, a description of dominance with one of the acculturation fashions was assigned. When statistically significant differences were not found cultural eclecticism (CE) was assigned. Statistical significance was tested at the ($P < .05$) level.

The resulting groups were as follows: Cultural Eclectics, $n=38$; Cultural Resistant, $n=8$; Cultural Incorporators, $n=0$; and Cultural Shifts, $n=3$ (see Table 2). This analysis did not result in evenly distributed groups and therefore a meaningful analysis performing a series of one-way ANOVAs comparing the four levels of acculturation on the MMPI-2 scale scores was determined not to provide useful information about this

sample's performance. This sample of Iranian Americans represented a subject pool of primarily cultural eclectics with a nondominant acculturation style.

Table 3

CLSI Dominant Cultural Lifestyle Tendency Frequencies

Acculturation Style	Frequency	%	Valid %
CE	38	75.5%	77.1%
CR	8	16.3%	16.7%
CS	3	6.1%	6.2%
Total	49	100%	100%

Spearman's rho. A partial regression analysis for each of the three components of acculturation was conducted to assess their relationship to demographic items and scores on the MMPI-2. Spearman's rank correlation, a non-parametric measure of correlation was used to describe the relationship between two variables, without making any assumptions about the frequency distribution of the variables. Unlike the Pearson product-moment correlation coefficient, Spearman's rank correlation coefficient does not require the assumption that the relationship between the variables is linear, nor does it require the variables to be measured on interval scales; it can be used for variables measured at the ordinal level.

Statistically significant correlations were found between cultural resistance, cultural incorporation, cultural shift, and the demographic data. First, as age at the time of immigration increased, scores on cultural resistance scores increased ($r = .388$; $p < .05$). Second, as the number of years living in the U.S. decreased, cultural resistance scores increased ($r = -.405$; $p < .01$).

The relationships between the MMPI-2 validity scale scores and the acculturation components cultural resistance, cultural incorporation, and cultural shift were tested via

correlational analysis as well. Results revealed a positive, statistically significant correlation between the L scale on the MMPI-2 and cultural incorporation ($r = .338$; $p < .05$). In other words, as scores on cultural incorporation increased so did scores on the L scale. In addition, a negative statistically significant correlation was found between cultural shift and the L scale on the MMPI-2 ($r = -.357$; $p < .05$), indicating that as scores on cultural shift increased, scores on the L scale decreased.

The correlations between the MMPI-2 clinical scales were also tested as they correlated to the acculturation components cultural resistance, cultural incorporation, and cultural shift were also examined. Results revealed a positive, statistically significant correlation between cultural resistance (CR) and scale 2 (Depression) on the MMPI-2 ($r = .351$; $p < .05$), indicating that as scores on cultural resistance increased so did scores on scale 2 of the MMPI-2. For scale 2 (Depression) the Harris-Lingoes subscales were also examined for significant relationships between level of acculturation and Subjective Depression (D1), Psychomotor Retardation (D2), Physical Malfunctioning (D3), Mental Dullness (D4), and Brooding (D5). No statistically significant relationships were found. Cultural resistance was also found to have a positive, statistically significant relationship with scale 0 (Social Isolation) on the MMPI-2 ($r = .312$; $p < .05$), indicating as scores on cultural resistance increased so did scores on scale 0 of the MMPI-2. No other statistically significant relationships were found.

Table 4

Spearman's rho correlations for MMPI-2 validity scales by CLSI

	L	F	K
Corr. Coeff.	.192	-.050	-.204
Signif.	.191	.737	.165
N	49	49	49
CI			
	L	F	K
Corr. Coeff.	.338	-.015	-.097
Signif.	.018	.917	.508
N	49	49	49
CS			
	L	F	K
Corr. Coeff.	-.357	.020	.235
Signif.	.012	.893	.104
N	49	49	49

Table 5

Spearman's rho correlations for MMPI-2 clinical scales by CLSI

CR										
	Sc1	Sc2	Sc3	Sc4	Sc5	Sc6	Sc7	Sc8	S9	S0
Corr. Coeff.	0.224	0.351	0.044	-0.15	0.03	0.034	0.121	0.198	0.037	0.312
Signif.	0.127	0.015	0.769	0.297	0.838	0.818	0.413	0.178	0.802	0.031
N	49	49	49	49	49	49	49	49	49	49
CI										
	Sc1	Sc2	Sc3	Sc4	Sc5	Sc6	Sc7	Sc8	S9	S0
Corr. Coeff.	0.107	-0.102	0.215	-0.13	0.194	0.032	0.074	0.074	0.129	-0.07
Signif.	0.463	0.484	0.138	0.372	0.181	0.826	0.613	0.614	0.376	0.647
N	49	49	49	49	49	49	49	49	49	49

(table continues)

CS	Sc1	Sc2	Sc3	Sc4	Sc5	Sc6	Sc7	Sc8	S9	S0
Corr. Coeff.	-0.352	-0.292	-0.185	0.146	-0.12	-0.06	-0.09	-0.17	-0.06	-0.25
Signif.	-.013	0.042	0.204	0.318	0.401	0.702	0.557	0.238	0.68	0.087
N	49	49	49	49	49	49	49	49	49	49

Chapter V

Discussion

Acculturation and the MMPI-2 Validity Scales

The initial analysis of identifying dominant and nondominant cultural lifestyle tendencies for each participant resulted in a large percentage of participants being assigned with a culturally eclectic (CE) style. The CE style is defined as an alteration of native and alternate cultural practices to create a unique subcultural entity (Ghaffarian, 1989). An assignment of CE means that the participant does not exhibit one of the three dominant cultural lifestyle tendencies assessed and that their cultural lifestyle tendency falls outside of the CLSI categories, similar to Berry's marginalization acculturation strategy (Berry, 1980). A contributing factor to this finding may be the inclusion criteria of this study and the demographics of the sample used. An overwhelming percentage of the sample was college graduates or graduate students. Based on Ghaffarian's (1998) explanation of CE, this finding may be an indication that this sample of Iranian Americans adheres more strongly to the norms of a third culture, not assessed by the CLSI, such as the higher education or university culture. Therefore, on the CLSI, when looking for dominant or nondominant styles of acculturation to U.S. culture or retention of Iranian culture, this sample falls primarily within the nondominant CE category.

