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Social Relations and Health: Comparing "Invisible" Arab Americans to Blacks and Whites

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Abstract

This paper establishes preliminary benchmarks by comparing average values of social relations and health among Arab Americans, Blacks and Whites. Specifically, we expand traditional racial/ethnic categories to distinguish Arab Americans, historically and legally considered White. Data come from a unique random digit dial (RDD) sample of Arab Americans (N=96), Blacks (N=102) and Whites (N=100) from metro-Detroit collected in 2011, ranging in age from 19-89. Analysis of covariance (ANCOVA) was conducted to compare health, network structure, composition and support quality. Findings established preliminary benchmarks showing that Arab Americans reported more depressive symptoms (7.6) than Whites (5.2), but no difference in physical health. Arab Americans also reported more contact frequency (4.4) than Blacks (4.1) and Whites (4.0), yet lower proportions of networks comprised of the same ethnicity (77%) compared to Blacks (96%) and Whites (97%). Unpacking the White category to identify Arab Americans in a comparative analysis identified benchmarks to show how Arab American health and social relations are distinct from Blacks and Whites, yielding unique avenues for thinking about new ways to conceptualize how race and social relations impact health disparities.

Keywords

Social Relations; Ethnicity; Race; Health Disparities; Arab Americans; Blacks; Whites

INTRODUCTION

The study of social relations and health among non-majority ethnic groups may unveil an important avenue for understanding the nature and extent of health disparities. We expand traditional racial and ethnic categories to distinguish Arab Americans, historically and legally considered White (Samhan 1999). Arab Americans are increasingly recognized as a newly identified racial/ethnic group, distinct from Whites. Research now suggests that Arab Americans may have poorer health outcomes than non-Arab Whites in the U.S. including higher rates of diabetes and hypertension (Dallo et al. 2016), lower life expectancies (El-Sayed et al. 2011), and more functional limitations (Dallo, Booza, and Nguen 2015) than

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Whites. Furthermore, ethnographic studies suggest Arab Americans rely on family relations as a critical resource for accomplishing goals and succeeding in life endeavors (Aswad 1997; Beitin and Aprahamian 2014). In addition, it is increasingly evident that Arab Americans currently face growing discrimination (Cainkar 2009). We compare and contrast how social relations and health among the "invisible" Arab American minority compares to Whites and the more visible Black minority. Comparing the average values reported by Arab Americans on social relations and health to averages reported by Blacks and Whites will provide preliminary benchmarks that make inequalities visible. Including Whites, Blacks, and Arab Americans in the same analysis provides a unique new avenue for considering racial and ethnic diversity in health disparities.

The metro-Detroit area provides an important context for this investigation. Detroit is one of the most segregated cities in the U.S. when considering residential patterns between Blacks and Whites (Farley 2015). Further, metro-Detroit is home to the largest, most visible and growing concentration of Arab Americans in the United States (Brittingham and de La Cruz 2005). More than 30% percent of those living in Dearborn report Arab ancestry (de La Cruz and Brittingham 2003). Moreover, U.S. Census data and statistics from the Office of Immigration Statistics, Department of Homeland Security show that the population in Michigan who identified as having Arabic-speaking ancestry grew by more than 47% between 2000 and 2013, has almost tripled since the Census first measured ethnic origins in 1980, and is among the fastest growing Arab populations in the country (Arab American Institute Foundation 2015).

Arab Americans were initially drawn to metro-Detroit in the early 20th century because of job opportunities in the automobile factories (Ajrouch 2000). Longstanding rifts between the Arab American community in Dearborn and non-Arab residents include the city's rezoning efforts in the 1970s (Ringall 2000), and in 1985, Dearborn's mayoral candidate campaign promise was to "clean up" the Arab problem (Walbridge 1996). Arab Americans have organized politically since then to protect themselves from such actions, yet the aftermath following the War on Terror has brought new challenges to the Arab American community (Abraham, Howell and Shryock 2011). The September 11th terrorist attacks in 2001 and the events that followed have made Arab Americans more visible as an ethnic category, and simultaneously perceived in a more negative light.

