

The Impact of Acculturative Stress on Marital Distress among Middle Eastern
Immigrants: Measuring Social Support as a Moderator

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I believe human vocabulary has enormous limitation in order to authentically and accurately reflect some of our profound inner feelings. Indeed, language obscures our subjectivity. Yet, I try to express my gratitude despite tyranny of language.

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Dedication

To my mother and father for their omnipresent love, sacrifices, and inspiration to think and live authentically with integrity and dignity.

To my oldest brother, Peyman, for encouraging me to go above and beyond geographical boundaries and become a citizen of the world.

To Keyvan, for his patience and wisdom.

To Pejman, for his compassion and kindness.

To Arman, the champion of our family.

To my nephews, Kian and Koushan, with the hope that when they grow up, they live in a more rational world with sane governments.

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To Bibi, who unwittingly disprove my cynical hypothesis on banality of love.

Abstract

Immigration is a significant life transition, which impacts family dynamics at multiple levels. Using hierarchical multiple regression, the present study examined 132 Middle Eastern married immigrants' experiences of the association between socio-demographic characteristics and acculturative stress and between acculturative stress, social support, and marital distress. Via online and paper-pencil surveys, participants completed demographic questions, the Revised Dyadic Adjustment Scale (RDAS) (Busby et al., 1995), the Social, Attitudinal, Familial, and Environmental (SAFE) Scale (Mena, Padilla, & Maldonado, 1987), and the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988).

Results revealed that participants with longer years of residence in the U.S. and higher income levels reported less acculturative stress. Social support moderated the impact of acculturative distress on marital distress and participants with medium and high levels of social support experienced less acculturative stress compared to participants with low level of social support. Recommendations for future research and clinical interventions that facilitate Middle Eastern immigrant couples' cultural adjustment are provided.

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CHAPTER I

Introduction

Global immigration trends and the emergence of multicultural societies in Western industrial countries have created an increasing demand for a contextual understanding of the impact of cultural encounters between individuals and groups (Sam & Berry, 2006). Currently, the United States (U.S.) has approximately 39.9 million immigrants, the greatest number in its history (Passel & Cohn, 2012; U.S. Census Bureau, 2011). Of those immigrants, approximately 2.5% or 41 million are from the Middle East and North Africa. Though great variation in ethnicity, culture, language, and religion exists within this group of immigrants, many identify as Muslim. Even though the U.S. Census Bureau does not gather data related to religious backgrounds, surveys have estimated that the population of Muslims in America is between three and five million (Leonard, 2003; PEW Research Center, 2007; Sirin et al., 2008). However, relatively recent public survey conducted by Pew Research Center (2011), estimated that there are 2.35 million Muslims living in the U.S.

One of the post-migration socio-cultural challenges faced by Middle Eastern immigrants relates to their familial and marital relationships. Religious leaders and counselors working with Middle Eastern couples have reported a drastic increase in marital conflict and divorce (Kholoki, 2007; Siddiqui, 2009). However, some scholars have argued that the existing body of literature provides limited information on the quality of marital relationships among Muslim Americans (Amer, 2010). An often-referenced study about divorce conducted in the early 1990s estimated the North

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American Muslim couples divorce rate at 31% (Ba-Yunus, 2000). A more recent study of 751 Muslims in California indicated a divorce rate of 21.3% (Alshugairi 2010). However, Ghayyur (2010) argued that the lack of enough empirical studies has limited the establishment of a statistically reliable divorce rate for Middle Eastern couples in the U.S.

Even though there are numerous studies in cultural psychology, research focusing on the impact of the process of acculturation on family dynamics and relationships is limited. Acculturation has been studied in relations to ethnic identity and self-esteem (Marin, 1993), academic achievement and depression (Cuellar, Bastida, & Braccio, 2004), international student psychological adjustment (Smith, & Khawaja, 2011), racial micro-aggression/racism (Dawson, 2009), substance abuse (Nichols-Anderson, & Gillaspay, 2003), and emotional well being (Caldwell et al. 2010). Scholars from different disciplines have approached acculturation and its impact at the individual level, or at best, intergenerationally, most commonly identifying individually based deficits and psychopathology.

However, in order to examine the impact of acculturation on mental health, a systemic understanding of acculturation at a relational level is necessary. Few studies have examined the aforementioned proposition. For instance, Flores et al. (2004) reported that acculturation processes could cause stress which potentially create marital conflicts among Mexican immigrant couples. Relatedly, other researchers have argued that the acculturation process diminishes marital quality and causes marital distress since it modifies the previously familiar spousal expectation and unbalance marital relationship (Grzywacz, Rao, Gentry, Marín, & Arcury, 2009; Negy & Snyder, 1997). Despite numerous existing studies on the impact of acculturation on individuals' mental health

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and relationship issues, only a few research studies have been conducted on families; however, they have not applied a systemic perspective. Moreover, the majority of studies on acculturation have been conducted with Hispanic and Asian populations (e.g., Hwang & Wood, 2009; Lau et al., 2005). To date, there has been no research on Middle Eastern couples that examines how stress from acculturation, impacts their marital relationships.

Overall, several studies have found that from a developmental perspective, the process of acculturation itself can be a stressful life event for both individuals and families (Kiang, Grzywacz, Marin, Arcury, & Quandt, 2010). It can trigger interpersonal conflicts due to the acculturation gap between married partners. It can destabilize the family status quo, modify the family structure, change personal values, and shift gender role expectations (Berry, 1980; Espin, 1987; Gil, Vega, & Dimas, 1994; Smart & Smart, 1995). Studies have indicated that some of the common stressors involved in cultural adjustment stem from family conflicts, loss of social support, and learning the new language (Bacallao & Smokowski, 2007; Padilla & Borrero, 2006).

Accumulation of these stressful factors has inspired scholars to contemplate the relationship between the acculturation process and the experience of stress. This has led to the conceptualization of “acculturative stress” (Berry, 2006; Padilla & Borrego, 2006). Studies have indicated that acculturative stress is linked with experience of conflict at both familial and cultural levels along with psychological distress (Flores et al., 2004). Acculturative stress can be either a positive or negative force in an immigrant’s life. For instance, low levels of acculturative stressors may enable an individual to adjust to their new environment, whereas high level of acculturative stress can led to significant psychological issues (Umana-Taylor & Alvaro, 2009). Additionally, studies have

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indicated that higher level of acculturative stress is associated with: 1) psychological distress, 2) psychopathology (e.g, depressive symptoms, suicidal ideation), 3) decreased physical health, 4) alcohol and substance abuse, 5) family issues, (6) marital problems, 7) lower quality of life, and 8) eating disorder (Arbona et. al., 2010; Finch and Vega, 2003; Hovey, 2000; Negy et al. 2010; Rodriguez, Myers, Mira, Flores, & Garcia- Hernandez, 2002).

Above common stressors of acculturation, Middle Eastern individuals have encountered an idiosyncratic stress in the post-9/11 political atmosphere. Berry (2006) suggested that negative environmental experiences such as discrimination in the social context of the host country contributes to acculturative stress. In a meta-analysis conducted by Williams, Neighbors, & Jackson (2003), the authors concluded that discrimination and perceived discrimination have a significant role in predicting acculturative stress. Out of 25 studies that examined discrimination and psychological distress, 20 studies found a positive association between the two variables.

The post- 9/11 era has been an unprecedented social context for Muslims, especially those with Middle Eastern backgrounds, particularly Muslims, who have encountered a dramatic increase in negative stereotypes at the macro-social level (American-Arab Anti-Discrimination Committee, 2003; Cassel, 2006). It has also been found that immigrants with Muslim background who, when compared to other minority ethnic group, were rated with a more unfavorable attitude and negative stereotype (Khan & Ecklund, 2012; Saroglou & Galand, 2004). The atmosphere of Islamophobia resulted in an approximately 60% higher report of discrimination by Muslim employee in 2010 compare to 2005 (Greenhouse, 2010). The Federal Bureau of Investigation (FBI) reported

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a 1,700 percent surge in hates crimes from 2000 to 2001 against Muslim-Americans (Anderson, 2002).

The drastic increase in racial and religious antagonism against immigrants with Muslim backgrounds and those who share physical similarities, has created a context of fear and vigilance (Abu-Ras & Suarez, 2009; Kira et al., 2010; Suleiman, 1999). Consequently, many Muslims in America have experienced a sense of uneasiness, insecurity, and rejection when interacting with others in different segments of society (Ahmed & Reddy, 2007). Nevertheless, despite empirical data on socio-political variables that impact levels of acculturative stress, there are no empirical studies examining how high levels of distress impact the marital relationships of Middle Eastern immigrants. This study aimed to investigate this phenomenon.

In summary, the drastic increase in the number of Middle Eastern immigrants living in the U.S., the increase in marital conflicts and divorce reported by Muslim community leaders, and the lack of attention to the significant role of acculturative stress, underscores an urgent need for empirical research to increase our understanding of this phenomenon. Moreover, it is important for research to inform the development and implementation of culturally and contextually relevant couple interventions for this population.

Statement of the Problem

Religious leaders in Middle Eastern communities and a few empirical studies have raised our awareness of increasing marital conflict, and the rising rate of divorce within the Muslim immigrant community in the U.S (Kholoki, 2007; Nadir, 1998; Siddiqui, 2009). Studies have noted that changing gender role dynamics among Middle

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Eastern couples going through the process of acculturation can pose marital challenges. Women's acculturation may enable them to renegotiate and re-structure the existing division of roles and expectations with their spouses, which can exacerbate the level of marital conflict and possibility of increased domestic violence (Firestone, Harris, & Vega, 2003; Frias & Angel, 2005). However, the impact of acculturative stress on the Middle Eastern marital relationship has not been systematically studied. Additionally, the role of social support as a protective factor in moderating the acculturative stress for Middle Eastern couples is unknown. Since social support is also one of the effective social influences to lessen acculturative stress (Crockett et al., 2007; Williams & Berry, 1991), it is plausible to assume that the absence or presence of social support may buffer or moderate the impact of acculturative stress on marital distress among married Middle Eastern immigrants.

Purpose of the Current Study

This study intends to address the existing gap in the literature by conducting the first empirical research on the impact of Middle Eastern couples acculturation stress on their marital relationships. It aims to apply a strength-based approach through a contextual understanding of immigrant Muslims by examining the buffering role of social support on the relationship between acculturative stress and marital distress. Few studies have examined the role of social support in buffering acculturative stress including Mexican American college students (Crockett et al., 2007); Korean and Indian immigrant adolescents (Thomas & Choi, 2006); Chinese international students (Ye, 2006); and Korean international students (Lee, Koeske, & Sales, 2004). In a study by Ribeiro (2012) results indicated a lower level of social support was highly associated with marital

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distress among undocumented Mexican men. However, no studies have examined the impact of social support in buffering acculturative stress for Middle Eastern couples. Furthermore, one of the paramount conceptual shortcomings of studies on acculturation resides within most researchers' etic and non-ecological perspectives, as well as their tendency to pathologize acculturation conceptually. Therefore, the current study is innovative in its attempt to address the phenomenon of acculturative stress from an emic, strength-based, and family systems perspective.

It is crucial for family therapists and other mental health professionals to increase their scope of knowledge about the current marital issues of Middle Eastern couples in the United States. Therefore, this study aimed to narrow the existing literature gap by examining acculturative stress and marital relationships within Middle Eastern immigrant families in the U.S. and how social support moderated the impact of acculturative stress on the marital distress of Middle Eastern men and women distinctly.

The Self of the Researcher

Being a Middle Eastern male who was born and raised in Iran makes me both a native and insider to this particular population, even though, I am only an insider to the Iranian culture. However, it is important to note that I don't identify with this populations based on religious orientation. Rather, I identify with them as a profusely misjudged and misunderstood member of a particular group in the U.S. Because of this complex positionality, I am privileged with insights and resources, which may limit my objectivity. To balance this, I draw from my academic training, as well as my independent research into the histories, sociologies, and theories on the Middle Eastern population from both a Western and native perspective. As a result, I have challenged

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myself to present a thorough and clear explanation of my Muslim identity by allowing differing perspectives to supplement the other's limited focus, rather than leaving them at odds with one another. Via personal accountability as well as the constructive criticism from professors and members of the Middle Eastern community, I believe I have accomplished this endeavor to the best of my abilities. As such, these are my assumptions going into the study:

- Personal identity is linked to well-being,
- Minorities must negotiate an ethnic identity to achieve a personal identity as they go through a process of acculturation.
- Both ethnic and religious identities are impacted by the systemic factors within an individual's ecology,
- Negotiating cultural and religious identities are complicated by the presence of acculturative and marital stress, and
- People are capable of reflection regarding the experience of their acculturative process, lack or presence of social support, and their level of marital stress related to all these issues.