When separate estimates of cultural resistance, cultural incorporation, and cultural shift were generated to develop a composite cultural lifestyle profile, correlations were found between the cultural lifestyle tendencies and scale L on the MMPI-2. It appears that participants' performance on the L scale was influenced by their level of acculturation. The results of the present study indicate that Iranian Americans who

indicated a tendency to adopt U.S. culture while also keeping their Iranian culture (CI) score higher on the L scale than Iranian Americans who indicated a tendency to substitute their native culture with U.S. culture (CS). This style (CI) was referred to by Berry (1980) and integration. The more items participants answered on the CLSI in a manner that indicated a cultural shift (CS) acculturation style, or assimilation (Berry, 1980) which indicates a tendency to substitute their native culture with U.S. culture, the lower their L scale score was. This finding may be related to the need of cultural incorporators, or integrationists, to protect their Iranian culture, and hence to be somewhat cautious in their responses due to cultural characteristics they have assumed to ensure their self-preservation and to cope with political instability and turmoil over centuries.

Rapidly changing political circumstances have caused Iranians to learn to live with uncertainty, distrust, and cynicism (Askari, 2003; Johnson, 2001). Iranians may manifest mistrust in interpersonal relationships as a result of a cultural belief that individuals must always be on guard to protect themselves (Askari, 2003; Johnson, 2001). In addition, Iranians are ambivalent, even mistrustful of a helpers expertise and in general, tend to be more skeptical about the help they can receive from a mental health professional (Askari, 2003).

Overall, the current findings are consistent with previous research indicating a correlation between lower levels of acculturation and elevated scores on the L scale because the CI acculturation style is considered a less acculturated style than the CS style. These two findings suggest that the more assimilated the acculturation style of the individual's in this sample was, the lower their L scale was, indicating a lower level of defensiveness. However, this finding was not supported with the lowest level of

acculturation the CLSI assesses for, cultural resistance (CR). It appears that Iranian acculturation may vary from previously held findings regarding acculturation (Ghaffarian, 1989).

The L scale originally was constructed to detect a deliberate and rather unsophisticated attempt on the part of the respondent to present him/herself in a favorable light (Groth-Marnat, 2003). Common interpretations of a high L scale include unwillingness to admit even minor shortcomings, and deliberate attempts to present oneself in a favorable way, i.e. heightened defensiveness (Groth-Marnat, 2003). It is indicated that better educated, brighter, more sophisticated people from higher social classes tend to score lower on the L scale (Groth-Marnat, 2003). In the present study it was found that the participants who used an integrationist acculturation strategy scored higher on the L scale, which indicates that they are not as open and candid in answering MMPI-2 questions than the more highly acculturated participants.

It should be noted here that while a statistically significant correlation was found between level of acculturation and the participant's performance on the L scale of the MMPI-2, the average score of this sample of Iranian Americans on the L scale (L; T=56) was not elevated at a clinically significant level. However, interpreting this finding amongst bicultural Iranian Americans as a deliberate attempt to present oneself in a favorable way and an unwillingness to admit to even minor shortcomings could prove to be troublesome if cultural implications are not considered.

The concept of *tarrof*, when understood as a frequently practiced aspect of Iranian culture, may help to clarify and give meaning to this finding in a way that is specific to Iranian Americans. In addition to the ritualistic expectations that are enveloped in the

practice of *tarrof*, such as standing when someone enters the room, treating guests with immense hospitality and courtesy or refusing offerings until being repeatedly urged, *tarrof* is also related to the value of deference. The deference encouraged in the family is generalized to other members of the community and in the Iranians' orientation to others in general (Jalali, 1996). This deference requires individuals to avoid publicly criticizing or embarrassing one another or themselves (Jalali). The importance of *tarrof* supersedes the value of honesty as truthfulness is avoided if it hurts another (Jalali).

Iranians' family oriented and collectivistic worldview creates a self-identity that includes the immediate and extended family (Askari, 2003). Thus, it is argued here that an answering style on the MMPI-2 that appears to depict a higher level of discomfort in endorsing minor shortcomings and deliberate attempts to present oneself in a favorable way for individuals who maintain Iranian culture while integrating U.S. culture may be a reflection of *tarrof* as it appears less dystonic to do so for individuals who are more assimilated. A less acculturated Iranian American individual may find it culturally incongruent or even inappropriate to answer affirmatively to items that are interpreted as shedding a negative light on themselves, their upbringing, or their experiences with their family.

Acculturation and the MMPI-2 Clinical Scales

Scale 2 Depression (D) - When separate estimates of cultural resistance, cultural incorporation, and cultural shift were generated to develop a composite cultural lifestyle profile, correlations were found between the cultural lifestyle tendencies and scale 2 on the MMPI-2. A significant relationship was found between level of acculturation and some of the clinical scales on the MMPI-2. It was found in this study that Iranian

Americans who indicated a tendency to resist U.S. culture (CR), had higher scores on scale 2 (Depression) of the MMPI-2. This scale was originally designed to identify depression, characterized by poor morale, lack of hope in the future, and a general dissatisfaction with one's own life situation (Groth-Marnat, 2003). Very high scores are interpreted as indicative of depression, while moderate scores tend to reveal a general dissatisfaction with one's life while more moderate scores tend to indicate a general attitude or life-style characterized by poor morale and lack of involvement (Groth-Marnat, 2003). It was also found that Iranian Americans whose responses on the CLSI indicated an orientation toward substituting their native culture with U.S. culture (CS), scored lower on scale 2 (Depression) of the MMPI-2.

Based on the accepted interpretation of scale 2 on the MMPI-2 it may be concluded that less acculturated Iranian Americans have a higher likelihood of experiencing poor morale, lack of hope in the future, and a general dissatisfaction with their life situation. It should also be noted here that while a statistically significant correlation was found between level of acculturation and the participant's performance on scale 2 of the MMPI-2 the average score of this sample of Iranian Americans on scale 2 (average Scale 2; $T = 58.8$) was not elevated at a clinically significant level. Again, as with the findings of the validity scales, making such interpretations without the consideration of cultural implications could be troublesome.

An important cultural implication that should be considered in light of this finding is the psychiatric anthropology perspective on the interpretation of Iranian depressive illness and dysphoric affect. It appears that due to the positive valuation of sadness and dysphoria in Iranian culture (Good et al., 1985) and the highly developed affective

discourse around sadness, loss and grief that is fundamental to Iranian culture, the expression of the experience of depression may differ from the traditional Western conception of poor morale, lack of hope in the future, and a general dissatisfaction with ones life situation. As a result, what scale 2 on the MMPI-2 may be measuring for Iranian Americans may deviate from what it measures for individuals included in the standardization sample, particularly when levels of acculturation are lower, signifying higher adherence to traditionally Iranian ethos. These considerations may help to explain the higher scores on scale 2 in this study for individuals who endorsed a culturally resistance acculturation style.