We recognize that the concepts of race and ethnicity each emphasize different aspects of a group identity. Racial hierarchies, however, influence understandings about and expressions of ethnicity (Ford and Harawa 2010). While ideas of race shape individual experiences and interactions, definitions of race are subject to renegotiations, drawing simultaneously from present day and historical predicaments (Ajrouch and Kusow 2007). The case of Arab Americans presents a particularly timely and relevant case concerning the fluidity of racial categories. Arab Americans are legally defined as White, yet can select to be White or non-White (Abdulrahim 2008), and are perceived by members both inside and outside of that group as non-White (Ajrouch 2004; Ajrouch and Jamal 2007; Cainkar 2009). Given that Arab Americans have historically been considered White, it remains to be seen whether that racial identity would make them similar to Whites with regard to health and social relations.

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At the conceptual level, the significance of race and ethnicity to understanding social relations and health includes the legacy of race-based discrimination as well as ethnic-based cultural world-views. The literature has clearly established disparities in health between Blacks and Whites. A recent review shows that Blacks continue to exhibit shorter life expectancies, higher levels of illness and disease as well as poorer mental health outcomes than Whites (Williams and Mohammed 2009). Williams and Mohammed argue that much of these disparities have been attributed to the stress that arises from race-based discrimination. Moreover, social support, which is a multi-dimensional concept (Antonucci, Ajrouch and Birditt 2014), is now shown to manifest differently across racial and ethnic groups (Sheffler and Sachs-Ericsson 2015; Strom and Egede 2012; Uchino et al. 2016). Blacks report smaller social networks, more contact frequency and higher proportions of kin in their networks than Whites (Ajrouch, Antonucci and Janevic 2001). Such differences may reflect cultural world-views that arise from individuals being embedded within larger systems of norms that create, sustain and reinforce unfair treatment (Ajrouch 2015; Alegria et al 2011). The social relations and health of Whites often serve as benchmarks because Whites are the dominant racial group in the U.S, and are therefore thought to represent the norm, against which all others are compared.

Focusing on the diversity of White Americans by differentiating Arab Americans helps to deconstruct the assumed homogeneity of the White experience, and may yield new avenues for better specifying mechanisms and processes leading to health disparities (Daniels and Schulz 2006). This exercise is especially important given that the current socio-historical climate, U.S. foreign and domestic policy (Cainkar 2009; Marvasti 2005) as well as new attention to banning immigration from the Arab world (Abuelezam, El-Sayed and Galea 2017), has resulted in Arab Americans increasingly being viewed as distinct from White Americans. Negative stereotypes of Arab Americans are now arguably deeply rooted in mainstream culture. Negative images, attitudes and beliefs can serve as a key source of discriminatory behavior even among persons who may not be prejudiced (Williams & Mohammed, 2009). The racialization of Arab Americans incurs aspects of discrimination that would suggest Arab American social relations and health deviate from the White experience. The likelihood that Arab Americans are increasingly viewed and self-identify as a minority may lead to health and social relations being closer to patterns found among Blacks. A first step to advancing comparative research that includes Arab Americans involves identifying benchmarks that would make comparisons meaningful.

STUDY AIMS

Because Arab Americans are legally considered White, they have historically been a hard-to-reach population. We aim to establish preliminary benchmarks of social relations and health in metro-Detroit by describing network structure, composition, quality of social relations, as well as psychological and physical indicators of health among Arab Americans, Blacks and Whites. By identifying preliminary benchmarks, we seek to compare the average values reported by Arab Americans, Blacks and Whites on social relations and health. Though we recognize averages emphasize differences between groups while they mask within group variations, they nevertheless provide critical data for understanding diversity, and how that diversity may be taken into account for program and policy development. We

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hypothesize that Arab Americans, who occupy a precarious position compared to Whites (Samhan 1999; Viruell-Fuentes, Miranda and Abdulrahim 2012), will report health and social relations distinct from Whites and more similar to Blacks.

METHODS

Data are from the Detroit Area Study on Social Relations. The random digit dial (RDD) study sample (N=298) included Arab American (n=96), Black (n=102) and White (n=100) adults aged 18 years or older residing in three major counties of southeastern Michigan (Oakland, Wayne and Macomb) with over-sampling in census tracts with at least 10% of the population reporting Arab ancestry. The sample ranged in age from 19-89 years old. Forty-four percent of Arab Americans were women, and on average 38 years old (SD=14.7). Fifty-eight percent of Blacks were women and on average 57 years old (SD=15.8). Sixty percent of Whites were women and on average 62 years old (SD=15.5). 66% of Arab Americans and Blacks and 64% of Whites had more than a high school education.