Explanation of Terms

Personal Identity is a sense of sameness with oneself as well as a persistent sharing of some kind of essential character with others (Erikson, 1980).

Ethnic Identity is the strength of one's bond with a specific ethnic group, the assessment and determined significance of this ethnic group, and the clarity of beliefs, standards, and goals that one holds regarding one's ethnicity (Phinney, 2004).

Middle Eastern Individual refer to people who have emigrated from any Middle

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East country and claim to be from that region. It is important to note that, the classification of Middle Eastern families is difficult due to the ethnic and religious diversity within the region and the lack of empirical studies that differentiate groups within this region. Therefore, for the purpose of this study, the term will refer to any individual who claims to be from the Middle Eastern regions. This term will also be used interchangeably with Muslim immigrants throughout this manuscript.

Paradigm and Theoretical Approach

Social Constructivism

A social constructivist worldview is used to guide this study. Social constructivism is a postmodern approach that resists taken-for-granted truths about a subject and instead allows for multiple beliefs and perspectives (Neimeyer, 1995). It posits that knowledge is based on individual experience within a specific social, cultural, and historical context (Creswell, 2007), asserting that 'facts' are dependent on human interaction and, as such, reality is co-constructed (Kukla, 2000; Neimeyer, 1995). Language plays a vital role because it shapes one's ability to think abstractly about the subject, as well as express one's ideas regarding the subject to others (Oldfather, West, White, & Wilmarth, 1999). It logically follows that different cultures with different social rules and languages, would produce diverse types of knowledge, facts, and realities. This worldview guided the review of literature, particularly the discussion about Middle Eastern versus Western worldviews. Additionally, social constructivism was influential in the interpretation of results, compelling me as the researcher to be self-reflective and self-critical as I do my best to capture the essence of Middle Eastern couples' challenges.

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Bronfenbrenner's Bioecological Model of Human Development has been utilized as an overarching theoretical framework for understanding how systemic factors including micorsystem, mesosystem, exosystem, and macrosystem play various role on Married Middle Eastern immigrants' experiences related to acculturative and marital distress. Acculturation and ABC-X Model of Family Stress theories have been applied to conceptualize the Middle Eastern immigrants' challenges with acculturation, and how individuals respond to stress while utilizing available resources, respectively.

Furthermore, these theoretical frameworks have guided the measurements chosen for this study including The Social, Altitudinal, Familial, Environmental Acculturative Stress Scale (SAFE), and Multidimensional Scale of Perceived Social Support (MSPSS). Finally, this study attempted to fill this gap in the literature by focusing on the exploration of acculturation stress and marital distress and the impact of social support as a buffering effect for Middle Eastern individuals.

Bronfenbrenner's Bioecological Theory of Human Development

Urie Bronfenbrenner, a leading scholar in the field of developmental psychology, understood well that the biological, historical, and sociocultural contexts of an individual had great influence on his or her psychological development. Over the course of his career, he refined the Bioecological Model of Human Development (Bronfenbrenner, 1979, 2005), which illustrates the five systems that he believed account for the interactional relationship individuals have with their environment.

The microsystem is the term Bronfenbrenner used to refer to the system in which the individual engages in face-to-face contact with other persons, such as family members, peers, and neighbors. Within this realm, the biopsychological characteristics of

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the individual interact with those of the other persons, in settings with unique physical and material properties of their own.

The mesosystem is the next level of influence and involves the relations between two or more of the settings containing the individual, such as the linkage between a couple's home and their workplace. Thus, the mesosystem can be understood as a system of microsystems.

The next level of influence, the exosystem, can also be considered a system of microsystems. However, it differs from the mesosystem in that at least one of the microsystems does not usually involve the individual, such as the linkage between one partner's workplace and on the other partner's life experiences.

The macrosystem encompasses all three of the former systems and refers to the patterns of the culture or subcultures in general. It has been described as a "social blueprint" for the individual's social context (Bronfenbrenner, 2005, p. 81). Such social contexts may include the individual's social class, ethnicity, region, or religion. Each macrosystem is unique in that it has its own patterns of beliefs and behaviors that hold implications for the evolving individual. Oftentimes, these patterns are perpetuated through institutions, such as family, church, and government, at the lower levels.

The final system of influence is the chronosystem (Bronfenbrenner, 2005) and refers to the patterns of events one experiences over time. Such events can be sociocultural, occurring between the individual and his or her environment, or biopsychological, occurring within the individual. Examples include the experiences of getting married, going through mid-life crisis, or getting a divorce.

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Together, these five systems stimulate individual development through a series of reciprocal interactions between the individual and the persons, objects, and symbols in one's environment. Bronfenbrenner described it as a complex, multidirectional process in which simply naming the environmental factors are not enough; one must also gain insight into the experiences of the individual in relation to these factors. In other words, one must understand the types of interactions with which an individual engages and the feelings associated with them. Another consideration is that such development does not only implicate the individual but also the social context of which he or she is a part. In other words, while the individual is constantly evolving, so are the elements that bind social groups together (Bronfenbrenner, 2005). Therefore, over the course of time, social groups may rise and fall in response to changes at any systemic level. This connection between individuals and social context is reflected in Bronfenbrenner's definition of development as "the phenomenon of continuity and change in the biopsychosocial characteristics of human beings both as individuals and as groups," which "extends over the life course across successive generations and through historical time, both past and present" (Bronfenbrenner, 2005, p. 3).

Bronfenbrenner's work dictates the importance of describing systemic factors when attempting to define the characteristics of an individual and, therefore, it is logical that it would be of equal importance when considering one's ethnic identity. Bronfenbrenner criticized the majority of scientific knowledge on human development for being "context free: that is, the characteristics of the person are defined, both conceptually and operationally, without any reference to the environment" and findings are interpreted as universal, "irrespective of the culture, class, or setting in which they are

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observed or in which the person lives” (Bronfenbrenner, 2005, p. 120). Therefore, in order to begin an exploration into the complexities of Middle Eastern couples relational stress, a review of the literature that places Middle Eastern couples in their context is needed.

Family Stress Theory

Boss (2002, 2006) and others (Price, Price, & McKenry, 2010) conceptualize family stress as a force or pressure that disturbs family homeostasis. It is a systems’ based concept that plays out in families as living social organisms as they experience change and seek stability maintenance of the status quo. Stress is a normal aspect of family experience across the lifespan and requires inevitable changes and adaptations within the family system (Boss, 2002). A family reaction to an encountered stress is determined by the how effectively a family either responds or copes to stress via utilizing all available resources (McKenry & Price, 2005; Wilmoth & Smyser, 2009). Usually family stress leads to a problematic scenario when the level of stress exceeds both the individual and family’s collective resources, leading to disruption within the family system (Boss, 2002; Hobfoll & Spielberger, 2003; McKenry & Price, 2005; Wilmoth & Smyser, 2009).

The ABC-X Model. Hill’s (1958) model of family stress provides a distinct explanation for how immigrant families can either cope effectively with acculturative stress or fall into crisis such as divorce or marital distress. The model has three factors: A (the event) interacts with B (resources), interacts with C (perception) to produce X (the crisis) (Boss, 2002; Hill, 1958).

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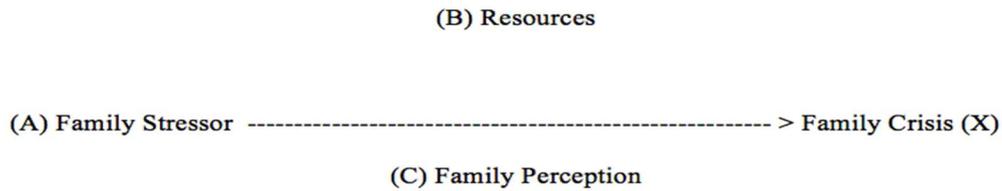


Figure 1. The ABC-X Stress Model.

Stressor Events (The A Factor)

The stressor event is conceptualized as an event which can be either positive or negative, that can modify or potentially create some changes in the family system (Boss, 2002; Wilmoth & Smyser, 2009). From a systemic perspective, families are stable organisms that are naturally aversive toward change. Every change in the family system can originate stress, such as the change in the family's power structure, decision-making process, norms, roles, functions, and boundaries (McKenry & Price, 2005). However, the level of stress varies by stress characteristics such as type, source, length, and intensity (Boss, 2002; Madden-Derdich & Herzog, 2005). Internal stressor events, such as immigration, emerge within and are managed by the family whereas external events such as natural disasters or war occur outside the family and are above and beyond family's control (Boss, 2002; McCubbin & Patterson, 1983). Simultaneous occurrences of stressful events can lead to stress pileup (Boss, 2002; McKenry & Price, 2005), which significantly reduces the family's resiliency and coping aptitudes, often resulting in a family crisis (Boss, 2002).

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Resources (The B Factor). Family's resources can be viewed as different forms of assets that enable families to problem solve and prevent an event from transforming into a crisis state (McCubbin & McCubbin, 1989; McCubbin & Patterson, 1983). There are three primary sources of resources for the family; the individual member (e.g., their education, economic well-being, personality characteristics, physical and psychological health, self-esteem), the family as a collective unit, and the community (McCubbin & McCubbin, 1989; McKenry & Price, 2005).

Immigration accompanied with acculturative stress involves major changes in both lifestyle and environment (Aroian, 1990; Brody, 1970) that potentially destabilizes the family status quo, exhausting and depleting family resources (Sluzki, 1979).

Researchers have found that family cohesion and family adaptability are significant determinant of successful adjustment to stress. Among community resources such as social support, religious organizations, and welfare agencies (McKenry & Price, 2005), social support is considered a primary buffer factor that protects the family from a possible breakdown caused by stress (McCubbin & McCubbin, 1989).

Perception (The C Factor). Perception is the meaning-making process by which a family appraises the situation and considers their available resources (Hill, 1958). He stated: "it has always puzzled observers that some families ride out the vicissitudes of floods and disasters without apparent disorganization, whereas most families are at least temporarily paralyzed by such catastrophes" (Hill, 1985, p. 141). Human beings and families are persistently trying to understand, form meanings, and make sense of their existence and external world (Hobfoll & Spielberger, 2003). Indeed, the meanings that family forms while encountering stressful event can be defined as the family's perception

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or understanding of the event which emerges through sum of individual members' interpretations and family's view as whole (Boss, 2002; Patterson & Garwick, 2003). A family's orientation or philosophy of life determines their subjective assessment. For example, Boss (2002) argued that families of imply a mastery orientation, try to interpret and adapt more actively toward the stressor compare to other type of families who have a fatalistic view of life. Furthermore, Patterson (2002) proposed that families construct meanings about (1) the stressor, (2) family identity, and (3) their worldview. In the present study, all three mentioned meaning constructs are the key element in how Middle-Eastern couples interpret the acculturative stress.

Family Crisis (The X Factor). According to Hill (1958), a family crisis would lead to a change in the role patterns and change expectations within the family system, resulting in "slowed up affectional and emotion-satisfying performances" (p. 146). Consequently, the collective family's physical, psychological, and spiritual health declines, and negatively impact family members' sense of wellbeing (Wilmoth & Smyser, 2009). After a stressor event depleted available resources, and each members cannot fulfill their roles effectively, the family encounter a phase of crisis (Hill, 1958). In the state of crisis, family equilibrium is overwhelmingly disturbed that incapacitate and paralyze the functionality of the family. Alternately, adaptation is viewed as an effective response to stress. Adaptive families maintain or strengthen their family integrity, and their members have a sense of well-being (Lavee et al., 1985). Family stress theory highlights the particular importance of resources, particularly social support in the current study, in buffering the impact of stress, in the case of Middle Eastern immigrants, acculturative stress.