Scale 0 Social Introversion (Si) - When separate estimates of cultural resistance, cultural incorporation, and cultural shift were generated to develop a composite cultural lifestyle profile, correlations were found between the cultural lifestyle tendencies and scale 0 on the MMPI-2. Less acculturated Iranian Americans, those who indicated a tendency to resist U.S. culture, had higher scores on scale 0 (Si) of the MMPI-2. Scale 0 was developed later than the other clinical scales, but it has come to be treated as a standard clinical scale (Groth-Marnat, 2003). This scale was originally designed to assess a person's tendency to withdraw from social contacts and responsibilities (Groth-Marnat, 2003). High scorers are generally seen as socially introverted, while low scorers tend to be sociable and extroverted. High scorers are seen as very insecure and uncomfortable in social situations, tending to be shy, reserved, timid, and retiring, while low scorers tend to be outgoing, gregarious, friendly, and talkative (Groth-Marnat, 2003).

Furthermore, while a statistically significant correlation was found between level of acculturation and the participant's performance on scale 0 of the MMPI-2 the average

score of this sample of Iranian Americans on scale 0 (average Scale 0; T = 50.9) was not elevated at a clinically significant level. However, interpreting this finding amongst Iranian Americans who exhibit a tendency to resist U.S. culture without taking into consideration culture specific explanations could also prove to be troublesome.

Iranian Americans who exhibit an acculturation style that is resistant to U.S. culture likely have a shorter length of residence in the U.S. than individuals at a higher level of acculturation (Ghaffarian, 1998). This finding was supported in this study as well and will be discussed below. How the individual is dealing with the shift from being in their home land where they were surrounded by numerous friends and families to a country where they may be more isolated and alone could be an important contributing factor to their score on the scale 0 (Si) of the MMPI-2. Through the process of immigration individuals may be experiencing a drastic socioeconomic and cultural shift (Askari, 2003). To what extent the issues surrounding that shift are affecting their current condition in terms of their social behavior and interactions may manifest itself in the form of social isolation or social withdrawal (Askari, 2003). Another issue to consider is how the individual is dealing with their ethnic minority status when they had previously been a part of the majority (Askari, 2003). Thus, scores on scale 0 may actually reflect the acculturative stress of recent immigrants as they move from a familiar to an unfamiliar sociocultural milieu.

Scale 1 Hypochondriasis (Hs) - When separate estimates of cultural resistance, cultural incorporation, and cultural shift were generated to develop a composite cultural lifestyle profile, correlations were found between the cultural lifestyle tendencies and scale 1 on the MMPI-2. More acculturated Iranian Americans, those who indicated a

tendency to substitute their native culture with U.S. culture, had lower scores on scale 1 (Hs) of the MMPI-2. This scale was originally developed to identify patients who manifested a pattern of symptoms associated with the label of hypochondriasis (Groth-Marnat, 2003). All the items on this scale deal with somatic concerns or with general physical competence (Groth-Marnat, 2003). Scale 1 is designed to assess a neurotic concern over bodily functioning and a person who is actually physically ill will obtain only a moderate elevation (Groth-Marnat, 2003). These people will endorse their legitimate physical complaints, but will not endorse the entire gamut of vague physical complaints tapped by this scale. Low scores on this scale then indicate a lack of concern with somatic symptoms or general physical competence.

It should also be noted here that while a statistically significant correlation was found between level of acculturation and the participant's performance on scale 1 of the MMPI-2 the average score of this sample of Iranian Americans on scale 1 (average Scale 1; $T = 50.9$) was not elevated at a clinically significant level. However, this finding suggests that Iranian Americans who are more highly acculturated report less somatic and physical concerns than individuals who are bicultural or who are resistant to U.S. culture. The findings do not indicate that bicultural or less acculturated Iranian Americans exhibit a high level of somatic concern, however.

Immigration and the MMPI-2

When separate estimates of cultural resistance, cultural incorporation, and cultural shift were generated to develop a composite cultural lifestyle profile, correlations were found between the cultural lifestyle tendencies and age of immigration to the U.S. and years residing in the U.S. It was found that as age of immigration and number of years in

the U.S. increased so did resistance to U.S. culture. Past research supports that individuals who immigrate later experience more acculturative stress and do not acculturate to the degree that younger immigrants do (Ghaffarian, 1989; Padilla, Alvarez, & Lindholm, 1986).

Methodological Limitations

This study may have been burdened by a number of potential sources of invalidity:

1. The sample may not be representative of the Iranian-American population since data was collected from volunteers rather than a probability sampling procedure. The sample of participants was fairly homogeneous with regard to level of education in particular. Overall the sample was predominantly highly educated.
2. The study used the adapted version of the Mendoza acculturation scale, Mendoza's Cultural Life Styles Inventory (CLSI), modified for Iranian respondents. It consists of 29 items that measure cultural familiarity, cultural preference, and actual usage of various Iranian and Anglo-American customs. This instrument includes five dimensions: intrafamily language usage, extrafamily language usage, social affiliations and activities, cultural familiarity and activities, and cultural identification and pride. The CLSI measures the process of acculturation with three different components: cultural shift, cultural incorporation, and cultural resistance. A fourth component, cultural eclecticism is assigned to individuals who do not show a dominant pattern in the acculturation pattern. Its adaptation to Iranian Americans has limited empirical support and the validity of its results should be interpreted carefully.

3. This study administered the MMPI-2 to a sample of Iranian Americans. As discussed previously, the MMPI-2 standardization sample did not include Iranian Americans. Ethical guidelines for psychological assessment state that the administration of assessment tools to populations for which the test was not standardized is unethical. However, it is necessary in order to begin to examine the cultural validity of the MMPI-2 with this population. During the debriefing of participants the limits of the MMPI-2 results in portraying an accurate and valid profile of their personality functioning was addressed in order to reduce psychological harm.
4. Language issues also were addressed with the participants of this study. It was previously mentioned that Iranian Americans would be selected for this study who could read and understand English because both the MMPI-2 and the Mendoza Cultural Life Styles Inventory are in English and do not offer Farsi translations. The difficulty of assessing and distinguishing the ability to read English from an adequate understanding of English is a potential diversity issue in this study design. Some participants may have been proficient in reading English but did not have a strong understanding of contextual factors that contributed to the connotative purpose of a question. For that reason it may be unclear if significant validity scale scores are due to defensiveness in answering style or a misunderstanding of the meaning of particular questions.
5. Due to the small sample size all interpretations of findings should be made cautiously. Additionally, none of the findings on any of the MMPI-2 clinical scales resulted in significant elevations. All significantly different correlations

between MMPI-2 scales and cultural lifestyle tendencies indicate a significant difference in a positive or negative direction, but not a significant elevation on a scale. It is important to keep this in mind when conclusions are made about Iranian Americans performance on the MMPI-2 scales and remember that the higher scores that were found were still within the normal range of scores expected on the MMPI-2.