Data were collected in 2011 via telephone interviews that lasted approximately one hour. The study achieved the following response rates for each racial/ethnic group: Arab American: 47%; Black: 75%; White: 78%.

Measures

Health—Three indicators of health were measured. *Self-rated health* was indicated by having participants reply to the question: “How would you rate your health at the present time?” and coded on a scale from 1=poor to 5=excellent. *Chronic illness* was a dichotomous measure coded as 1=yes, 0=no in response to the question, “Are you suffering from any health problems currently?” *Depressive symptoms* was measured using the short, 11-item version of the Center of Epidemiological Study-Depression inventory (Kohout et al. 1993). Participants were asked during the last week the extent to which they: felt bothered, did not feel like eating, etc. on a scale from 0=rarely/none of the time to 3=most/all of the time. Scores were summed so higher scores indicated greater depressive symptoms (0-33). Although counter arguments can be made, the social science literature has generally accepted the CES-D as a reliable measure of depressive symptoms for various age groups as well as in multiple race and ethnic groups (Perreira, Deeb-Sossa, Harris and Bollen 2005).

Network Structure—Social networks were measured using the hierarchical mapping technique (Antonucci 1986). Participants were shown a diagram of three concentric circles with the word “you” placed in the center, and asked to name people closest (inner circle), close (middle circle), and somewhat close (outer circle). Respondents were then asked a series of questions concerning characteristics about the ten people closest to “you” on the diagram. Data on named network members aged 13 and older were used for analyses.

Total network size represents a count of the total number of people the respondent included on his/her diagram.

Contact frequency was assessed by asking how often the participant had contact (e.g., in person, telephone, electronic) with up to 20 network members on a 5-point scale: irregularly,

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once a year or more often, once a month or more often, once a week or more often, or every day (1=irregularly, 5=every day). These scores were then averaged to create a mean composite of contact frequency.

Geographic proximity assessed whether each network member lives within an hour's drive (1=yes; 0=no). The sum of network members who lived within an hour's drive was divided by the total number of network members (up to 20) nominated (range 0-100%).

Network Composition—We identify three composition characteristics, proportion: *closest*, *family*, and *co-ethnic*. The number identified as so close that the participant 'could not imagine living life without them' were counted and then divided by the total number of network members nominated (up to 20) to create a percentage of people in the network named closest (range 0-100%, higher numbers indicate a higher percentage of close network members). The same procedure was used to assess proportion family (those reported to have a kin tie) and proportion co-ethnic (those named by the respondent as having the same race/ethnicity as the respondent).

Relationship Quality—Positive and negative quality was measured with the first three people nominated in the network.

Positive quality included instrumental and emotional dimensions. Participants stated the extent to which they agreed (1=disagree; 5=agree) with the following statements: I can share my very private feelings and concerns with _____; I feel my _____ would take care of me when I'm sick; My _____ always understands me. A mean composite of the three was created (alpha=.69).

Negative quality. Participants stated the extent to which they agreed (1=disagree; 5=agree) with the following statements: _____ gets on my nerves; _____ makes too many demands on me. A mean composite of the two responses was created (alpha=.67).

Covariates—*Age* was measured continuously (in years) based on birth date. *Gender* was assessed as 1= male; 2= female. *Education* was assessed by asking the participant to report the highest level attained and coded as 0=H.S. diploma/G.E.D. or less; 1=more than high school.

Analysis

Analyses of covariance (ANCOVA) controlling for age, gender and education were conducted to establish benchmarks. Post hoc analyses followed to ascertain which groups significantly differed from one another.

RESULTS

The paragraphs below describe and document (in Table 1) the health, structure, composition, and quality of social relations differences among Arab Americans, Blacks and Whites.

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Health

Arab Americans reported highest levels of depressive symptoms (7.6) compared to Blacks (6.6) and Whites (5.2). Post hoc tests revealed depressive symptoms were significantly different between Arab Americans and Whites, but there were no differences between Arab Americans and Blacks. Differences by race/ethnicity in self-rated health and presence of chronic illness were not statistically significant.