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Acculturation Theory

An early version of acculturation theory by Gordon (1964) posited that individuals internalize the cultural norms and belief systems of the dominant culture. It was assumed that immigrants' acculturation process was not completed until they were thoroughly assimilated into the dominant culture and abandoned their sense of belonging and identification of the native land (Graves, 1967). The cultural values of the native culture were either obsolete or irreconcilable with the values of the new host culture resulting in cultural conflict, and producing psychological and interpersonal distress in acculturating individuals until they had completely assimilated to the new culture (Ramirez, 1984). This one-dimensional approach is often called an assimilation model or unidirectional model of acculturation (Nguyen & von Eye, 2002). The primary criticism of this model is that such a linear and simplistic conceptualization of acculturation did not provide any alternative path for the immigrants to have bicultural identities (Chun, Balls Organista, & Marín, 2003; Nguyen & von Eye, 2002). Alba and Nee (1999) argued, "assimilation has come to be viewed by social scientists as a worn-out theory that imposes ethnocentric and patronizing demands on minority peoples struggling to retain their cultural and ethnic integrity" (p.137).

Until the early 20th century, acculturation was defined as full immersion into the dominant culture, the "melting pot" theory; it was also a synonym for "Americanization" (Escobar & Vega, 2000). From a historical perspective, the assimilationist perspective was supported through indirect methods to integrate immigrants into the political ideology of White Anglo-Saxon Protestants. The sociologist, Portes (1999), conceptualized such a colonial act as "symbolic violence" that was experienced by

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immigrants in Ellis Island, and Angel Island who were pressured to accept Anglicized names anytime immigration officers did not know or did not care to spell out the names accurately.

A paradigm shift in the theoretical understanding of acculturation occurred as the globalization brought waves of immigrants to different countries and scholars engaged in critical discourse about the phenomenon of acculturation. In 1979, Berry proposed a bidimensional model, which defined acculturation as "the degree to which one maintains one's culture of origin and the extent to which one participates in the mainstream culture" (p.123). This model recognized acculturation as a process by which individuals negotiated dominant cultural values while deciding to maintain native cultural values or not (Berry, 1997).

More recent conceptualizations of acculturation recognize it as a multidimensional process that includes changes in multiple layers of immigrants' lives at both macro and micro levels, such as language proficiency, belief systems, ethnic identity, emotions and cognition, gender norms, interpersonal relationships, cultural rituals, food and music preferences (Yoon, Langrehr, & Ong, 2011). Acculturation occurs on two levels. Individual beliefs and values might change due to the cultural contact of an inside group member to members of the dominant culture (i.e., psychological change). Groups can also change when common beliefs shared among group members are modified in order to provide a responsive context for the experiences of individual members (i.e., cultural change) (Grzywacz, Rao, & Gentry, 2009).

Theoretical Synthesis

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The current study applies an integration of three main theoretical frameworks, namely the bio-ecological theory of human development, family stress theory, and acculturation theory. This multi-dimensional theoretical perspective allows for a meaningful context in which to understand the impact of acculturative stress on Middle Eastern immigrants' level of marital distress. It also supports the quantitative constructs and measurement tools utilized in this study.

In summary, ecological theory helps us understand how acculturative stress impacts Middle Eastern immigrants' experiences across different context such as the microsystem (e.g., immediate family), exosystem (e.g., workplace), and the macrosystem (e.g., community, larger society). Acculturation theory illuminates the challenges of Middle Eastern individuals in each of those contexts. Finally, family stress theory highlights the impact of acculturative stress on one's level of functionality within family system (marital distress) and how utilizing resources such as social support can buffer its impact at the micro-level of the family, i.e., within the marital relationship.

CHAPTER II

Review of the Literature

In the following literature review, Bronfenbrenner's Bioecological Model of Human Development (1979, 2005a, 2005b, 2005c, 2005d), Family Stress Theory (Boss, 2002; Price, Price, & McKenry, 2010), and Acculturation Theory (Berry, 1979), grounded in a social constructivist worldview will be utilized to discuss Middle Eastern couple and the challenges they face at multiple levels

The following questions provide the framework for reviewing the current literature on the relationships among acculturative stress, marital distress, and social support that are documented in the extant literature: Who are Middle Eastern immigrants and what are some of their challenges as they make the United States their home? What is known about the Middle Eastern population in regards to their acculturation process, marital distress, and social support?

Contextualizing Middle Eastern Immigrants

In order to understand and study the Muslim world, one needs to consciously apply a socio-historical lens. There is an inherent cultural and religious pluralism across Muslim countries. The world population of Muslims is estimated to be around 1.6 billion, or about 23.4% of the world's population. This is estimated to increase to 6.1 billion (26.4%) by the year 2030 (Pew Research Center, 2011). Approximately three to five million Muslims, followers of Islam, live in America (Kobeisy, 2004). American born Muslims comprise approximately 25% of the U.S.-based Muslim population and the remaining 75% are immigrants from different countries around the globe (Rashad, Osman, & Roudi-Fahimi, 2009).

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The American Muslim community is a mixture of various nationalities with multiple intra-national ethnicities: Muslims from East Asia such as Indonesia, Malaysia, Philippine, Middle East (e.g., Iran, Turkey, Afghanistan), and from North Africa (Egypt, Morocco, Algeria) (Abbot, Springer & Hollist, 2012; Al-Krenawi & Graham, 2005). First-generation Muslim Americans come from many different countries around the world. Almost 41% are immigrants from the Middle East or North Africa whereas approximately about a quarter (26%) originated from South Asian countries including Pakistan (14%), Bangladesh (5%) and India (3%). The remaining Muslim Americans have various geographical backgrounds such as sub-Saharan Africa (11%), European countries (7%), Iran (5%), or other countries (9%) (PEW Research Center, 2011).

There are immensely diverse cultural practices such as marriage within Muslim populations that are influenced and shaped by a broad spectrum of Islamic teachings (Krenawi & Graham, 2005). Muslim immigrants in the U.S are generally understood as a ‘monolithic group’ (McCarus, 1994; Nyang, 1999), and viewed as an undifferentiated religious minority. A group of incredibly diverse individuals with enormous differences, from physical appearances to philosophy of life, are nonetheless portrayed as over-enmeshed and similar, people who think, act, and behave alike (Abu-Ras & Suarez, 2009; Khan & Ecklund, 2012). Sirin and Fine (2008) argued that the label of ‘Muslim-American’ defies any simplistic description due to the variation in paths, both figuratively and historically, for becoming Muslim in America. Any simple description undermines numerous layers of cultural and national identities.

Middle Eastern Immigrants’ Sociopolitical Context

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Acculturation does not occur in social isolation; rather it occurs at a given time and place in the cultural context of both immigrants and their host society (Brown & Gaetner, 2001). It is therefore meaningless to speak of acculturation if both contexts under which the two groups are in contact are not understood (Berry, 2006). These contexts may include the socio-political characteristics of the groups along with the ontological reasons underlying the intercultural interaction. Thus, it is crucial that these cultural contexts are distinctly identified before any meaningful understanding of acculturation can be reached (Sam & Berry, 2006). Indeed, a zeitgeist perspective toward current experiences of Middle Eastern immigrants can provide an important contextual understanding of this group's acculturation challenges at the macro-level and how, in turn, these challenges can impact relationships such as marriages at the micro-level.

Even though Muslims have a long history of being part of social fabric of the U.S. and other Western countries, the Western perspective views them as a homogenous religious group that lacks distinct diversities in terms of religiosity, ethnicity, race, gender norms, and economic status (Daneshpour & Dadras, 2015, Zahedi, 2011). Such a broad generalization results in numerous misunderstandings such as applying religious labels (i.e., Muslim) to every immigrant from the Middle East. As mentioned earlier, this oversimplification obscures unimaginable variations in cultural rituals, ethnicities, spoken languages, gender norms, and economic structures, all of which play important roles in people's lives above and beyond their religious affiliation.

Historically, even before the 9/11 attacks, attitudes toward Arabs and Muslims in the United States have never been predominantly positive (Sirin et al., 2008). Numerous polls of American attitudes toward Muslims and Islam indicated omnipresent negative

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attitudes during the 1980s and 1990s. Gerges (1997) proposed that unfavorable attitudes towards Muslims were closely related to American foreign policy concerns in the Middle East. Shaheen (2003) found that movies produced in the U.S. overwhelmingly portrayed an unfavorable image of Arabs, Muslims, and Middle Easterners. These negative attitudes were exacerbated by the attacks that occurred on 9/11 (Sirin et al., 2008), and the religious background of the attackers. Now Muslims are linked with terrorism, and Islam is generally viewed as archaic, barbaric, irrational, and a “religion of violence and aggression that supports terrorism” (Hague, 2004, p. 14). Further, post-9/11 polls show that about 60% of Americans favor racial profiling “at least as long as it was directed at Arabs and Muslims” (Maira, 2004, p. 221) and 46% of Americans agreed that “it is OK to detain Muslims indefinitely to protect ‘us’” (Deane & Fears, 2006). The high prevalence of negative societal attitudes towards Muslims/Middle Easterners/Arabs in the current sociopolitical environment can increase stress in these targeted populations and contribute to mental health issues (Ahmed, Kia-Keating, & Tsai, 2011). Thus, it is important to illuminate these contextual factors that provide a critical backdrop to the variables of interest in this study – acculturative stress, marital distress, and social support.

Culture and Acculturation

Culture. Although attempts have been made to escape the danger of defining culture as monolithic, homogenous, and static (Lazarus, 1997), many cultural definitions fail to incorporate the broad social structures within which culture operates. Culture can be defined as a form of cognitive schema, value systems, and social practices that shape human experience, including cognitions (D’Andrade, 1981; Rogoff, 2003), emotions

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(White, 2010), and identities (Shweder & Sullivan, 1993). Escobar and Vega (2000) approach the definition of culture with a more cautious postmodern and social constructivist position:

Culture is one of the most complex words in the human vocabulary . . . [acculturation includes] ethnic identity, familism, traditionalism, cultural knowledge . . . behaviors, and language. In its current fuzzy construction there are no theoretical limits to the number of additional dimensions . . . The challenge . . . [is] to identify the necessary and sufficient dimensions of culture” (pp. 738, 740).

It is critical to mention that the definition of culture predominantly appears to be incomplete and depoliticized. One of the most comprehensive definitions of culture but unfortunately, often briefly stated, belongs to D’Andrade (1981). He proposed that culture consists of

...learned systems of meaning, communicated by means of natural language and other symbol systems, having representational, directive, and affective functions, and capable of creating cultural entities and particular senses of reality. Through these systems of meaning, groups of people adapt to their environment and structure interpersonal activities. Cultural meaning systems affect and are affected by the various systems of material flow, such as the flow of goods and service, and an interpersonal network of commands and requests. Cultural meaning systems are linked to personality systems through the sharing of specific items that function in both systems for particular individuals. Various aspects of cultural meaning systems are differentially distributed across persons and statuses, creating institutions such as family, market, nation, and so on, which constitute

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the social structure. Analytically, cultural meaning systems can be treated as a very large diversified pool of knowledge, or partially shared clusters of norms, or as intersubjectively shared, symbolically created realities. On the individual level, however, the actual meanings and messages that people learn, encounter, and produce are typically not divided into separate classes of items that can be labeled knowledge, norm, or reality, but rather from multifunctional complexes of constructs, organized in interlocking hierarchical structures, which are simultaneously constructive, representative, evocative, and directive (p. 116).

Acculturation. The definition of acculturation has gone through numerous theoretical revisions by scholars from various academic backgrounds. Initially, anthropologists conceptualized acculturation as a group-level phenomenon involving cultural change and adaptation (Boas, 1888). Later, Redfield, Linton, and Herskovits (1936) defined acculturation as a "phenomenon that results when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of each other or both groups" (p. 149).

Acculturation is

a culture change that is initiated by the conjunction of two or more autonomous cultural systems. Acculturative change may be the consequence of direct cultural transmission; it may be derived from non-cultural causes, such as ecological or demographic modification induced by an impinging culture; it may be delayed, as with internal adjustments following upon the acceptance of alien traits or patterns; or it may be a reactive adaptation of transitional modes of life" (Social Science Research Council, 1954, p. 974).

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Sam (2006) defined acculturation as social and psychological processes of change and adjustment to a different culture. Such changes take place at the group or individual level. In this sense, not only an individual can change or adapt in terms of belief systems and norms, but also a group can modify or change its dynamic and regulations at multiple levels. These changes can occur across domains such as physical, biological, and psychological (Berry, 2005). The acculturation process can lead to both positive and negative outcomes. It can help individuals to find opportunities and contribute positively to the dominant host culture or it can be undesirable experience due to a lack of opportunities or the unsuitability of either the individual or the dominant culture for a healthy adjustment. (Berry, 2005).