6. A majority of the participants in this study were recruited through snowball sampling. As a result a characteristic that many study participants shared a previous acquaintance or relationship with the investigator. Though all participants were informed that no identifying information was kept to match the individual participants to the instruments administered participants may have assumed more knowledge by the investigator of their scores. The nature of their relationship with the investigator prior to their participation in this study may have had an affect on their test-taking approach, answering style, and comfort level with answering questions candidly. The result may reflect this limitation.

Conclusion and Recommendations

Iranian Americans have become a significant immigrant group in the United States within the last 25 years. Psychologists working in the United States will undeniably work with individuals of this cultural and ethnic background. Yet, the research that addresses the mental health needs of this population remains inadequate, and the amount of literature that addresses the psychological assessment of this population, specifically, is even more discouraging. It is therefore important to begin to

explore the appropriateness of the use of psychological assessment tools, such as the widely used MMPI-2, with this cultural group.

The major implication of this study is related to the relationship found between level of acculturation and performance on the MMPI-2. Since it was found that those Iranian Americans who were less acculturated to U.S. culture performed higher on scale L, 2, and 0 of the MMPI-2, interpretations of these scales by mental health professionals should be done so with caution. Iranian specific cultural phenomena such as the practice of *tarrof*, Iranian dysphoric affect, and the process of immigration should be used to help understand MMPI-2 findings where possible.

Further studies need to be conducted on Iranian Americans and the MMPI-2 to provide more contextual information for mental health professionals who work with this population. The preceding research is the only existing database of Iranian-Americans performance on the MMPI-2. Continuing to build this database can help create many other research projects that will add to our knowledge about Iranian Americans, their views on mental health, and their performance on this widely used assessment tool. A larger database will allow for this study to be conducted with a larger sample size and with a wider range of participants with regard to age, SES, religion, and educational and immigration background. The same correlational research design could be conducted with a larger sample size potentially lending itself to more significant or new findings.

Exploring in further depth the performance of Iranian Americans on scale L and scale 2 (Depression) of the MMPI-2 to investigate what drives the higher scores on these scales for less acculturated individuals in this population could help contextual the

findings of this study. This could be done by administering only MMPI-2 items that load on the L scale and Scale 2

REFERENCES

- Askari, G. (2003). A cultural relativistic approach toward Iranian immigrants in therapy. *Dissertation Abstracts International*, 66 (06), 1996B. (UMI No. 3094900)
- Berry, J.W. (1980). Acculturation as varieties of adaptation. In A.M. Padilla (Ed.), *Acculturation: Theory, models, and some new findings*. Boulder, CO: Westview Press.
- Butcher, J. N., Cheung, F. M., & Lim, J. (2003). Use of the MMPI-2 with Asian populations. *Psychological Assessment*, 15(3), 248-256.
- Canul, G. D., & Cross, H. J. (1994). The influence of acculturation and racial identity attitudes on Mexican-Americans' MMPI-2 performance. *Journal of Clinical Psychology*, 50(5), 736-745.
- Ghaffarian, S. (1998). The acculturation of Iranian immigrants in the United States and the implications for mental health. *The Journal of Social Psychology*, 138(5), 645-654.
- Gillis, M. (2000). Iranian Americans. In *Gale encyclopedia of multicultural America*, 2, 918-928. Retrieved May 21, 2005, from http://findgalegroup.com/gvrl/infomark.do?&type=retrieve&tabID=T001&prodId=GVRL&docId=CX3405800087&eisbn=0-787677272&source=gale - & userGroupName - pepperdine_main&version=1.0
- Good, B. J., Good, M. D., & Moradi, R. (1985). The interpretation of Iranian depressive illness and dyphoric affect. In A. Kleinman & B. Good (Eds.), *Culture and Depression: studies in the anthropology and cross-cultural psychiatry of affect and disorder*. Berkeley, CA: University Press.
- Good, B. J. & Good, M. D. (1988). Ritual, the state, and the transformation of emotional discourse in Iranian society. *Culture, Medicine and Psychiatry*, 12(1), 43-63.
- Groth-Marnat, G. (2003). *Handbook of psychological assessment* (4th ed.), Hoboken, NJ: Wiley & Sons, Inc.
- Hanassab, S., & Tidwell, R. (1996). Sex roles and sexual attitudes of young Iranian women: Implications for cross-cultural counseling. *Social Behavior and Personality*, 24(2), 185-194.
- Hojat, M., Shahpurian, R., Nayerahmadi, H., Farzaneh, M., Foroughi, D., Parsi, M., & Azizi, M. (1999). Premarital sexual, child rearing, and family attitudes of Iranian men and women in the United States and Iran. *The Journal of Psychology*, 133(1), 19-31.

- Jalali, B. (1996). Ethnicity, cultural adjustment, and behavior: Implications for family therapy. In L. Comas-Diaz & E.E.H. Griffith (Eds.), *clinical guidelines in cross-cultural mental health*. Oxford, England: Wiley & Sons.
- Johnson, B. D. (2001). An Iranian-American experience: A narrative of culture and transformation. *Dissertation Abstracts International*, 62 (11), 3945B. (UMI No. 3031984)
- Kheirkhah, S. P. (2003). Acculturation among Iranian immigrants in America: A phenomenological inquiry. *Dissertation Abstracts International* 64 (02), 1003B. (UMI No. 3080419)
- Kwan, K. K. (1999). MMPI and MMPI-2 performance of the Chinese: Cross-cultural applicability. *Professional Psychology: Research and Practice*, 30(3), 260-268.
- Lucio, E., Ampudia, A., Duran, C., Leon, I., & Butcher, J. N. (2001). Comparison of the Mexican and American norms of the MMPI-2. *Journal of Clinical Psychology*, 57(12), 1459-1468.
- Mahdi, A. A. (2001). Perceptions of gender roles among female Iranian immigrants in the United States. In S. Ansari & V. Martin (Eds.), *Women, religion and culture in Iran* (pp. 185-210). London: Curzon Press.
- Mendoza, R. H. (1989). An empirical scale to measure type and degree of acculturation in Mexican American adolescents and adults. *Journal of Cross-Cultural Psychology*, 20, 372-385.
- Mertens D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. London: Sage Publications, Inc.
- Mezzich, J. E., Kleinman, A., Fabrega, H. & Parron, D. L. (Eds.). (1996). *Culture & psychiatric diagnosis: A DSM-IV perspective*. Washington, DC: American Psychiatric Press, Inc.
- Mobed, S. (1996). Psychosocial review of Iranian culture and Iranian Americans. *Dissertation Abstracts International* 57 (10), 6654B. (UMI No. 9708799)
- Mostofi, N. (2003). Who are we: The perplexity of Iranian-American identity. *Sociological Quarterly*, 44(4), 681-703.
- Nagayama, G. C., Bansal, A., & Lopez, I. R. (1999). Ethnicity and psychopathology: A meta-analytic review of 31 years of comparative MMPI/MMPI-2 research. *Psychological Assessment*, 11(2), 186-197.
- Noorbala, A. A., Yazdi, S. A., Bagheri, Yasamy, M.T., & Mohammad, K. (2004). Mental