Network Structure

Arab Americans reported more frequent contact with their social network (4.4) than Blacks (4.1) or Whites (4.0). The three groups reported between 8.7 and 9.8 members in their network, and approximately three-quarters of their networks lived within one hour's drive. There were no statistically significant differences in network size or geographic proximity.

Network Composition

Composition differences were evident for two of the three indicators. Arab Americans reported networks with highest proportions in their inner circle (51%) and lowest proportion of co-ethnics, e.g., other Arab Americans (77%), in their network. Post hoc tests revealed Arab Americans were significantly different from Whites regarding proportion in the inner circle, but there were no differences between Arab Americans and Blacks. For proportion co-ethnic, Arab Americans were significantly different from both Blacks and Whites.

Support Quality

Arab Americans reported the highest levels of positive support, though post hoc analyses indicate that Arab Americans (4.4) are significantly different only from Blacks (4.1), not Whites (4.2) in their levels of positive support. There were no statistically different levels of negative quality.

DISCUSSION

A primary aim of this study was to identify benchmarks in social relations and health by comparing invisible Arab Americans to Blacks and Whites. We do so by comparing the three groups on widely accepted measures of health and social relations. Overall, Arab Americans differ from Whites in terms of psychological health, contact frequency, and the percentage of people in the network named closest. Arab Americans differ from both Whites and Blacks with regard to co-ethnic social network composition, and differ from Blacks in terms of positive support quality. The discussion that follows includes suggestions as to how our findings can advance the discipline and guide future research.

Health

Higher levels of depressive symptoms for Arab Americans have been documented in previous studies (Abu-Ras and Abu-Bader 2009; Amer and Hovey 2012). Our findings show that depressive symptoms are higher compared to Whites, but not Blacks. Recent literature has shown that some minority groups adopt poor health behaviors such as unhealthy diet, lack of exercise and increased substance abuse, which while helping to alleviate immediate

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stress, eventually leads to more physical ailments and lower life expectancies (Jackson, Knight, and Rafferty 2010). The present findings suggest that Arab Americans may be similarly at-risk for poor health behaviors that minorities often adopt as a coping mechanism to ameliorate gloom and stress. This risk is especially of concern given the stigma associated with use of mental health services among Arab Americans (Abu-Ras 2015). Future research should consider examining links between stress and depressive symptoms among Arab Americans, as well as measure health behaviors to substantiate whether the incidence of mental health outcomes that mirror other minorities yield similar coping behaviors. Interestingly, statistically significant differences by race and ethnicity in self-rated health and the presence of chronic illness did not emerge. It may be that depressive symptomology is evident in advance of and a precursor to physical illness.

The generalized physical health measures used in the present study are widely accepted in the field, but it should be noted that these measures are more global, and hence may mask specific disparities. For example, the *presence* of chronic disease may not be different across race and ethnicity, though the type of chronic disease may vary. Arab Americans and Blacks, for example, report disproportionate levels of diabetes and other life threatening diseases (American Diabetes Association 2017; El-Sayed et al. 2011; Jaber, Al-Kassab, and Dallo 2014; Williams and Mohammed 2009). Future studies would benefit from comparing prevalence of specific types of physical health indicators.

Social Relations

Contact frequency differences imply that for Arab Americans, networks have a higher level of accessibility or conversely, burden. The most distinct difference in composition was proportion of network members with the same race/ethnicity as the respondent. Lower proportion of co-ethnics among Arab Americans signifies they are not as segregated as Whites or Blacks, indicating integration into wider society. At the same time, it also suggests they lack the protective effect co-ethnic ties seem to exert on health (Pearson and Geronimus 2011). Arab Americans and Blacks report similar proportions of network members identified as close, implying the importance of intimate relations to protect against stigma and discrimination. Support quality findings suggest Arab Americans have more ambivalence in their relations than Blacks given higher reports of positive support but similar levels of negative support quality, which may obscure the health benefits of support (Holt-Lunstad et al. 2007).