Acculturative Stress

Acculturative stress is defined as "a response by individuals to life events (that are rooted in intercultural contact) when they exceed the capacity of individuals to deal with them" (Berry, Poortinga, Segall, & Dasen, 2002, p. 362). Acculturative stress is the stress response experienced by an immigrants to challenges in negotiating and adopting to perceived cultural incongruities caused by differences in language, practices, and values between and within the host and heritage cultures (Gil, Vega, & Dimas, 2006; Padilla, Cervantes, Maldonado, & Garcia, 1988). Stress is a response to a perceived imbalance between environmental demands and personal coping resources, whereby environmental demands exceed coping resources, resulting in negative affect (Lazarus & Folkman, 1984). Immigrant families and their later generations endure the process of acculturation and are involved in many different ways with their host and native cultures. Therefore, they may have difficulties negotiating these intercultural interactions, which gives rise to

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different levels of acculturative stress based on available coping resources (Flores et al., 2015).

In the midst of the acculturation process, some individuals may encounter a range of stressors related to how they have been viewed and perceived by both individuals and institutes within the dominant culture (Goforth et al., 2014). Even though, acculturative stress is usually manifested through behavioral responses within intercultural contacts; it also impacts the individual and families at the bio-psycho-social dimensions of their existence.

Three major dimensions of acculturative stress have specific relevance to ethnic minorities and immigrants: familial, attitudinal, and environmental (Fuertes & Westbrook, 1996; Goforth et al., 2014). Environmental factors are direct or indirect experiences of racism such as those discussed earlier in the section on the sociopolitical context of Middle Eastern immigrants; attitudinal factors include difficulties caused by emotional cut-off from the intimate relationship with families, friends, and native culture; and familial factors are those caused by paradoxical encounters with families' values or cultural norms.

Acculturative stress is not a deterministic force upon every single immigrant. It may not occur for those individuals who are able to cope effectively with acculturation challenges and make genuine adjustments to cultural discrepancies posed by the host culture. However, those individuals who find that demands for cultural adaptation are beyond their ability to adjust, could experience acculturative stress (Goforth, et al., 2014).

Empirical studies have identified multiple factors associated both positively and negatively with acculturative stress. For instance, higher levels of social support (Mirsky,

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2009; Zhan & Goodson, 2011), family cohesion (Dillon & De La Rosa, 2013), and ethnic identity (Hurwich-Reiss et al., 2015) have been found to be related to lower levels of acculturative stress. In contrast, overall cultural dissimilarities (Eustace, 2007), general life stressors (Dona & Berry, 1994), a perceived absence of choice to have immigrated (Hovey, 1999), and the experience of racism and perceived discrimination (Cook et al., 2009) have shown to be correlated with higher levels of acculturative stress. Even though there have been studies examining acculturation among Asian American and Hispanic American families (e.g., Dinh, Sarason & Sarason, 1994; Hwang & Wood, 2009; Lau et al., 2005), there is very limited empirical research examining the acculturative experiences of immigrant and ethnic minority Middle Eastern and Muslim families. One of the few studies that examined acculturative stress in the Muslim population revealed that there is a strong association between socio-cultural adversities such as discrimination and psychological distress (Ahmed, Kia-Keating, & Tsai, 2011).

Immigrant American Muslim Marriage

Similar to Muslims worldwide, immigrant Muslims living in American strongly emphasize marriage as part of their Islamic duty. A common Muslim saying attributed to the Prophet Muhammad states that marrying completes half of one's religious duties (Hogben, 1991), and Muslims believe that divorce is allowed but discouraged by God. The family is perceived as sacred and the fundamental unit of society. Its healthy functioning directly affects the health of the larger society since the family's main duty is cultivating social and spiritual values (Hodge, 2005).

The majority of Muslims follow Islamic teaching as guidance for important aspects of life including mate selection, marriage, parenting, decision-making, gender

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roles and expectations, leisure activities, and sexual norms (Hall & Livingston, 2006). Marriage among Muslims is considered a union not only of two people but also of two families, who often contribute heavily to partner selection (Haddad et al., 2006; Smith, 1999). Indeed, there is a high-value placed upon healthy families among Muslims, and couples put effort mutually to preserve family unit stability and healthy functioning (Alshugairi, 2010). However, there is cultural diversity among Muslims who came from the Middle East, and there is a wide spectrum of adherence to religious values and rules. Indeed, each Muslim couple, regardless of their geographical background, must be approached uniquely (Carolan, Bagherinia, Juhari, Himelright, & Mouton-Sanders, 2000; Nassar-McMillan, Ajrouch & Hakim-Larson, 2014).

Despite cultural diversities and religious influences on Muslim marriages, there are common characteristics of Middle Eastern immigrant marriages such as arranged marriages, patriarchal hierarchies, sharp division of gender roles, orthodox sexual standards, and a strong emphasis on pride and shame that regulates family interactions (Abudabbeh, 1998; Nassar-McMillan, Ajrouch & Hakim-Larson, 2014). Most of the aforementioned characteristics stem from the collectivistic culture of Middle Eastern countries. They often conflict with Western values of egalitarianism in relationships and may contribute to marital conflict for some Muslim immigrants (Abbott, Springer & Hollist, 2008; Nassar-McMillan & Hakim-Larson, 2003).

Muslim spouses are encouraged to work hard to resolve marital disputes. Yet they may encounter significant lack of support. For example, Islamic teachings recommend that married couples reach out to their families of origin when experiencing marital challenges. However, many American Muslims do not have access to these resources

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because their extended family remains in their country of origin and their social support network is limited. Even though seeking marital therapy from professionals appears to be an option, studies have indicated that American Muslims are hesitant and often resistant to obtaining professional support because of pervasive doubts about mainstream counselors' or psychotherapists' cultural sensitivity and competency (Ahmed & Reddy, 2007; Hodge, 2005). Some mainstream American psychotherapists' lack of understanding about Muslim couples' religious values and cultural beliefs will hinder the process of therapy (Daneshpour, 1998). Some Muslims may also be afraid that American therapists might unconsciously stigmatize the couples' values and perspectives due to widespread stereotype of Muslims (Nassar-McMillan, 2003).

From the sociopolitical post 9/11 context, many Muslim couples may be hesitant to seek external help because they do not want to reinforce the negative stereotypes about Islam and Muslims (Nassar-McMillan, Ajrouch & Hakim-Larson, 2014). Consequently, American Muslim couples seek help from religious leaders (i.e., an Imam) for marital counseling (Bagby, Perl, & Froehle, 2001). Yet studies have shown that the majority of Imams do not have professional training and expertise in the mental health field (Abu-Ras, Gheith, & Cournos, 2008; Chapman & Cattaneo, 2013). Undoubtedly, the lack of socio-emotional support from one's family of origin, the lack of trust in and limited access to culturally competent professional mental health providers, and the active involvement of religious leader without professional expertise have created multiple layers of obstacles for immigrant Middle Eastern couples who are experiencing marital issues and dealing with acculturative stress simultaneously.

The Role of Acculturative Stress in Marital Relationship

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There are only a few studies, which have addressed the impact of acculturative stress on marital relationships. Studies with Hispanic families have found that immigration impacts family dynamics and marital functioning. Each spouse's individual differences in terms of acculturation level negatively influence the functionality and satisfaction of marital dyad and family overall (Falicov, 2005; Flores et al., 2004; Negy & Snyder, 1997; Suarez-Orozco et al., 2002). Flores et al.'s (2004) study found that spouses who were 'more acculturated' utilized a more assertive style of conflict resolution. In contrast, spouses who were "less acculturated" used indirect way of expressing themselves during conflictual situations. A drastic change in the marital relationship patterns among immigrant couples is an important indication that significant modification of traditional behaviors occurs in terms of marital interactions after spouses are being exposed to the host culture norms and values (Reberio, 2012). In one of the major studies in the literature, Negy et al. (2010) found that higher levels of acculturative stress was significantly associated with marital distress.

The Role of Social Support

Studies have indicated that immigration is associated with a significant loss of social support and connections (Bacallao & Smokowski, 2007; Padilla & Borrero, 2006, Riberio, 2012). From a social Darwinism perspective, human beings maintain social relationships and create social networks to maximize their survival chances (Tardy, 1985; Sarason, Levine, Bashan, & Sarason, 1983). Social support refers to an individual, a group, or a community, which can provide different forms of support - psychological, financial, or informational - to help individuals cope with life challenges and stresses more effectively (Cohen, 2004). Unsurprisingly, studies showed that individuals who

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have higher social support report higher levels of physical and mental health (Finch & Vega, 2003; Rodriguez et al., 2003; Uchino, 2006). Additionally, studies have indicated that social support is associated with lower levels of marital distress among Mexican immigrants (Negy et al., 2010; Reberio, 2012).

Social support provides both psychological and material resources, which can potentially serve as buffers against stress by preventing an event from being perceived as stressful. Additionally, social support can offer solutions to a stressful problem, minimize its perceived importance, or facilitate healthy coping behaviors (Cohen & Wills, 1985). The stress-buffering model of social support emphasizes that “social connections benefit health by providing psychological and material resources needed to cope with stress” (Cohen, 2004, p. 677). Also, based on core assumptions of Family Ecology Theory and the ABC-X model, social support, as a form of social capital and resource, plays a significant role in buffering or moderating both family and individual levels of stress. Abundant studies have been conducted on the role of support on Latino immigrants’ acculturation in the U.S. Results have indicated that social support plays a significant role in both physical and psychosocial functioning (Campos et al., 2008; Crockett et al., 2007; Dunn & O’Brien, 2009). Mallinckrodt and Leong (1992) also found that “not only is social support crucial in itself for positive well-being, but social support also provides a powerful coping resource for persons experiencing stressful life changes, including the stress of adjusting to an unfamiliar culture” (p. 71). Despite both the theoretical relevance of social support to the acculturation process and the empirical support for the buffering effects of social support, there are limited studies that examine how social support influences the experience of acculturative stress (Lee, Koeske & Sales, 2004).

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Extended Family and Social Support. An emic perspective of Middle Eastern couples highlights the significant involvement of extended family, particularly spouses' parents in the couple relationship. Muslim families are likely to value connectedness, harmony, and structure in the extended family (Daneshpour, 1998) due to religious and cultural norms as well as strong structural connections (e.g., financial interdependencies; Knox & Schacht, 2007). A significant body of non-empirical articles based in culturally competent mental health practice with Muslim families (e.g. Ahmed & Reddy, 2007; Daneshpour, 1998; Hodge, 2005) emphasize the significant cost for Middle Eastern couples when they lack access to extended family members and can no longer consistently rely on family support during times of marital conflict. Many couples have described how extended families, including parents and parents-in-law, began their role in a couple's marriage through active involvement in the choice of a spouse (Carolan et al., 2000; Daneshpour, 1998; Haddad et al., 2006). The support continues through the availability of extended families provide significant resources for Muslim couples including childcare, provide financial support if needed, share conflict resolution and marital advises (Ahmad & Reid, 2008; Carolan et al., 2000; Daneshpour, 1998).

Beitin and Allen (2005) found that after 9/11, some Middle Eastern couples were more reliant on each other to cope with a social atmosphere that made them feel more targeted and isolated. This result was further supported by Aroian, Templin, and Ramaswamy's (2010) study on social support in 539 Arab immigrant women. Husbands appeared to be a greater source of support than family and friends.

Although some scholars have found that Middle Eastern families serve as a buffer against the impact of acculturative stressors on individuals (Ajrouch, 2004; Hattar-Pollara

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& Meleis, 1995), research has also revealed a somewhat contrary finding; acculturative stress may be additionally associated with reduced family satisfaction (Faragallah et al., 1997; Kulwicki & Miller, 1999).

Summary

The literature reviewed above clearly notes that there is a lack of empirical exploration of the role of family and social support for Middle Eastern couple and family life. This study intended to address this gap through its first-ever examination of the impact of acculturative stress on marital distress and whether social support has a buffering or moderating effect on Middle Eastern immigrant married individuals. This innovative study also aimed to make a significant contribution to the family science field since the numbers of Middle Eastern immigrants are drastically increasing in the U.S., and in general, are a greatly misunderstood and mistreated people.

Research Questions

Based on literature and theoretical considerations from human ecology, acculturation, and family stress frameworks, the present study examined the relationships among demographic variables, acculturative stress, marital distress, and social support by testing the following research questions and related hypothesis.