- health survey of the adult population in Iran. *British Journal of Psychiatry*, 184, 70-73.
- Padilla, A. M., Alvarez, M., & Lindholm, K. J. (1986). Generational status and personality factors as predictors of stress in students. *Hispanic Journal of Behavioral Sciences*, 8(3), 275-288
- Safran, W. (1999). Diasporas in modern societies: Myths of homeland and return. In S. Vortec and R. Cohen (Eds.), *Migration, diasporas and transnationalism* (pp. 364-380). Cheltenham, UK: Elgar Reference.
- Shafii, R. (1997). *Scent of saffron: Three generations of an Iranian family*. London: Scarlet Press.
- Wiking, E., Johanssen, S., & Sundquist, J. (2004). Ethnicity, acculturation, and self reported health: A population based study among immigrants from Poland, Turkey, and Iran in Sweden. *Journal of Epidemiol Community Health*, 58, 574-582.

APPENDIX A

Cultural Lifestyle Inventory

CLSI

Please read each question carefully and provide your response to each item with a ____ mark. Try not to skip any items and answer as accurately as you can.

1. When you talk with your grandparents, in what language do you speak? (Please check only one answer)
 - a. Farsi only ____
 - b. Mostly Farsi ____
 - c. Mostly English ____
 - d. English only ____
 - e. Both English and Farsi about equal ____
 - f. Other language (Please specify _____)
 - g. I don't have grandparents ____

2. When you talk with your father, in what language do you speak? (Please check only one answer)
 - a. Farsi only ____
 - b. Mostly Farsi ____
 - c. Mostly English ____
 - d. English only ____
 - e. Both English and Farsi about equal ____
 - f. Other language (Please specify _____)
 - g. I do not have a father ____

3. When you speak with your mother, in what language do you speak? (Please check only one answer)
 - a. Farsi only ____
 - b. Mostly Farsi ____
 - c. Mostly English ____
 - d. English only ____
 - e. Both English and Farsi about equal ____
 - f. Other language (Please specify _____)
 - g. I do not have a mother ____

4. When you speak with your brothers and/or sisters, in what language do you speak? (Please check only one answer)
 - a. Farsi only ____
 - b. Mostly Farsi ____
 - c. Mostly English ____
 - d. English only ____
 - e. Both English and Farsi about equal ____
 - f. Other language (Please specify _____)
 - g. I do not have brothers or sisters ____

5. When you talk with your spouse, in what language do you speak? (Please check only one answer)
 - a. Farsi only ____

- b. Mostly Farsi _____
 - c. Mostly English _____
 - d. English only _____
 - e. Both English and Farsi about equal _____
 - f. Other language (Please specify _____)
 - g. I am not married _____
6. When you talk to your children, in what language do you speak? (Please check only one answer)
- a. Farsi only _____
 - b. Mostly Farsi _____
 - c. Mostly English _____
 - d. English only _____
 - e. Both English and Farsi about equal _____
 - f. Other language (Please specify _____)
 - g. I do not have children _____
7. When you talk to your friends, in what language do you speak? (Please check only one answer)
- a. Farsi only _____
 - b. Mostly Farsi _____
 - c. Mostly English _____
 - d. English only _____
 - e. Both English and Farsi about equal _____
 - f. Other language (Please specify _____)
8. In what language are the newspapers and magazines that you read? (Please check only one answer)
- a. All are written in Farsi _____
 - b. Most are written in Farsi _____
 - c. Most are written in English _____
 - d. All are written in English _____
 - e. Some are written in English and some are written in Farsi, about equal _____
 - f. Other language: (Please specify _____)
9. What kind of music do you listen to? (Please check only one answer)
- a. Iranian music only _____
 - b. Mostly Iranian music _____
 - c. Mostly Western music _____
 - d. Western music only _____
 - e. Western and Iranian music about equal _____
 - f. Other music (Please specify: _____)
10. When you listen to the radio, do you listen to: (Please check only one answer)
- a. Farsi speaking program only _____
 - b. Mostly Farsi speaking programs _____

- c. Mostly English speaking programs _____
- d. English speaking programs only _____
- e. English and Farsi speaking programs about equal _____
- f. Other language (Please specify: _____)

11. When you watch television, do you watch: (Please check only one answer)

- a. Farsi speaking programs only _____
- b. Mostly Farsi speaking programs _____
- c. Mostly English speaking programs _____
- d. English speaking programs only _____
- e. English and Farsi speaking programs about equal _____
- f. Other language (Please specify: _____)

12. In what language do you pray? (Please check only one answer)

- a. In Farsi only _____
- b. Mostly in Farsi _____
- c. Mostly in English _____
- d. In English only _____
- e. In English and Farsi about equal _____
- f. Other language (Please specify: _____)
- g. I do not pray _____

13. In what language are the jokes that you are familiar with? (Please check only one answer)

- a. In Farsi only _____
- b. Mostly in Farsi _____
- c. Mostly in English _____
- d. In English only _____
- e. In English and Farsi about equal _____
- f. Other language (Please specify: _____)

14. What is the ethnic background of the people that you consider to be your closest friends (Please check only one answer)

- a. All Iranian _____
- b. Mostly Iranian _____
- c. Mostly Anglo-American _____
- d. All Anglo-American _____
- e. Anglo-American and Iranian about equal _____
- f. Other ethnic group (Please specify: _____)

15. What is the ethnic background of the people that you have dated? (Please check only one answer)

- a. All Iranian _____
- b. Mostly Iranian _____
- c. Mostly Anglo-American _____
- d. All Anglo-American _____