These preliminary data highlight the importance of recognizing fundamental differences and similarities in the social relations and health of individuals from different ethnic and racial groups (Mezuk et al. 2013). Arab Americans have long been considered by professionals in the health care field to be a population-at-risk for mental illness and disease (Jamil et al. 2002; Laffrey et al. 1989; Lipson, Reizian, and Meleis 1987; Nasser-McMillan, Ajrouch and Hakim-Larson, 2014). Comparative analyses shed light on the extent to which Arab American health differs from, and is similar to Blacks and Whites. It is well documented that preferences for, as well as the characteristics and benefits of, social support vary across racial/ethnic groups (Sheffler and Sachs-Ericsson 2015; Strom and Egede 2012; Uchino et al. 2016). Social ties represent a key resource in need of critical appraisal, especially

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concerning links to health including: health care, health behavior and health interventions, each of which have significant implications for health disparities.

Conclusions and Future Directions

Living in a socio-historical period where Arab Americans are emerging as a distinct and separate racial/ethnic group, often perceived through a negative lens due to recent world events (Cainkar 2009; Marvasti 2005; Salari 2002), their health and social relations are of paramount significance. With respect to Arab Americans we live in an historical period marked by fast increasing marginalization. Social science can make an important contribution to our understanding of the form and function of health and social relations by benchmarking (e.g., documenting characteristics in comparative perspective) these differences and then advancing our understanding of these phenomenon by conducting in-depth studies examining their causes, meaning and consequent effects. Future research that focuses on the Arab American case may also benefit from extending comparisons to other recent immigrant groups. For instance, studies show substantial differences in health and well-being depending on citizenship status (Gubernskaya, Bean, and Van Hook 2013; Read, Amick and Donato 2005). The invisibility of Arab Americans raises questions about the extent to which such social factors impact health in ways similar to other immigrants. Furthermore, research on minority groups show that strong ethnic and/or racial identity can lead to feelings of mastery and empowerment, even in the face of discrimination (Lamont 2009; Sellers et al. 2003). More research is needed to investigate whether such effects are also present in the Arab American experience. As Elder (1999) documented in his study of the Great Depression, historical experiences can have lasting effects on the individual, their relationships and their health. This is especially relevant for marginalized populations. Making Arab Americans visible within the social sciences is a unique opportunity and represents an important step toward advancing research on the social determinants of health inequalities.

References

Abdulrahim, Sawsan. ‘White’ or ‘Other’: Racial Subjectivity and the Arab Immigrant Experience in the United States. In: Jamal, A, Naber, N, editorsRace and Arab Americans Before and After 9/11: From Invisible Citizens to Visible Subjects. New York: Syracuse University Press; 2008. 131–146.

Nabeel, Abraham; Howell, Sally; Shryock, Andrew, editorsArab Detroit 9/11: Life in the terror decade. Detroit, MI: Wayne State University Press; 2014.

Abuelezam, Nadia N; El-Sayed, Abdulrahman M; Galea, Sondra. 2017Arab American Health in a Racially Charged US. American Journal of Preventive Medicine.

Abu-Ras, Wahiba. Understanding Risk and Protective Factors. In: Amer, MM, Awad, GH, editorsHandbook of Arab American Psychology. New York: Routledge; 2015. 175–187.

Abu-Ras, Wahiba; Solomon, H Abu-Bader. 2009; Risk Factors for Depression and Posttraumatic Stress Disorder (PTSD): The case of Arab and Muslim Americans post-9/11. Journal of Immigrant & Refugee Studies. 7(4):393–418.

Ajrouch, Kristine J. 2000; Place, Age, and Culture: Community living and ethnic identity among Lebanese American adolescents. Small Group Research. 31(4):447–69.

Ajrouch, Kristine J. 2004; Gender, Race, and Symbolic Boundaries: Contested Spaces of Identity among Arab-American Adolescents. Sociological Perspectives. 47(4):371–91. DOI: 10.1525/sop.2004.47.4.371

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Ajrouch, Kristine J. 2015; Toward a Vigorous Incorporation of Culture in the Study of Human Development. Research in Human Development. 12(3-4):202–08.

Ajrouch, Kristine J; Amaney, Jamal. 2007; Assimilating to a White Identity: The Case of Arab Americans. International Migration Review. 41(4):860–79. DOI: 10.1111/j.1747-7379.2007.00103.x

Ajrouch, Kristine J; Abdi, M Kusow. 2007; Racial and Religious Contexts: Situational Identities among Lebanese and Somali Muslim Immigrants. Ethnic and Racial Studies. 30(1):72–94. DOI: 10.1080/01419870601006553

Ajrouch, Kristine J; Toni, C Antonucci; Mary, R Janevic. 2001; Social Networks among Blacks and Whites: The interaction between race and age. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 56(2):S112–18.