Research question 1a. Do gender, education, years of immigration, number of children, income, and years of marriage predict acculturative stress among Middle Eastern married individuals?

Hypothesis 1a: Participants' gender, education, years of immigration, number of children, income, and years of marriage will significantly predict acculturative stress in Middle Eastern married individuals.

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Research question 1b. Does social support predict acculturative stress above and beyond socio-demographic characteristics?

Hypothesis 1b: Social support will significantly predict acculturative stress after controlling for participants' socio-demographic characteristics.

Research question 2: Does social support moderate the relationship between acculturative stress and marital distress among Middle Eastern married individuals?

Hypothesis 2: Social support will moderate the relationship between acculturative stress and marital distress among Middle Eastern immigrants. The association between acculturative stress and marital stress will be stronger for Individuals who report high levels of perceived social support than those who report a low levels of perceived social support.

Research question 3. Which of the four dimensions of acculturative stress, namely social, attitudinal, family, and environmental, is the most significant source of marital distress?

Hypothesis 3: There is a significant relationship among all acculturative stress factors (social, attitudinal, and family, and environmental factors) and marital distress.

Research question 4. Is there any difference between men and women regarding their levels of marital distress, acculturative stress, and social support?

Hypothesis 4: Immigrant Middle Eastern men will report higher level of marital distress, social support, and acculturative stress compare to women.

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Figure 2 illustrates the proposed relationships among variables that will be tested in this study.

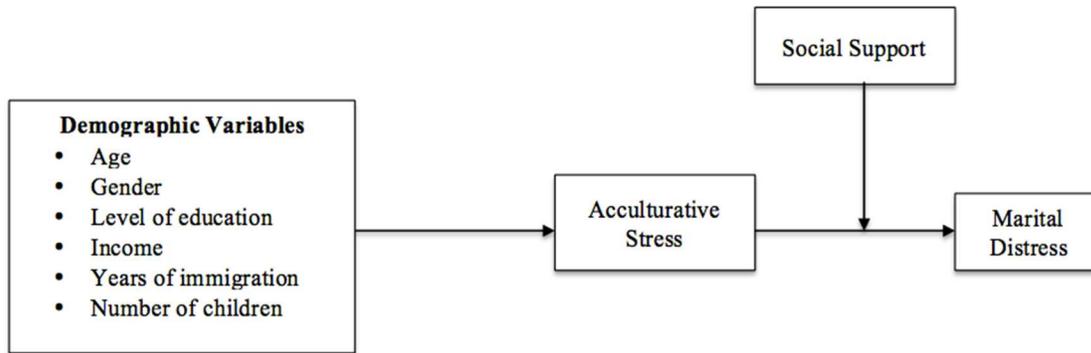


Figure 2. Analytical Model with Impact of Social Support as a Moderator

Chapter III

Method

Design

Employing a non-experimental design, cross-sectional data were collected through self-administered surveys.

Target Population

The target population for this study was married individuals who a) self-identified as being born in the one of the Middle Eastern countries and immigrated to the U.S. b) were married to another person who was also born in the Middle East region, c) had lived in the U.S. for at least one year, d) were bilingual and able to read and comprehend English, and e) had immigrated after the age of 18. There was no exclusion criterion for the duration of their residency in the U.S.

Data Collection

Data were collected through both paper-pencil surveys and online, using a tool named Qualtrics (www.Qualtrics.com) that is sponsored by the University of Minnesota. An incentive for participation in the study was that ten participants would be randomly selected to receive a \$50 Amazon gift card via email.

Recruitment. Recruitment began on March 17, 2016 and continued until June 5, 2016. After receiving human subjects' approval by the University of Minnesota Institutional Review Board (study number: 1601E83226), several recruitment efforts were initiated: 1) The principal investigator sent emails containing a description of the study and an electronic link to the online survey to community organizations that served the Middle Eastern community (Islamic Center of Minnesota, Masjid Al-Huda, Islamic

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Cultural Community Center); 2) Flyers describing the research project and providing the online survey link were distributed at local retail shops within the community; 3) A description of the study and the electronic link to the online survey were sent to the Muslim Mental Health Group listserv; 4) Muslim professional colleagues shared a description of the study and the survey link with family members and acquaintances who met the study's eligibility criteria; 5) The study was advertised in the *Muslim Jamat* weekly electronic newsletter; 6) The principal investigator emailed personal acquaintances in the Iranian community and requested their assistance in distributing the description of the study and link to the survey within the community.

Seventy four participants completed the paper-pencil surveys. Five additional paper-pencil surveys were mostly blank and were excluded. Also, 104 individuals completed the online survey. Initial screening resulted in the exclusion of 41 surveys for the following reasons: 20 surveys were completely blank, 14 surveys were missing more than 5% of the data, two surveys were from individuals who were residents of Canada and Italy and therefore ineligible for the study, and five individuals were ineligible because their partners were American. Therefore, 63 online surveys out 104 survey were included in final sample along with 69 paper-pencil surveys.

Sample

The final sample in this study was 132 Middle Eastern married individuals, 64 (48.5%) were male and 68 (51.5%) were female. Participants' ages ranged from 18 to 65 with more than half (51%) between the ages of 40 to 49 year old. In terms of ethnic background, the majority of participants were Arab (n=69; 52.3%) and Persian (n=61; 46.2%). A large majority of participants was Muslim (n=111; 84.1%) and the rest

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identified themselves as Baha'i (n= 4, 3%), Zoroastrian (n= 3, 3.2%), and other (n= 13, 9.8%). Less than half (47.7%) of participants had lived in the U.S. for less than 10 years. About 29% (n=38) of the sample had been married less than 5 years, approximately 65% (n=88) reported between 6 and 25 years of marriage, and another 5% (n=7) had been married 25 years or more.

Table 1 summarizes the demographic characteristics of the participants.

Table 1.

Demographic Characteristics of Participants (N =132)

Characteristics	n	%
Gender		
Male	64	48.5
Female	68	51.5
Age		
18-29	11	14.52
30-39	34	44.88
40-49	67	88.44
50-59	12	15.84
60 and older	8	10.56
Ethnicity		
Persian	61	46.2
Arab	69	52.3
Afghan	1	0.8
Other	1	0.8
Religion		
Zoroastrian	3	2.3
Muslim	111	84.1
Christian	1	0.8
Baha'i	4	3.0
Other	13	9.8
Years of Immigration		
1-4	37	28.0
5-9	26	19.7
10-14	29	22.0

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15-19	15	11.4
20 or more	25	18.9
Years of Marriage		
Less than a year	1	0.7
1-5	38	28.7
6-10	42	31.8
11-25	44	33.3
25 or more	7	5.3
Education		
High School/GED	1	.8
Some College	3	2.3
2-year Degree	29	22.0
4-year Degree	48	36.4
Master's Degree	34	25.8
Doctoral Degree	9	6.8
Professional Degree (JD, MD)	8	6.1

Measures

Demographic Information. Participants were asked to provide their age, gender, ethnicity, place of birth, number of years living in the U.S., religious affiliation, marital status, number of children, educational level, annual income, and occupation.

Marital Distress. Participants completed the Revised Dyadic Adjustment Scale (RDAS) (Busby et al., 1995) which is a self-report questionnaire measuring three overarching areas of the marital relationship including consensus in terms of decision making, affection expression, satisfaction in the relationship with respect to stability and conflict regulation, and cohesion as seen through activities and discussion. The RDAS includes 14 items, and respondents were asked to rate different domains of their marital relationship on a 5 or 6 Likert-type scale with options ranging from 0 = all the time, 1 = most of the time, 2 = more often than not, 3 = occasionally, 4 = rarely, 5 = never. Sample

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items are “How often do you discuss or have considered divorce, separation, or terminating your marital relationship?” “Do you ever regret that you married?” Item scores are summed and can range from 0 to 69 with higher scores indicating greater relationship satisfaction and lower scores indicating greater relationship distress. The established cut-off score for RDAS is 48; a score of 48 and above is an indication of non-distress and score of 47 and below indicates marital distress. The RDAS has indicated a Cronbach’s alpha of .90. Additionally, RDAS has shown strong discriminatory validity by successfully differentiating distressed from non-distressed couples 81% of the time (Crane, Middleton, & Bean, 2000).

In this study, scores on the RDAS ranged from 22 to 60 ($M= 45.22$; $SD= 11.95$). The Cronbach’s alpha for this study was .91.

Acculturative Stress. The Social, Attitudinal, Familial, and Environmental (SAFE) scale (Mena, Padilla, & Maldonado, 1987) is comprised of 21 multiple-choice questions along with three open ended questions, measuring acculturative stress in four areas: social, attitudinal, familial, and environmental. In the current study only multiple-choice question were included. Participants responded to each item using a 5-point Likert scale with options ranging from 1= not stressful, 2 = somewhat stressful, 3 = stressful, 4 = very stressful, 5 = extremely stressful.

The Environmental factor consisted of 10 items such as “I feel uncomfortable when others make jokes about or put down people of my ethnic background” or “Many people have stereotypes about my culture or ethnic group and treat me as if they are true”. The Social factor is measured by four items such as “I do not feel at home” or “I do not have any close friends”. Three items such as “It bothers me that family members I am

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close to do not understand my new values “or” Close family members and I have conflicting expectations measure the Family factor. Finally, four items such as “It is hard to express to my friend how I really feel,” or “Loosening ties with my country is difficult” measure the Attitudinal factor. (See Appendix IV for a complete description of the SAFE scale).

Participants` responses were summed; higher scores indicated higher acculturative stress levels. The same procedure was applied for each four factors and each factor sub-items responses were summed and approached as a total score. Previous studies have revealed a Cronbach alpha coefficient of .90 (Hovey, 2000) to .98 (Fuertes & Westbrook, 1996). The SAFE scale has been used with many different groups, including international students, immigrants, U.S. born ethnic minorities, adults and adolescents.

In the current study, overall SAFE scores ranged from 20 to 80 (M=60; SD= 17.52). Individual factor scores were as follows: SAFE-Family (M=7.29, SD= 2.39), SAFE-Attitudinal (M=10.74, SD= 3.24), SAFE Social (M= 8.19, SD= 2.89), and SAFE Environmental (M= 27.46, SD= 6.77). The internal reliability (Cronbach`s alpha) for the SAFE scale was .94.

Social Support. The Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988) was used to determine participants` perceptions of social support from family members, friends, and significant others. MPSS consists of 12-items using a 7-point Likert scale; response options ranged from 1 (very strongly disagree) to 7 (very strongly agree). A sample item is “There is a special person with whom I can share my joys and sorrows.” (See Appendix IV for a full description of items). Clara et al. (2003) reported that MSPSS showed a significantly high internal

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consistency and test-retest reliability with a Cronbach's alpha ranged from 0.81 to 0.98.

In the current study, MSPSS scores ranged from 23 to 87 (M= 53.65, SD=12.87). The internal reliability (Cronbach's alpha) was .92.

Analyses

The statistical software IBM SPSS Version 22 was used to conduct the analyses. First, descriptive analyses were conducted to examine the demographic characteristics of participants. Means, medians, frequencies, standard deviations, and ranges are reported. Additionally, zero-order correlations were computed to assess the general patterns of relationships among the variables. The following section describes the analyses used to test the study's hypotheses.

Hypothesis 1a: Participants' age, gender, education, years of immigration, income, and number of children and will significantly predict acculturative stress among Middle Eastern couples.

Hypothesis 1b: Social support will significantly predict acculturative stress after controlling for participants' socio-demographic characteristics.

A two-step hierarchical multiple regression was conducted to examine the prediction of acculturative distress from social support after controlling for socio-demographic variables. In first step, socio-demographic variables (age, gender, education, years of immigration, income, and number of children) were regressed on the dependent variable Acculturative Stress. In step two, Social Support was introduced to the model. The only dichotomous variable was gender, which was dummy coded (male = 0, female = 1) before entering into regression model.

Hypothesis 2: Social support will moderate the relationship between acculturative

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stress and marital distress among Middle Eastern immigrants.

In order to examine the moderating effect of social support on marital distress, a two-step hierarchical regression analyses with as a moderated multiple regression MMR (e.g., Aguinis, 2004) was conducted. For the purpose of avoiding multicollinearity issue, both predictor (acculturative stress) and moderator (social support) were centered by their mean scores (Frazer, Tix, Barron, 2004). In the first step, both Acculturative Stress and Social Support were entered. In the second step, the interaction term (Acculturative Stress \times Support) was entered. Baron and Keeny (1986) proposed that if the regression coefficient of the interaction is significant, there must be an effect due to moderation or mediation.