- e. Anglo-American and Iranian about equal ____
 - f. Other ethnic group (Please specify: _____)
 - g. I have not dated ____
16. Would you say that the people that you would most like to be accepted by (such as friends, relatives, and teachers) are: (Please check only one answer)
- a. All Iranian ____
 - b. Mostly Iranian ____
 - c. Mostly Anglo-American ____
 - d. All Anglo-American ____
 - e. Anglo-American and Iranian about equal ____
 - f. Other ethnic group (Please specify: _____)
17. When you go to social functions such as picnics, dances or sports events, are the people that you go with: (Please check only one answer)
- a. All Iranian ____
 - b. Mostly Iranian ____
 - c. Mostly Anglo-American ____
 - d. All Anglo-American ____
 - e. Anglo-American and Iranian about equal ____
 - f. Other ethnic group (Please specify: _____)
18. What kind of foods do you eat? (Please check only one answer)
- a. Only Iranian food ____
 - b. Mostly Iranian food ____
 - c. Mostly Anglo-American food ____
 - d. Only Anglo-American food ____
 - e. Anglo-American and Iranian food about equal ____
 - f. Other types of food (Please specify: _____)
19. Do you celebrate: (Please check only one answer)
- a. Only Iranian holidays ____
 - b. Mostly Iranian holidays ____
 - c. Mostly Anglo-American holidays ____
 - d. Only Anglo-American holidays ____
 - e. Anglo-American and Iranian holidays about equal ____
 - f. Other ethnic holidays (Please specify: _____)
20. Would you say that you are familiar with: (Please check only one answer)
- a. Only Iranian holidays ____
 - b. Mostly Iranian holidays ____
 - c. Mostly Anglo-American holidays ____
 - d. Only Anglo-American holidays ____
 - e. Anglo-American and Iranian holidays about equal ____
 - f. Other ethnic holidays (Please specify: _____)

21. Of the various cultures with which you are familiar, which do you criticize the most? (Please check only one answer)
- Most definitely the Iranian culture (way of life) _____
 - Probably the Iranian culture (way of life) _____
 - Probably the Anglo-American culture (way of life) _____
 - Most definitely the Anglo-American culture (way of life) _____
 - Both Anglo-American and Iranian cultures about equal _____
 - Other cultures: (please specify _____)
22. Of the various cultures with which you are familiar, which do you feel most proud of? (Please check only one answer).
- Most definitely the Iranian culture (way of life) _____
 - Probably the Iranian culture (way of life) _____
 - Probably the Anglo-American culture (way of life) _____
 - Most definitely the Anglo-American culture (way of life) _____
 - Both Anglo-American and Iranian cultures about equal _____
 - Other cultures: (please specify _____)
23. Would you say that the people that you admire the most (such as friends, relatives, teachers, doctors, movie stars, and professional athletes) are: (Please check only one answer)
- Only Iranian _____
 - Mostly Iranian _____
 - Mostly Anglo-American _____
 - Only Anglo-American _____
 - Both Anglo-American and Iranian about equal _____
 - Other ethnic group (please specify: _____)
24. If you had a choice, would you want to marry: (Please check only one answer)
- Most definitely an Iranian _____
 - Probably an Iranian _____
 - Probably and Anglo-American _____
 - Most definitely an Anglo-American _____
 - Either an Anglo-American or an Iranian, it would not matter to me _____
 - Other ethnic group (Please specify: _____)
25. If you had a choice, what type of community would you want to live in? (Please check only one answer)
- Most definitely an Iranian community _____
 - Probably an Iranian community _____
 - Probably an Anglo-American community _____
 - Most definitely an Anglo-American community _____
 - A mixed Anglo-American and Iranian-community _____
 - Other ethnic community (Please specify: _____)

26. If you had children, what types of names would you give them? (Please check only one answer)
- Most definitely Iranian names _____
 - Probably Iranian names _____
 - Probably English or Anglo-American names _____
 - Most definitely English or Anglo-American names _____
 - Either English/Anglo-American names or Iranian names, it would not matter to me _____
 - Other ethnic names (please specify: _____)
27. If you had children, would you teach them to read, write and speak in (Please check only one answer)
- Farsi only _____
 - Mostly Farsi _____
 - Mostly English _____
 - English only _____
 - Both English and Farsi about equal _____
 - Other language (please specify: _____)
28. Of the various cultures with which you are familiar, which would you say you feel most comfortable with? (Please check only one answer)
- Most definitely the Iranian culture (way of life) _____
 - Probably the Iranian culture (way of life) _____
 - Probably the Anglo-American culture (way of life) _____
 - Most definitely the Anglo-American culture (way of life) _____
 - Both Anglo-American and Iranian cultures about equal _____
 - Other cultures: (please specify _____)
29. Of the various cultures with which you are familiar, which has the most positive impact on you life? (Please check only one answer)
- Most definitely the Iranian culture (way of life) _____
 - Probably the Iranian culture (way of life) _____
 - Probably the Anglo-American culture (way of life) _____
 - Most definitely the Anglo-American culture (way of life) _____
 - Both Anglo-American and Iranian cultures about equal _____
 - Other cultures: (please specify _____)

APPENDIX B

Demographic Questionnaire

Demographic Questionnaire

Instructions: Please read each question carefully and provide your response to each item with a ___ mark or fill in your response. Please try not to skip any items and try to answer the items as accurately as you can.

1. Sex: ___ Male ___ Female

2. Age: ___

3. Marital status:

___ Never married ___ Married ___ Separated

___ Divorced ___ Widowed

4. What is the highest level of education you have completed? (Please check only one answer).

___ Less than 7th grade

___ Junior high school

___ High school

___ **Some college**

___ Community college, trade/technical school

___ College or university graduate

___ Graduate/professional training (Please specify: _____)

5. What is your occupation? _____

6. What is your religion?

___ Christian

___ Jewish

___ Muslim

___ Other (specify) _____

7. Where were you born? _____

8. If not born in the United States, at what age did you immigrate to the United States?

9. If not born in the United States, how many years have you been in the United States?

APPENDIX C

Telephone Screening Script

Telephone Screening Script

Investigator: To qualify for the study, individuals must meet **ALL** of the following criteria: identify themselves or their parents as of Persian/Iranian heritage, be 18 years old or older, feel comfortable reading English language magazines, and deny prior history of any serious emotional conditions that required hospitalization. Can you say “yes” to **ALL** of these statements?

If the caller responds with “yes”:

Investigator: Based on your response you qualify for participation in this study.

Participation involves responding to a demographic questionnaire, an acculturation survey, and a paper-and-pencil psychological test in English which may take approximately 90 to 120 minutes. Your participation is strictly voluntary and you may refuse to participate, withdraw from the study at any time, or refuse to answer any of the survey questions without penalty. **This survey is 567 questions, some of which are sensitive in nature.**

Administration of the study measures will take place at Pepperdine University, Graduate School of Education and Psychology Howard Hughes Center 6100 Center Drive Los Angeles, CA 90045 and 90045 and Irvine Graduate Center 18111 VonKarman Ave. Irvine, CA 92612. Administration will take place on the following days and times: X/X/07 and X/X/07 from X:00pm to X:00pm in Room XXX at the Los Angeles campus and X/X/07 and X/X/07 from X:00pm to X:00pm in Room XXX at the Irvine campus. Which of the administration times would you like to attend?