Alegria, Margarita; Pescosolido, Bernice A, Williams, Sandra; Canino, Gloria. Culture, Race/Ethnicity and Disparities: Fleshing out the socio-cultural framework for health services disparities. In: Pescosolido, BA, Martin, JK, McLeod, JD, Rogers, A, editorsHandbook of the sociology of health, illness, and healing: A blueprint for the 21st century. New York, NY: Springer; 2011. 363–392.

Amer, Mona M; Joseph, D Hovey. 2012; Anxiety and Depression in a Post-September 11 Sample of Arabs in the USA. Social Psychiatry and Psychiatric Epidemiology. 47(3):409–18. [PubMed: 21287143]

American Diabetes Association. 2017; Promoting Health and Reducing Disparities in Populations. Diabetes Care. 40(Supplement 1):S6–10. [PubMed: 27979888]

Antonucci, Toni C. 1986; Hierarchical Mapping Technique. Generations. 10:10–12.

Antonucci, Toni C; Kristine, J Ajrouch; Kira, S Birditt. 2014; The Convoy Model: Explaining social relations from a multidisciplinary perspective. The Gerontologist. 54(1):82–92. [PubMed: 24142914]

Arab American Institute Foundation. Michigan. Washington DC: Arab American Foundation Institute; 2015. Retrieved June 10, 2016 from https://d3n8a8pro7vhmx.cloudfront.net/aai/pages/7706/attachments/original/1461267434/Michigan_2015.pdf?1461267434

Aswad, Barbara. Arab-American Families. In: DeGenova, MK, editorFamilies in Cultural Context. New York, NY: McMillan Press; 1997. 213–17.

Beitin, Ben K, Aprahamian, Mireille. Family Values and Traditions. In: Nassar-McMillan, SC, Ajrouch, KJ, Hakim-Larson, J, editorsBiopsychosocial Perspectives on Arab Americans: Culture, Development, and Health. Boston, MA: Springer US; 2014. 67–88. Retrieved ()

Brittingham, Angela; Patricia, G, De la, Cruz. We the People of Arab Ancestry in the United States. Washington, DC: US Census Bureau; 2005.

Cainkar, Louise A. Homeland Insecurity: The Arab American and Muslim American Experience After 9/11. New York, NY: Russell Sage Foundation; 2009.

Dallo, Florence J; Ruterbusch, Julie J; Kirma, Joeseph D; Schwartz, Kendra; Fakhouri, Monty. 2016; A Health Profile of Arab Americans in Michigan: A Novel Approach to Using a Hospital Administrative Database. Journal of Immigrant and Minority Health. 18(6):1449–54. [PubMed: 26472547]

Dallo, Florence J; Booza, Jason; Nguyen, Norma D. 2015; Functional Limitations and Nativity Status among Older Arab, Asian, Black, Hispanic, and White Americans. Journal of Immigrant and Minority Health. 17(2):535–42. DOI: 10.1007/s10903-013-9943-0 [PubMed: 24165988]

Daniels, Jessie; Schulz, Amy J. Constructing Whiteness in Health Disparities Research. In: Schulz, AJ, Mullings, L, editorsHealth and illness at the intersections of gender, race and class. San Francisco, CA: Jossey-Bass Publishing; 2006. 89–127.

de la Cruz, Patricia G, Brittingham, Angela. The Arab population 2000 US Department of Commerce. Washington, DC: Economics and Statistics Administration; 2003.

Elder, Glen H. Children of the Great Depression: Social Change in Life Experience. Boulder, CO: Westview Press; 1999.