Hypothesis 3: There is a negative and significant relationship among all acculturative stress factors (social, attitudinal, family, and environmental factors) and marital distress.

A Pearson correlation was conducted to test the relationship among the four factors of acculturative stress and marital distress.

Hypothesis 4: Immigrant Middle Eastern men will report higher levels of marital distress, social support, and acculturative stress compared to women.

Three separate independent sample t-tests were conducted to examine the gender differences in mean scores for acculturative stress, social support, and marital distress.

Missing Data. An analysis of missing data was conducted to examine if patterns of missing values were random or non-random. Results indicated that there was less than 5% missing data for socio-demographic variables. However, for the primary variables of interest in this study, there was some concern: acculturative stress 11.4%, social support

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9.8%, and marital distress 6.8 %. These missing data can be the result of participants' fatigue toward the end of the survey.

To deal with missing data in a statistically sound fashion, listwise, pairwise, mean substitution, and expectation-maximization technique were conducted and results compared. It was concluded that the multiple imputation method had advantages which have been described by McCleary (2002): a) results in unbiased estimates, provide more validity than ad hoc approaches to missing data; (b) uses all available data, preserving sample size and statistical power; and (c) is available in most of statistical software. Therefore, the multiple imputation method was used to impute missing data values for acculturative stress, social support, and marital distress variables.

Power Analysis. Prior to conducting multiple regressions, relevant assumptions were tested. First, a sample size of 132 was estimated to be adequate with 7 independent variables tested in this study. According to Tabachnick and Fidell's (2007) formula ($N > 50 + 8m$), 106 participants would be required to have adequate power. An a priori GPower analysis (Faul & Erfelder, 2007) indicated that a minimum of 103 participants was required in the current study to find a medium effect size and have power of .80 at $\alpha = .05$.

Multicollinearity Analysis. The assumption of singularity was also tested and met as the independent variables (age, gender, education, income, years of immigration, number of children, and social support), were not a combination of other independent variables. An examination of correlations revealed that except years of immigration and years of marriage ($r = .73, p < .001$), no other independent variables were highly correlated. Since, years of immigration has more theoretical relevance to acculturative stress, years of

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marriage was excluded from regression analysis. Collinearity statistics (i.e., Tolerance and VIF) were all within accepted limits, so the assumption of multicollinearity was deemed to have been met (Coakes, 2005; Hair et al., 1998). No extreme univariate outliers were identified in initial data screening. Residual and scatter plots indicated the assumptions of normality, linearity, and homoscedasticity were all satisfied (Hair et al., 1998; Pallant, 2001).

Pearson correlations were calculated to examine intercorrelations among variables. Table 2 shows that five of seven pairs of variables were significantly correlated. Acculturative stress was positively correlated with marital distress ($r = .30, p < .001$), and negatively correlated with social support ($r = -.34, p < .001$), income ($r = -.37, p < .001$), and years of immigration ($r = -.53, p < .001$). Additionally, social support was negatively associated with marital distress ($r = -.6, p < .001$), years of immigration ($r = .28, p < .001$), and years of marriage ($r = .27, p < .001$). Table 2 includes the correlations among all variables.

Table 2.
Pearson Intercorrelations Among All Variables (N = 132)

Measure	1	2	3	4	5	6	7	8	9
1. Gender	—	.07	-.08	-.02	-.31**	-.23**	-.06	.16	-.24**
2. Years of Marriage	.07	—	.73**	-.36**	.30**	.32**	-.52**	.27**	-.15
3. Years of Immigration	-.08	.73**	—	-.45**	.33**	.48**	-.58**	.28**	-.09
4. Number of Children	-.02	-.36**	-.45**	—	-.22*	-.36**	.24**	-.28**	.03
5. Income	-.31**	.30**	.33**	-.22*	—	.38**	-.37**	.14	.09
6. Education	-.23**	.32**	.48**	-.36**	.38**	—	-.24**	.23**	.11
7. Acculturative Stress	-.06	-.52**	-.58**	.24**	-.37**	-.24**	—	-.34**	.30**
8. Social Support	.16	.27**	.28**	-.28**	.14	.23**	-.34**	—	-.60**
9. Marital Distress	-.24**	-.15	-.09	.03	.09	.11	.30**	-.60**	—

Note. * $p < .01$, ** $p < .001$

CHAPTER IV

RESULTS

The purpose of this study was to examine the relationships among acculturative stress, marital distress, and social support in married Middle Eastern individuals who had immigrated to the U.S. The following section describes the results of analyses.

Hypothesis 1a: Participants' gender, education, years of immigration, number of children, income, and years of marriage will significantly predict acculturative stress among Middle Eastern couples.

A hierarchical multiple regression was conducted to examine the best predictor of acculturative stress among demographic characteristics. The analysis indicated that the variance accounted for (R^2) with the combination of gender, education, years of immigration; number of children, income, years of marriage equaled .40 (adjusted $R^2 = .38$), which was significantly different from zero ($F(6, 125) = 13.67, p < .001$). It can be concluded that, as indicated by the adjusted R^2 , 38% of the variance in the level of acculturative stress among Middle Eastern immigrants was predicted by the combined effect of factors including age, gender, education, years of immigration, number of children, and income. According to Cohen (1988), this is a large effect size. Years of immigration ($\beta = -.70, p < .001$) and income ($\beta = -.27, p < .001$) are the significant predictors in the model one suggesting that participants with longer immigration histories and higher incomes experienced lower level of acculturative distress. Gender, age, number of children, and level of education were the non-significant predictive factors in the regression model. Thus, Hypothesis 1a was partially supported.

Hypothesis 1b: Social support will significantly predict acculturative stress after

controlling for participants' socio-demographic characteristics.

In step 2, after controlling for socio-demographic variable, social support was entered to the model. The result revealed that it significantly improved the model, $F(7, 124) = 14.60, p < .001$. The adjusted R^2 suggested that step 2 is better than step 1 given the increase in the adjusted R^2 value from $R^2 = .40$ to $R^2 = .45$. The result suggested that higher level of social support ($\beta = -.25, p < .001$) was associated with lower acculturative stress. Therefore, hypothesis 1b was supported. β Weights and significance values are presented in Table 3.

Table 3.

Two Steps of Hierarchical Multiple Regression Predicting Acculturative Stress from Socio-demographic Variables and Social Support (N = 132)

Predictor	Model 1			Model 2		
	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β
Gender	-2.45	2.08	-.08	-1.38	2.10	-.05
Age	.48	.26	.27	.33	.25	.24
Years of Immigration	-1.07	.22	-.70***	-.88	.21	-.64***
Number of Children	-.07	1.25	-.02	-.30	1.14	-.02
Income	-2.55	1.14	-.27*	-2.65	1.08	-.21*
Education	.29	1.21	.04	1.06	1.16	.09
Social Support				-.19	.05	-.25***
F Score		13.64***			14.61***	
R^2		.40			.45	
ΔR^2					.05	

Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

Hypothesis 2: Perceived social support will moderate the relationship between acculturative stress and marital distress among Middle Eastern immigrants. Individuals who report a high level of perceived social support have a lower association between acculturative stress and marital distress compare to those who report a low level of perceived social support.

Results indicated that acculturative stress was associated with higher levels of marital distress ($\beta = .17, p < .001$), while social support was associated with lower levels of marital distress ($\beta = -.46, p < .001$). Therefore model one significantly predicted the variance in marital distress $R^2 = .36, F(2, 129) = 29.55, p < .001$. Additionally, the interaction between acculturative stress and social support was significant ($\beta = -.24, p < .01$), explaining a significant increase in the variance in marital distress, ($\Delta R^2 = .02, F(1, 128) = 24.63, p < .01$). Therefore, results indicated that social support moderated or buffered the effect of acculturative stress on marital distress. Table 4 presents the hierarchical multiple regression analysis testing the interaction between acculturative stress and perceived social support.

Table 4.

Hierarchical Multiple Regression Analysis Predicting Marital Distress From Acculturative Stress, Social Support, and Moderator

Variable	R^2	ΔR^2	B	SEB	β
Step 1	.36				
Acculturative Stress			.12	.07	.17**
Social Support			-.34	.05	-.46**
Step 2	.38	.02*			
Acculturative Stress x Social Support			-.006	.004	-.11*

Note: N=132, * $p < .05$, ** $p < .001$

A post hoc test was conducted to further examine the significance of the interaction between acculturative stress and marital distress. Simple slopes were tested for low (-1 SD below the mean), moderate (mean), and high (+1 SD above the mean) levels of social support. All three simple slope tests indicated a significant negative association. However, the impact of acculturative stress on marital distress was more strongly buffered for participants with lower levels of social support ($b = .36, t(128) = 7.9, p < .001$) and those in the moderate social support level group ($b = .17, t(128) = 6.3, p < .001$), compared to the group of participants with higher levels of social support ($b = .02, t(128) = .08, p < .05$). These results support hypothesis 2. Figure 3 illustrates that the simple slope for lower levels of social support is relatively steeper compared to moderate and high social support, suggesting that the relationship between acculturative stress and marital distress is stronger for those married individuals with lower levels of support.

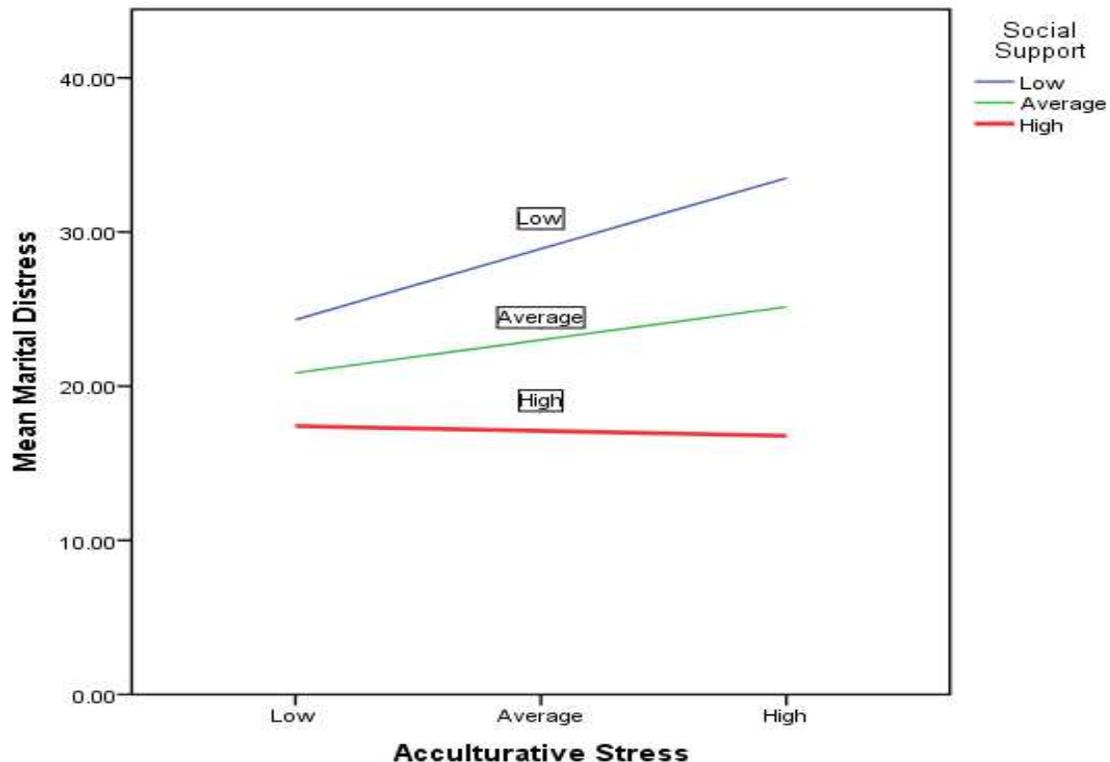


Figure 3. Line Graph of Interaction between Acculturative Stress and Social Support as Predictors of Marital Distress

Hypothesis 3: There is a negative and significant relationship among all acculturative stress factors (social, attitudinal, and family, and environmental factors) and marital distress.