If you have any questions prior to the administration date please contact me at XXX-XXX-XXXX. Thank you for your time and interest.

If the caller responds with “no”:

Investigator: Based on your response you do not qualify for participation in this study. Thank you for your time and interest.

Responding to screening participant questions:

Q: Why would prior hospitalization disqualify me from this study?

This study seeks to obtain information about a community sample of Iranian Americans. Because individuals who have a prior history of hospitalization only represent a small percentage of the entire community inclusion of such individuals would not make the sample of volunteers a representative sample of the community.

Q: Why does my age disqualify me from this study?

The paper-and-pencil psychological test that will administered as a part of this study was developed for use with adults only. Its validity is based on its appropriate use for the population for which it was intended.

Q: Why does my identification as an Iranian American qualify or disqualify me for this study?

This study aims to gain information about the performance of a particular cultural group, Iranian Americans, on a measure of psychological functioning. Identification as Iranian American by the participant is essential for the results of the study to be interpreted as meaningful and helpful.

Q: Why does my reading level disqualify me for this study?

The paper-and-pencil psychological test that will administered as a part of this study requires the participant to read and answer several statements. Comprehension of these statements is essential for the test results to be valid. The test was developed at the 8th grade reading level making it essential that participants of this study feel comfortable reading at this level for the results to be interpreted as meaningful and helpful.

APPENDIX D

Script for Contacting Professors

Script for Contacting Professors

I am a doctoral student in psychology at Pepperdine University's Graduate School of Education and Psychology who is investigating people of Iranian/Persian heritage and psychological testing. **This study is completely voluntary and is not tied in any way to the courses of this college or to Pepperdine University.** I have created a flyer outlining the qualifications and contact information for participating in my study. Would you be willing to distribute the flyers to your classes to assist me?

APPENDIX E

Recruitment Flyer

ATTENTION

I am a doctoral student in Psychology at Pepperdine University who is investigating people of Iranian/Persian heritage and psychological testing in the Los Angeles and Orange County areas.

The intent of this study will be to explore the relationship between acculturation of Iranian-Americans and their performance on a measure of psychological functioning. **Acculturation is the process of adjusting to a culture different from one to which an individual has been accustomed.**

It is hoped that such information will provide those of us in the field of psychology information that may enhance the profession's understanding of the psychological needs of the Iranian American community.

Your participation will take approximately 90 to 120 minutes. If you meet the following criteria and would be interested in participating in the study or obtaining more information about the study, please call or email:

Negar Shekarabi, M.A.

XXX-XXX-XXXX

IranianStudy@hotmail.com

I am interested in individuals who:

- 1) Are 18 years-old or older
- 2) Identify themselves or **both** parents as of Persian/Iranian heritage.
- 3) Are comfortable reading English language magazines.
- 4) Do not have a history of emotional conditions that required hospitalization.

The questionnaire that will be administered includes sensitive questions. Participation in this study is completely voluntary and is not tied in any way to Pepperdine University courses. Participants will be compensated for their time and for parking costs.

APPENDIX F

Recruitment Email

ATTENTION

I am a doctoral student in Psychology at Pepperdine University who is investigating people of Iranian/Persian heritage and psychological testing in the Los Angeles and Orange County areas.

The intent of this study will be to explore the relationship between acculturation of Iranian-Americans and their performance on a measure of psychological functioning. **Acculturation is the process of adjusting to a culture different from one to which an individual has been accustomed.** It is hoped that such information will provide those of us in the field of psychology information that may enhance the profession's understanding of the psychological needs of the Iranian American community.

Your participation will take approximately 90 to 120 minutes. If you meet the following criteria and would be interested in participating in the study or obtaining more information about the study, please call or email:

Negar Shekarabi, M.A.

XXX-XXX-XXXX

IranianStudy@hotmail.com

I am interested in individuals who:

- 1) Are 18 years-old or older
- 2) Identify themselves or **both** parents as of Persian/Iranian heritage.
- 3) Are comfortable reading English language magazines.
- 4) Do not have a history of emotional conditions that required hospitalization.

The questionnaire that will be administered includes sensitive questions.

Participation in this study is completely voluntary and is not tied in any way to Pepperdine University courses. Participants will be compensated for their time and for parking costs.

Screening Email

Thank you for your interest in my study. To qualify for the study, individuals must meet **ALL** of the following criteria:

- 1) identify themselves or their parents as of Persian/Iranian heritage
- 2) be 18 years old or older
- 3) feel comfortable reading English language magazine
- 4) deny prior history of any serious emotional conditions that required hospitalization.

If you can say “yes” to **ALL** of these statements you qualify for participation in this study.

If you cannot say “yes” to **ALL** of these statements you do not qualify for participation in this study. Thank you for your interest and your time.

Participation involves responding to a demographic questionnaire, an acculturation survey, and a paper-and-pencil psychological test in English which may take approximately 90 to 120 minutes. Your participation is strictly voluntary and you may refuse to participate, withdraw from the study at any time, or refuse to answer any of the survey questions without penalty. **This survey is 567 questions, some of which are sensitive in nature.**

Administration of the study measures will take place at:
Pepperdine University, Graduate School of Education and Psychology
Howard Hughes Center 6100 Center Drive Los Angeles, CA 90045 and
Irvine Graduate Center 18111 VonKarman Ave. Irvine, CA 92612

Administration will take place on the following days and times:

- X/X/07 from X:00pm to X:00 pm in Room XXX (LA)
- X/X/07 from X:00pm to X:00 pm in Room XXX (LA)
- X/X/07 from X:00pm to X:00 pm in Room XXX (Irvine)
- X/X/07 from X:00pm to X:00 pm in Room XXX (Irvine)

Please respond to this email indicating which of the administration times you would like to attend. A confirmation email will be sent to you upon receipt of your response.

If you have any questions prior to the administration date please contact me at XXX-XXX-XXXX or IranianStudy@hotmail.com. Thank you for your time and interest.

Negar Shekarabi, M.A.

Confirmation Email

Based on your response you qualify for participation in this study. You have indicated that you would like to attend administration of study measures on the following date and time:

X/X/07 from X:00pm to X:00pm in Room XXX

Please arrive at Pepperdine University, Graduate School of Education and Psychology Howard Hughes Center 6100 Center Drive Los Angeles, CA 90045 promptly and report to the Xrd floor; Room XXX.