El-Sayed, Abdulrahman M; Tracy, Melissa; Scarborough, Peter; Galea, Sandro. 2011; Ethnic Inequalities in Mortality: The Case of Arab-Americans. PLoS ONE. 6(12)

Farley, Reynolds. 2015; The Bankruptcy of Detroit: What Role Did Race Play? City & Community. 14(2):118–37.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Ford, Chandra L; Nina, T Harawa. 2010; A New Conceptualization of Ethnicity for Social Epidemiologic and Health Equity Research. Social Science and Medicine. 71(2):251–58. DOI: 10.1016/j.socscimed.2010.04.008 [PubMed: 20488602]

Gubernskaya, Zoya; Bean, Frank D; Van Hook, Jennifer. 2013; (Un) Healthy Immigrant Citizens: Naturalization and activity limitations in older age. Journal of Health and Social Behavior. 54(4): 427–443. [PubMed: 24311754]

Holt-Lunstad, Julianne; Uchino, Bert N; Smith, Timothy W; Angela, Hicks. 2007; On the Importance of Relationship Quality: The Impact of Ambivalence in Friendships on Cardiovascular Functioning. Annals of Behavioral Medicine. 33(3):278–90. [PubMed: 17600455]

Jackson, James S; Knight, Katherine M; Rafferty, Jane A. 2010; Race and Unhealthy Behaviors: Chronic Stress, the HPA Axis, and Physical and Mental Health Disparities over the Life Course. American Journal of Public Health. 100(5):933–39. [PubMed: 19846689]

Jaber, Linda; Al-Kassab, Abdul S, Dallo, Flora J. Diabetes Mellitus Among Arab Americans. In: Nasser, SC, Ajrouch, KJ, Hakim-Larson, J, editorsBiopsychosocial Perspectives on Arab Americans. New York: Springer US; 2014. 307–24.

Jamil, Hikmet; Hakim-Larson, Julie; Farrag, Mohamed; Kafaji, Talib; Duqum, Issa; Jamil, Laith H. 2002; A Retrospective Study of Arab American Mental Health Clients: Trauma and the Iraqi Refugees. The American Journal of Orthopsychiatry. 72(3):355–61. [PubMed: 15792047]

Kohout, Frank J; Berkman, Lisa F; Evans, Denis A; Cornoi-Huntley, Joan. 1993; Two Shorter Forms of the CES-D Depression Symptoms Index. Journal of Aging and Health. 5(2):179–93. DOI: 10.1177/089826439300500202 [PubMed: 10125443]

Laffrey, Shirley C; Meleis, Afaf I; Lipson, Juliene G; Solomon, Margot; Omidian, Patricia A. 1989; Assessing Arab-American Health Care Needs. Social Science & Medicine. 29(7):877–83. DOI: 10.1016/0277-9536(89)90087-7 [PubMed: 2799430]

Lamont, Michèle. Responses to Racism, Health, and Social Inclusion as a Dimension of Successful Societies. In: Hall, Peter A, Lamont, Michèle, editorsSuccessful Societies: How Institutions and Culture Affect Health. Cambridge, UK and New York: Cambridge University Press; 2009. 151–168.

Lipson, Juliene G; Reizian, Alice E; Meleis, Afaf I. 1987; Arab-American Patients: A Medical Record Review. Social Science & Medicine. 24(2):101–07. DOI: 10.1016/0277-9536(87)90242-5 [PubMed: 3563553]

Marvasti, Amir. 2005; Being Middle Eastern American: Identity Negotiation in the Context of the War on Terror. Symbolic Interaction. 28(4):525–47.

Mezuk, Briana; Abdou, Cleopatra M; Hudson, Darrell; Kershaw, Kiarri N; Rafferty, Jane A; Lee, Hedwig; Jackson, James S. 2013; 'White Box' Epidemiology and the Social Neuroscience of Health Behaviors the Environmental Affordances Model. Society and Mental Health. 3(2):79–95. DOI: 10.1177/2156869313480892

Nassar-McMillan, Sylvia C, Ajrouch, Kristine J, Hakim-Larson, Julie. Biopsychosocial Perspectives on Arab Americans: Culture, Development, and Health. New York, NY: Springer Publications; 2014.

Perreira, Krista M; Deeb-Sossa, Natalia; Harris, Kathleen M; Kenneth, Bollen. 2005; What Are We Measuring? An evaluation of the CES-D across race/ethnicity and immigrant generation. Social Forces. 83(4):1567–1601.