Because each of the four acculturative stress factors and marital distress were normally distributed and the assumption of linearity was not markedly violated, Pearson correlations were computed to examine the intercorrelations of the variables. Table 5 shows that 3 of the 5 pairs of variables were significantly correlated. The strongest positive correlation, which would be considered a medium effect size according to Cohen (1988), was between the environmental stress factor and marital distress, $r(132) = .40, p$

< .001. Other statistically significant relationships found were between the social stress factor ($r(132) = .35, p < .001$) and the family stress factor ($r(132) = .22, p < .01$). The attitudinal stress factor was not statistically correlated with marital distress.

Table 5.

Intercorrelations, Means, and Standard Deviations for Four Acculturative Stress Factors and Marital Distress (N = 132)

Variable	1	2	3	4	5	M	SD
1. Marital Distress	—	.39**	.15	.34**	.21*	23.78	11.56
2. Social	.39**	—	.44**	.64**	.50**	8.19	2.89
3. Attitudinal	.15	.44**	—	.44**	.55**	10.74	3.24
4. Familial	.34**	.64**	.44**	—	.67**	7.29	2.39
5. Environmental	.21*	.50**	.55**	.67**	—	27.46	6.77

Note. * $p < .01$, ** $p < .001$

Hypothesis 4: Immigrant Middle Eastern men will report higher levels of marital distress, social support, and acculturative stress compared to women.

Three separate independent-samples t-test were conducted to compare marital distress, social support, and acculturative stress among men and women in the sample. There was a significant difference in the mean scores for marital distress for men ($M=26.65, SD=11.18, n = 64$) and women ($M=21.04, SD=11.30, n = 68$), $t(130)= 2.85, p = .004$. The effect size is approximately 5.0, which is a medium effect size according to Cohen (1988). There was no significant difference between mean scores of social support for men ($M = 56.46, SD = 19.77$) and women ($M = 62.23, SD = 16.58$), $t(130)= 1.85, p = .06$. Finally, there was no significant difference between women and men on acculturative stress, $t(130)= .74, p = .45$. Table 6 shows the results of the tests for male and female differences on marital distress, acculturative stress, and social support.

Table 6.

Comparison of Male and Female Middle Eastern Immigrants on Mean Score of Social Support, Marital Distress, and Acculturative Stress (n = 64 males and 68 females)

Variables	M	SD	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
Social Support			1.85	130	.06	.31
Males	56.46	19.77				
Females	62.23	16.58				
Marital distress			2.85	130	.004	.50
Males	26.65	11.18				
Females	21.04	11.30				
Acculturative Stress			.74	130	.45	.10
Males	54.37	12.62				
Females	52.97	13.15				

CHAPTER V

DISCUSSION

The overall purpose of this study was to examine the relationships among acculturative stress, social support, and marital distress in a sample of Middle Eastern immigrants in the U.S. Further, this study examined how participants' socio-demographic characteristics contributed to acculturative stress. Findings will be interpreted and discussed in light of the three main theoretical frameworks that guided the study: Bronfenbrenner's Ecological Theory of Human Development (2005), Berry's (1987) Acculturation Model, and Hill's (1958) ABC-X Model of Family Stress.

Socio-demographic Variables and Acculturative Stress

Demographic characteristics such as income, and years of immigration were significant and negative predictors of acculturative stress. Participants with longer immigration histories and higher incomes have lower levels of acculturative stress. Additionally, participants' gender, age, level of education and number of children were not associated with acculturative stress Middle Eastern immigrants. Similar to previous studies on U.S. Mexican immigrant populations (e.g, Hovey, 2002) and Asian populations (e.g, Lueck & Wilson, 2010), the present study found that the level of acculturative stress decreased over time for Middle Eastern married individuals. Generally, empirical studies have indicated that the length of residence in the host country is the most significant predictor of adjustment among immigrants (Zlobina, Basabe, Paez, & Furnham, 2006). Berry's (2006) acculturation model, would also theoretically support that over years of living in the host country, an individual would have more opportunity to negotiate norms and values of both native and dominant

culture, learn the language, and develop personal skills which consequently facilitate one's cultural adjustment process.

Related to income, an empirical study found that Korean immigrant women with lower socio-economic statuses reported higher levels of acculturative stress (Im, Lee, & Lee, 2014). Viewed through theoretical lenses, the availability and function of resources is a core to adjusting to environmental changes and stress (Bronfenbrenner, 2005) and ABC-X Model (Hill, 1958). Access to enough resources empowers individuals to function more smoothly when they experience challenges in a new social context. Consequently, it is plausible to argue that participants with higher level of income have more resources to prevent stress pile-up and more effectively manage the external sources of stress.

Finally, this study found that gender was not a significant predictor of acculturative stress. This finding contradicts some studies in the literature. For example, Lee and Padila (2014) found that male Korean students in American universities reported higher levels of acculturative stress compared to female.

The Role of Social Support as Moderator

Based on previous research, a hypothesis of this study was that social support buffers the negative impact of marital distress caused by acculturative stress. This study found that there was a significantly positive association between acculturative stress and marital distress and that social support was negatively and significantly correlated with both of them. More importantly, social support buffered the negative impact of acculturative stress on marital distress. Those participants who had higher social support reported lower marital distress despite the presence of acculturative stress.

These results were consistent with previous studies (Negy et al., 2010; Zhang, 2012). Negy et al (2010) found that social support partially moderated the relationship between acculturative stress and marital distress for Hispanic immigrant women. He concluded that the “availability of social support serves to buffer the effects of stress from external pressures to acculturate and, in turn, from distress experienced in marital relationships.” (Negy et al., 2010, p. 15). Additionally, some studies have suggested that not only does social support stabilize marital relationships, but it also protects marital dyad from acculturative stress (Fossion et al. 2004; Mui & Kang, 2006). Finally, Mallinckrodt, and Leong (1992) indicated that “not only is social support crucial in itself for positive well-being, but social support also provides a powerful coping resource for persons experiencing stressful life changes, including the stress of adjusting to an unfamiliar culture” (p. 71).

The ABC-X Model (Hill, 1958) proposed that if a family fails to adequately cope with stressor events (A Factor, e.g., immigration) and lack the B factor (e.g., resources), it could lead to problematic perception and consequently significant disruption within the family system. Social support is considered as a primary buffer factor of stress, which protects the family from the possible breakdown (McCubbin & McCubbin, 1989). Also, based on core assumptions of ecology theory, social support is viewed as a form of social capital, which plays a significant role in buffering or moderating both family and individual levels of stress.

This relationship also hold true for Middle Eastern immigrants in U.S. One of the few studies on Arab immigrant women suggested that their spouses were the primary source of support compare to their family and friends (Aroian, Templin, & Ramaswamy,

2010). One of the major reasons for such a phenomenon is that most of their families live outside of the U.S. In this case, there would be a circular causal relationship among acculturative stress, social support, and marital distress. It would not be an unrealistic assumption to even argue that pre-existing marital conflict before immigration could lead to higher levels of acculturative stress and further denigration of the marital relationship.

Acculturative Stress Factors and Marital Distress

The current study examined which acculturative stress factors, namely social, attitudinal; environmental, and familial were significantly correlated to marital distress. Fuertes and Westbrook (1996) found that the acculturative stress factors that are relevant for ethnic minority or immigrant groups are attitudinal, environmental, and family factors.

Results from this study showed that except for the attitudinal factor, which is about the sense of perceived stress related to one's culture of origin and self-expression, the other three acculturative stress factors were significantly associated with marital distress. The environmental factor predominantly measured stress related to perceived discrimination in the work place or in interpersonal relationships. The familial factor tapped into value conflicts with family expectations, and the social factor measured level of social engagement. This study's results were consistent with previous studies that have found an association between the experience of racism, perceived discrimination, and high levels of acculturative stress (Araujo & Borrell, 2006; Araujo & Panchanadeswaran, 2010; Cook et al., 2009).

Theory, particularly Family Ecology Theory (Bronfenbrenner, 2005), aids in the interpretation of these findings. The chronosystem, or the patterns of events one

experiences over time, for the Middle Eastern immigrants in this study, included the events of 9/11 and the long-term anti-Muslim/anti-Middle Eastern sociocultural environment that became entrenched in U.S. society. Since that time there has been a significant socio-cultural shift in the daily life experiences of Middle Eastern immigrants in U.S. The phenomena of Islamophobia has impacted many individuals and families who share similar backgrounds or physical features with members of Islamist terrorist groups resulting in a 60% higher reports of discrimination by Muslim employees in 2010 compared to 2005 (Greenhouse, 2010). The drastic increase of systemic racial and religious antagonism against immigrants with Muslim backgrounds has created a context of fear and vigilance toward individuals from other cultures. An ecological perspective would posit that experiences in the toxic macro- and meso-environments would permeate the boundaries of the micro-system of the family, increase acculturative stress for family members, and impact relationships, including marriages. Moreover, it is not surprising that participants identified values and expectations conflicts with their families as another important source of acculturative stress. Most Middle Eastern immigrants have grown up in collectivistic societies that embrace traditional familial values. As Berry (2006) noted, negotiating differences in family values and belief systems between their own families and those of the dominant culture as part of an on-going acculturation process can lead to challenges for individuals and families.

Limitations

There are methodological limitations of this study that must be addressed. Using a convenience sample introduced bias and limits the generalizability of results beyond this specific sample. Additionally, the small sample size and the heterogeneity of the sample

also limit generalizability of the results. The majority of participants identified as either Persian or Arab, two major ethnic groups among Middle Eastern populations but not representative of the multitude of distinct sub-ethnic groups with different nationalities and unique cultures. Lastly, the majority of participants were residents of Minnesota; the geographic and cultural contexts of the Midwest could have impacted participants' experience of acculturative stress, compared to individuals in other states such as California or Oregon.

The measures used in this study also present some limitations. Even though scales used in this study were statistically reliable, confirmatory factor analysis of the scales to test for socio-cultural validity was not possible due to the small sample size. Additionally, the use of a survey to collect data posed another common limitation due to potential method variance and consistency bias (Podsakoff, MacKenzie, & Podsakoff, 2003).

Implications and Future Research

This study contributes to the scholarship on immigrant families in two important ways. First, there are implications for clinical practice. Counselors and therapists face multiple challenges when working with Middle Eastern or Muslim individuals, couples, and families. It is important that mental health professionals keep in mind that Middle Eastern immigrants and Muslim Americans are hesitant to receive family counseling or marital therapy due to multiple social cultural issues such as fear of being misunderstood by the therapist or the stigma of mental health issue itself. It is critical that time is taken to hear these fears and concerns and to build trust into the counseling relationship.

Additionally, this study can provide therapist an initial glimpse into some of the

challenges Middle Eastern immigrants face, particularly related to acculturative stress, social support, and marital distress.

Perhaps most importantly, this study opens up multiple directions for future research. New studies can build on the findings of this research to ask more specific and complex research questions about acculturative stress, family dynamics, and marital quality of Middle Eastern immigrants and Muslim Americans. This is both an academic and political necessity, since there is great concern within the Muslim American community regarding a drastic increase in the prevalence of divorce. This concern will only continue to grow as new waves of immigrants from the Middle Eastern region enter immigrate to the U.S.

There is an undeniable absence of qualitative research on Middle Eastern families and marriages. This approach would be useful in research that seeks to understand the essence of individual or family experiences of acculturative stress, challenges in finding, creating, or accessing social support, and marital distress. Qualitative research inquiries such as ethnography and phenomenology offer methods to discover new knowledge and insight, which is not attainable through an objectivist epistemology or quantitative methodology. O'Brien (2005) stated that in most current research designs, there is primarily linear conceptualization about complex change processes, which limit the scholar's ability to access or grasp underlying factors that impact the outcome. Fundamental aspects of family dynamics such as context, dynamic process, reciprocal causality, and transactional analysis require complex conceptualizations and research designs to effectively study Middle Eastern families and couples. However, they are not readily evident in the extant body of literature on this population.

Conclusion

The purpose of this study was to explore the relationship between socio-demographic variables and acculturative stress among Middle Eastern immigrant in U.S. The study examined if social support played a buffering role in the impact of acculturative distress on marital distress. It was shown that individuals with longer years of residence in the U.S. and higher income levels experienced less acculturative stress. Additionally, the study found that social support moderated the impact of acculturative stress on marital distress. However, low levels of social support did not have a buffering effect. This study contributed to the current gap in the literature regarding the role of acculturative stress on marital relationship among immigrants with Middle Eastern or Muslim background in the U.S.