If you have any questions prior to the administration date please contact me at XXX-XXX-XXXX or IranianStudy@hotmail.com. Thank you for your time and interest.

Negar Shekarabi, M.A.

APPENDIX G

Consent Form

Pepperdine University

Graduate School of Education and Psychology

INFORMED CONSENT

Iranian Americans and the MMPI-2: Considering Cultural Factors
in the Assessment of Psychopathology

I authorize Negar Shekarabi, M.A., a doctoral student in clinical psychology at Pepperdine University, Graduate School of Education and Psychology, to include me in the research project which is designed to explore the relationship between acculturation and psychological assessment of Iranian Americans in Southern California. Ms. Shekarabi's project is being supervised by Dr. Daryl Rowe who is on faculty at the University.

The purpose of the study is to investigate the relationship between level of acculturation among Iranian Americans and their performance on a measure of psychological functioning. **Acculturation is the process of adjusting to a culture different from one to which an individual has been accustomed.** I understand that my participation in this study is strictly voluntary. The reason I have been asked to participate in this study is because I identify myself or my parents as Iranian American or Iranian, am 18 years-old or older, can read English at the 8th grade competency level, and have no prior history of serious emotional conditions that required hospitalization. I understand that my participation in the study involves responding to a demographic questionnaire, an acculturation survey, and a psychological test in English which may take approximately 90 to 120 minutes. **I understand that participation in this study is completely voluntary and not tied in any way to Pepperdine University or to my community college courses. I understand that there are 567 questions on this questionnaire, some of which are sensitive questions. I am not required to answer any question that makes me uncomfortable.**

I understand that the potential risks of participation are boredom, fatigue, and I may feel a little discomfort from the personal nature of some of the questions I am asked. If I am made to feel uncomfortable I am encouraged to speak to Ms. Shekarabi. **I understand that Ms. Shekarabi will have no way to determine the identity of anyone who has completed the questionnaire since there will be no personally identifying information placed on any questionnaire answer forms nor will there be a list linking subject identification numbers to specific individuals. In addition, I will not receive individual feedback on my test results.**

Although there may not be any direct benefits from my participation, I understand that the information I provide may help identify the needs of some members of the Iranian community. The results of this study will add to the research literature on psychological

test performance among Iranian Americans. **I understand that I will be compensated for parking costs should I complete the research questionnaires at Pepperdine University's Orange County or West Los Angeles campus. I understand that I will be compensated for my time by the researcher with a gift card to Target stores.**

I am aware that I may refuse to participate, withdraw from the study at any time, or refuse to answer any of the survey questions without penalty. I am guaranteed that my identity will not be revealed and no information I provide will be released to others without my separate consent unless such disclosure is required by law. I understand that under California law an exception to the privilege of confidentiality includes but is not limited to the alleged or probable abuse of a child, physical abuse of an elder or a dependent adult, or if I indicate I wish to do serious harm to myself, others, or property. If the findings of the study are published, no personally identifying information will be released. It is possible that at some future point in time, other investigators may be granted access to these data. If such permission is granted, no personally identifying information of participants in the study will be released. In other words, other investigators that enter into a collaborative relationship with this investigator will not be provided the name, address, or phone number of the study participants.

I understand that if I have any questions regarding study procedures, I can contact Negar Shekarabi, M.A. at (XXX)XXX-XXXX to get answers to my questions. If I have any questions about my rights as a research participant, I may also contact Dr. Stephanie Woo, Chair of the Graduate and Professional Schools Institutional Review Board, Pepperdine University, Graduate School of Education and Psychology, Howard Hughes Center
6100 Center Drive Los Angeles, CA 90045 (310) 258-2845.

In signing this form, I am acknowledging that I have read and understand the above statements, and am agreeing to participate in this study. I also acknowledge having received a copy of this form.

Participant signature _____

Date: _____

Telephone #: (____) ____ - _____

APPENDIX H

Administration Script

Administration Script

The intent of this study will be to explore the relationship between acculturation of Iranian-Americans and their performance on a measure of psychological functioning. It is hoped that such information will provide those of us in the field of psychology information that may enhance the profession's understanding of the psychological needs of the Iranian American community.

Your participation is voluntary and you have the right to discontinue participation in the study at any time. **There are sensitive questions on the questionnaire and you are not required to answer any question that makes you uncomfortable. The questionnaire has 567 questions.** Potential risks of participation are boredom and/or fatigue. Results of the measurements will be confidential and only the investigator will have access to them.

Please complete one copy of the consent form and summary request form and place them in the business-size envelope you have been provided and return them to the investigator before continuing. You are to keep the second copy of the consent form for your own records. **The researcher will have no way to determine the identity of anyone who has completed the questionnaire since there will be no personally identifying information placed on any questionnaire answer forms nor will there be a list linking subject identification numbers to specific individuals. In addition, you will not receive individual feedback on your test results.**

Next, complete the demographic questionnaire, MMPI-2, and Cultural Lifestyles Inventory that you have been provided. Please do not write your name or any identifying information on these forms. When you have finished please return all 3 items to the investigator. It may take approximately 2 hours for you to complete all of the measurements.

Thank you for your participation in this study. A summary of the research findings will be available to those persons who complete and return the form entitled "Request for Summary".

APPENDIX I

Request for Summary

Request for Summary

I request a summary of the completed study which will be available in approximately 1 year. Please mail the summary to me at the following address.

Name: _____

Street: _____

City _____ State: _____ Zip: _____

APPENDIX J

Referral List

Referral List

Los Angeles

Farnaz Margo Galdjie, Psy.D
2001 S. Barrington Ave. #110
Los Angeles, CA 90025
310)477-7702
dr.galdjie@verizon.net

Pepperdine University
Graduate School of Education and Psychology
Psychological and Educational Clinic
Pepperdine University Plaza
6100 Center Drive
Los Angeles, CA 90045
Tel: (310) 568-5752

Pepperdine University
Graduate School of Education and Psychology
Community Counseling Center
Encino Graduate Campus
16830 Ventura Blvd., Suite 216
Encino, CA 91436
Tel: (818) 501-1678

Orange County

Behrooz Bernous, Ph.D.
17291 Irvine Blvd, Suite 104
Tustin, CA 92780
714)508-1930
bbernous@hotmail.com

Pepperdine University
Graduate School of Education and Psychology
Community Counseling Center
Irvine Graduate Campus
18111 Von Karman Avenue, Suite 401
Irvine, CA 92612
Tel: (949) 223-2570