Pearson, Jay A; Arline, T Geronimus. 2011; Race/ethnicity, Socioeconomic Characteristics, Coethnic Social Ties, and Health: Evidence from the National Jewish Population Survey. American Journal of Public Health. 101(7):1314–21. [PubMed: 21164093]

Read, Jen'nan Ghazal; Amick, Benjamin; Donato, Katharine M. 2005; Arab Immigrants: a new case for ethnicity and health? Social Science & Medicine. 61(1):77–82. [PubMed: 15847963]

Rignall, Karen. Building the Infrastructure of Arab American Identity in Detroit. In: Abraham, N, Shyrock, A, editorsArab Detroit: from margin to mainstream. Detroit, MI: Wayne State University Press; 2000. 49–59.

Salari, Sonia. 2002; Invisible in Aging Research Arab Americans, Middle Eastern Immigrants, and Muslims in the United States. The Gerontologist. 42(5):580–88. DOI: 10.1093/geront/42.5.580. [PubMed: 12351793]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Samhan, Helen Hatab. Not Quite White: Race Classification and the Arab-American Experience. In: Suleiman, MW, editorArabs in America: Building a New Future. Philadelphia, PA: Temple University Press; 1999. 209–26.

Sellers, Robert M; Caldwell, Cleopatra H; Schmeelk-Cone, Karen H; Marc, A Zimmerman. 2003; Racial identity, racial discrimination, perceived stress, and psychological distress among African American young adults. Journal of Health and Social Behavior. 44(3):302–317. [PubMed: 14582310]

Sheffler, Julia; Natalie, Sachs-Ericsson. 2015; Racial differences in the effect of stress on health and the moderating role of perceived social support. Journal of Aging and Health. 28(8):1362–81.

Strom, Joni L; Leonard, E Egede. 2012; The Impact of Social Support on Outcomes in Adult Patients with Type 2 Diabetes: A Systematic Review. Current Diabetes Reports. 12(6):769–81. [PubMed: 22949135]

Uchino, Bert N; Ruiz, John M; Smith, Timothy W; Smyth, Joshua M; Taylor, Daniel J; Allison, Matthew; Ahn, Chul. 2016; Ethnic/racial differences in the association between social support and levels of C-reactive proteins in the North Texas Heart Study. Psychophysiology. 53(1):64–70. [PubMed: 26681618]

Viruell-Fuentes, Edna A; Patricia, Y Miranda; Sawsan, Abdulrahim. 2012; More than Culture: Structural racism, intersectionality theory, and immigrant health. Social Science & Medicine. 75(12):2099–106. [PubMed: 22386617]

Walbridge, Linda S. Without Forgetting the Imam: Lebanese Shi'ism in an American community. Detroit, MI: Wayne State University Press; 1996.

Williams, David R; Selina, A Mohammed. 2009; Discrimination and Racial Disparities in Health: Evidence and needed research. Journal of Behavioral Medicine. 32(1):20–47. DOI: 10.1007/s10865-008-9185-0 [PubMed: 19030981]

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Table 1

Analysis of Covariance on Social Relations by Race/Ethnicity

	Arab American (n=96)	Black (n=102)	White (n=100)	F/Chi^2
	M (SE)	M (SE)	M (SE)	
Health				
Self-Rated Health	3.9 (.10)	3.7 (.09)	4.0 (.09)	n.s.
Chronic Illness Present	.32 (.06)	.49 (.06)	.52 (.06)	n.s.
Depressive Symptoms	7.6 (.63)^a	6.6 (.55)	5.2 (.56)^a	3.67*
Structure				
Size	8.7 (.59)	8.8 (.51)	9.8 (.53)	n.s.
Contact Frequency	4.4 (.06)^a	4.1 (.05)^a	4.0 (.05)^a	8.49***
Geographic Proximity	77 (2.9)	79 (2.5)	79 (2.6)	n.s.
Composition				
% Closest	51 (2.9)^a	48 (2.5)	41 (2.6)^a	3.53*
% Family	81 (3.2)	75 (2.8)	71 (2.9)	n.s.
% Co-Ethnic	77 (2.8)^a	96 (2.5)^a	97 (2.6)^a	15.04***
Support Quality				
Positive	4.4 (.07)^a	4.1 (.06)	4.2 (.07)^a	5.91**
Negative	2.3 (.10)	2.3 (.09)	2.1 (.09)	n.s.

Adjusted means reported;

* p<.05,

** p<.01,

*** p<.001

^{a} indicates post-hoc differences between Arab Americans and others