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Appendix I: IRB Approval Letter

The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2 SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS; OBSERVATION OF PUBLIC BEHAVIOR.

Study Number: 1601E83226

Principal Investigator: Iman Dadras Konestani

Title(s):

The Impact of Acculturative Stress on Marital Distress among Middle Eastern Immigrants: Measuring Social Support as a Moderator

This e-mail confirmation is your official University of Minnesota HRPP notification of exemption from full committee review. You will not receive a hard copy or letter.

This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.

This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study's expiration date. Please inform the IRB when you intend to close this study.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at (612) 626-5654.

You may go to the View Completed section of eResearch Central at <http://eresearch.umn.edu/> to view further details on your study.

The IRB wishes you success with this research.

We value your feedback. We have created a short survey that will only take a couple of minutes to complete. The questions are basic, but your responses will provide us with insight regarding what we do well and areas that may need improvement. Thanks in advance for completing the survey. <http://tinyurl.com/exempt-survey>

Appendix II: Consent Form

The impact of acculturative stress on marital distress among Middle Eastern immigrants: measuring social support as a moderator

You are invited to be in a research study of how the stress related to the cultural adjustment impact the quality of marriage and marital relationship among immigrants in the North America with Middle Eastern background.

This study aims at adding empirical evidence to the relationship between the role of cultural adjustment, marital relationship and importance of social support. The result of this study can increase the social awareness about Middle Eastern immigrants in United States. We ask that you read this form and ask any questions you may have before agreeing to be in this study.

This study is being conducted by: Iman Dadras, Department of Family Social Science, University of Minnesota.

Research Procedure:

If you agree to participate, you will be asked to fill out a demographic questionnaire (e.g., your education, income level, religious background, etc...), how you experience stress related to cultural differences, how you feel about your social support network, and how satisfied you are with your marriage. To be eligible for participation in this study a) you must be married, b) first generation immigrant, c) immigrated when you were 18 years or older, and d) living in the U.S at least for a year or more.

I understand how important your time is, and so I offer you the opportunity to win one of ten \$50 gift certificates to Amazon.com to thank you for participating. You will be able to enter a drawing to win one of the gift certificates after completing the survey. Your email address will be kept secure as described above, and will not be sold or distributed in any way. Winners will be randomly drawn by the researcher once data collection is complete. You will be notified via email if you have won an Amazon gift certificate, which will be emailed at the address provided. The information that you provide for this drawing will be destroyed once the gifts have been mailed.

Risks

There are no foreseeable risks for participating in this research.

Confidentiality

The data in this study will be confidential. Your name will not be placed on survey data. Nobody will be informed about who does or does not participate in the study. Research records will be stored securely and only researchers will have access to the records. At

the end of the survey, you will be asked to give your email address if you wish to enter a drawing for a Amazon gift certificate to thank you for your participation. If you agree to do this, your email address will be available to the researcher only. Your email address will be separated from your survey responses so that your responses cannot be linked to your identity.

Security

Your data will be anonymous and will not include your name. Your information will be kept in a secure location, and will not be sold or shared at any time.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at anytime without affecting those relationships.

Contact and Questions:

This research is conducted by Iman Dadras Konestani at University of Minnesota.

If you have any question or want to report any research related problem, you are encouraged to contact him at dadra001@umn.edu or (612)-516-6880.

The faculty advisor for this project is Dr. Catherine Solheim. She may be reached at email address: csolheim@umn.edu and office telephone : 715-232-1405.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Research Subject's Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612)-625-1650.

Appendix III: Recruitment Letters

Recruitment Letter to Potential Distributors of Study to American Muslims

Salam [Name/Title],

I write to ask for your help and support in collecting data for my dissertation research. Please consider distributing my study to [members of your listserv/ your personal or professional contacts who are Muslims with Middle Eastern background living in U.S. My study seeks information about the characteristics of married Middle Eastern immigrants; how acculturative stress impacts the level of distress in their marital relationship; how social support buffer the acculturative stress other family members help them with these tasks and responsibilities; and how the level of marital distress is different for Middle Eastern men and women. This topic is a response to the community's concern about increasing divorce rate and marital dispute among Middle Eastern and Muslim immigrants. I hope that my study will help the community and academic field to understand the nature of those important factors that negatively impacting the marital relationship within the community.

You are under no obligation to complete this study yourself or to send it to anybody. If you are interested in distributing the study, please reply to me, and I will send you an email that you can forward to [your listserv/your contacts]. That email will contain the link to the study. This email contains information only for you.

I hope you are well; thank you for your interest in my work!

Warm regards,

Iman Dadras

Iman Dadras, MS, LMFT.
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Recruitment Letter to Middle Eastern Immigrant Participants

Hello (Salam)

My name is Iman Dadras, and I am a student of couple and family therapy at University of Minnesota, Twin Cities.

I invite you to participate in my research study on the impact of acculturative stress on the marital relationship among immigrants in the North America with Middle Eastern background regardless of their religious identity.

My study seeks information about the characteristics of married North American Middle Eastern immigrant; how acculturative stress impacts the level of distress in their marital relationship; how social support buffer the acculturative stress other family members help them with these tasks and responsibilities; and how the level of marital distress is different for Middle Eastern men and women. This topic is a response to the community's concern about increasing divorce rate and marital dispute among Middle Eastern and Muslim immigrants. I hope that my study will help the community and academic field to understand the nature of those important factors that negatively impacting the marital relationship within the community.

The goal of my research is to increase both knowledge and awareness about the issue of acculturation and marital relationship in order assist mental health professionals and religious leaders of the community to provide a more evidence-based marital therapy and counseling to the community.

I understand how important your time is, and so I offer you the opportunity to win one of ten \$50 gift certificates to Amazon.com to thank you for participating. You will be able to enter a drawing to win one of the gift certificates after completing the survey.

The survey should take you 10-20 minutes to complete. Please note that, in order to participate, you must be 1) Married, 2) first generation immigrant, 3) emigrated when you were 18 years or older, 4) living in US at least for a year or more.

Only one person per married couple should participate. If you choose to participate, your responses will be kept completely private. Your responses, including any identifying information, will not be shared with anybody. My research is not affiliated with any social or political organization or group.

If you are interested in participating, please click this link to access the study:

https://umn.qualtrics.com/jfe/preview/SV_efmeDdKPha59PBr

With gratitude,

Iman Dadras, MS, LMFT.
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Associate Professor, Family Social Science Department
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Appendix IV: Questionnaires

Demographics Information

What is your gender?

- Male
- Female

What is your age? _____

In which city and state do you live? _____

What is your ethnicity?

- Persian
- Arab
- Afghan
- Turkish
- Other

What is your religion?

- Zoroastrian
- Muslim
- Christian
- Baha'i
- Jewish
- Armenian
- Other _____

How many years have you been married to your current spouse? _____

How long (in years) have you resided in North America?

- 1 - 4 years
- 5 - 9 years
- 10 - 14 years
- 15 - 19 years
- 20 years or more

How many children under age of 18 currently live in your house? _____

What is your highest education level? Please choose *only one* of the following:

- Some high school

- Completed high school
- Some college (undergraduate)
- Completed college (undergraduate)
- Some graduate education
- Completed graduate degree

What is your spouse's highest education level? Please choose *only one* of the following:

- Some high school
- Completed high school
- Some college (undergraduate)
- Completed college (undergraduate)
- Some graduate education
- Completed graduate degree

What is your average annual income? (Please do not count any income earned by anybody except you) Please choose *only one* of the following:

- \$15,000 - \$24,999
- \$25,000 - \$39,999
- \$40,000 - \$54,999
- \$55,000 - \$69,999
- \$70,000 - \$84,999
- \$85,000 - \$99,000
- \$100,000 or above

What is your spouse's average annual income? (Please do not count any income earned by anybody except your spouse)

Please choose *only one* of the following:

- \$15,000 - \$24,999
- \$25,000 - \$39,999
- \$40,000 - \$54,999
- \$55,000 - \$69,999
- \$70,000 - \$84,999
- \$85,000 - \$99,000
- \$100,000 or above

Multidimensional Scale of Perceived Social Support (MSPSS)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the “1” if you **Very Strongly Disagree**

Circle the “2” if you **Strongly Disagree**

Circle the “3” if you **Mildly Disagree**

Circle the “4” if you are **Neutral**

Circle the “5” if you **Mildly Agree**

Circle the “6” if you **Strongly Agree**

Circle the “7” if you **Very Strongly Agree**

- | | |
|---|---------------|
| 1. There is a special person who is around when I am in need. | 1 2 3 4 5 6 7 |
| 2. There is a special person with whom I can share joys and sorrows. | 1 2 3 4 5 6 7 |
| 3. My family really tries to help me. | 1 2 3 4 5 6 7 |
| 4. I get the emotional help & support I need from my family. | 1 2 3 4 5 6 7 |
| 5. I have a special person who is a real source of comfort to me. | 1 2 3 4 5 6 7 |
| 6. My friends really try to help me. | 1 2 3 4 5 6 7 |
| 7. I can count on my friends when things go wrong. | 1 2 3 4 5 6 7 |
| 8. I can talk about my problems with my family. | 1 2 3 4 5 6 7 |
| 9. I have friends with whom I can share my joys and sorrows. | 1 2 3 4 5 6 7 |
| 10. There is a special person in my life who cares about my feelings. | 1 2 3 4 5 6 7 |
| 11. My family is willing to help me make decisions. | 1 3 3 4 5 6 7 |
| 12. I can talk about my problems with my friends. | 1 2 3 4 5 6 7 |

Reference:

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30-41.

**The Social, Attitudinal, Familial, and Environmental (S.A.F.E.)
Acculturation Stress Scale**

Below are a number of statements that might be seen as stressful. For each statement that you have experienced, circle only one of the following numbers (1, 2, 3, 4, or 5), according to how stressful you find the situation.

If the statement does not apply to you, circle number 0: Have Not Experienced.

- 1 = NOT AT ALL STRESSFUL
- 2 = SOMEWHAT STRESSFUL
- 3 = MODERATELY STRESSFUL
- 4 = VERY STRESSFUL
- 5 = EXTREMELY STRESSFUL

1. Because I am different, I do not get enough credit for the work I do.
2. I often feel ignored by people who are supposed to assist me. .
3. I often feel that people actively try to stop me from advancing
4. Many people have stereotypes about my culture or ethnic group and treat me as if they are true.
5. In looking for a job, I sometimes feel that my ethnicity is a limitation.
6. I feel uncomfortable when others make jokes about or put down people of my ethnic background.
7. I have more barriers to overcome than most people.
8. Because of my ethnic background, I feel that others often exclude me from participating in their activities.
9. It bothers me when people pressure me to assimilate.
10. People look down upon me if I practice customs of my culture.
11. Loosening the ties with my country is difficult.
12. It bothers me that I cannot be with my family.
13. I often think about my cultural background.
14. It is hard to express to my friends how I really feel.
15. I have trouble understanding others when they speak.
16. I don't have any close friends.
17. People think I am unsociable when in fact I have trouble communicating in English.
18. I don't feel at home.
19. It bothers me that family members I am close to do not understand my new values.
20. Close family members and I have conflicting expectations about my future.
21. My family does not want me to move away but I would like to.

Reference:

Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences*, 9, 207–225.

Revised Dyadic Adjustment Scale (RDAS)

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occasionally Agree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Religious Matter						
2. Demonstration of Affection						
3. Making Major Decision						
4. Sex Relations						
5. Conventionality (correct or proper behavior)						
6. Career Decision						

	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
7. How often do you discuss or have you considered divorce, separation, or terminating your relationship?						
8. How often do you and your partner quarrel?						
9. Do you ever regret that you are married (or lived together)?						
10. How often do you and your spouse "get on each other's nerves"?						

	Everyday	Almost everyday	Occasionally	Rarely	Never
11. Do you and your spouse engage in outside interests together?					

How often would you say the following events occur between you and your mate?

	Always Agree	Almost Always Agree	Occasionally Agree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Religious Matter						
2. Demonstration of Affection						
3. Making Major Decision						

Reference:

Busby, D. M., Christensen, C., Crane, D. R., & Larson, J. H. (1995). A revision of the dyadic adjustment scale for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy*, 21(3), 289-308.

Crane, D. R., Middleton, K. C., & Bean, R. A. (2000). Establishing criterion scores for the Kansas Marital Satisfaction Scale and the Revised Dyadic Adjustment Scale. *American Journal of Family Therapy*, 28(1), 53-60.