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Keywords

Older Hispanics, Activities, Social engagement, Health, Depression

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Patterns of Social Activity Engagement among Older Hispanics and their Relationship to Socio-demographic and Health Variables

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Abstract

The purpose of this study was to examine patterns of social activity engagement in a sample of older Hispanics (Puerto Rican, Dominican and Other Hispanic) and determine whether these differed significantly from the comparison Non-Hispanic White group. This paper also analyzes how ethnicity, socio-demographic and health variables (health problems and depression) relate to each of the activity engagement patterns. The factor analysis of social activities from the Norbeck Social Support Questionnaire yielded three factors, which describe engagement in social activities as follows: Children and Relatives Active, Friends and Activities Active and Senior Services Active. The results from the regression analyses show that Hispanic ethnicity and education are positively associated with being more engaged in activities with children and relatives, whereas being male and especially male living alone is inversely associated with this pattern. In addition, being Friends and Activities active shows positive association with education, the subject living alone and experiencing more language inclusion; but it is inversely associated with depression, age, being male and number of health problems. Finally, engaging in activities offered by senior services is only significantly associated with increased age and the number of health problems. The interpretations of these findings, directions for future research and implications for activity professionals/recreation therapists are also discussed.

Keywords: Older Hispanics, Activities, Social Engagement, Health, Depression

INTRODUCTION

Engagement in various social activities, both formally structured and informal, can serve as a conduit for creating a full experience for the senior from which valuable forms of social support may be derived (Adday et al., 2006; Glass et al., 1999; Kirk, Waldrop, & Rittner 2001; Lennartsson & Silverstein, 2001). In fact, the literature on aging and health has documented the existence of a positive association between social engagement and a range of measures of well being, such as physical and mental health, cognitive functioning and perceived quality of life (Martinez, I. L., et al. 2009; Seeman, 2000). For example, one study found that perceived friendliness of staff and clients in congregate meals was associated with lower depression symptoms and perceived quality of life among residents in assisted living facilities, which illustrates how even formal assistance services, such as meals programs and others, can be conducive to quality social contact (Sook Park, 2009). Furthermore, activities that promote social integration are usually protective against depression, especially if these include the presence of primary ties with a spouse, children, and/or supportive significant others (Seeman, 2000). An inverse association has also been found between social engagement and depression. Among newly admitted nursing home clients depression was independently associated with low social engagement, further suggesting the existence of a reciprocal relationship between health and social engagement (Mendes de Leon, Glass, & Berkman, 2003).

Although most studies have highlighted the positive effects of activities on well being, it is important to be cautious about making generalizations and consider differences that may stem from social location, personal resources and the nature and quality of social contacts. Some seniors receive greater benefits from social engagement than others. For instance, findings from at least one longitudinal study reveal that a negative association between symptoms of depression and social activity engagement is significant, but only among those not depressed at baseline, as measured by the CES-D scale (Glass et al., 2006). Moreover, gender issues are likely to intervene in this relationship. The salutary effects of engagement from social network participation tend to be higher for men than for women. Social connections with people in the elder's network can increase symptoms of psychological distress among women with low resources, especially when connections entail role strain derived from responsibility to provide social support to others (Kawachi, 2006). In our current cohort study on aging Puerto Ricans in Boston we have found that involvement in social activities and social networks appears to be more protective of psychological well being for Puerto Rican men than for women—who are often expected to provide care for people in their networks (Falcon, Todorova, & Tucker, 2009).

In this study, we examine patterns of social engagement among Hispanic elders and how they relate to health and socio-demographic variables. Most studies looking at

social engagement among Hispanic elders have used a medical paradigm similar to that often used by researchers on social activities and aging. In this context, researchers have examined the role of social networks as a predictor of a health outcome(s) or health seeking behavior. The results of these investigations show that social engagement and supportive social networks help older Hispanics to seek the help they need and to maintain a healthier lifestyle (Angel & Angel, 2005; Baxter, She'lerly, et al., 1998; Dean & Wood, 1990; Freidemberg, 1998). For example, participation in religious activities has been shown to play a role in delaying mortality among Mexican-Americans (Angel & Angel, 2005) and possessing diverse and good quality social networks facilitate access to health care among Latinos/as in New York (Freidemberg, 1998). Still, the broader sociological issue of patterns of engagement in social activities, understood as a framework for interactions among Hispanic elders, has not been adequately examined. The present study aims to fill the existing knowledge gap by bringing light to bear on the ways in which Hispanic elders are socially connected through their participation in different social activities. This study examines whether patterns of social activities participation differ across three different Hispanic sub-groups (Puerto Ricans, Dominicans, and Other Hispanics), and from the comparison group of Non-Hispanic Whites. Puerto Ricans represent the largest and oldest Hispanic group in Massachusetts and the Northeastern United States. Having US citizenship since 1917, Puerto Ricans show a particular pattern of migration and settlement distinct from other immigrant Hispanic groups, that includes immigration, out-migration

and circular migration (Baer, 1992); because of this, Puerto Ricans have been also characterized as a “commuter nation” (Acosta-Belen & Santiago, 2006). Historically, Puerto Ricans have concentrated in the Northeast, especially in major cities such as New York, Chicago and Philadelphia. Since the 1960s, Puerto Ricans have resided in Massachusetts in significant numbers and have subsequently been growing at a relatively fast pace. This Hispanic population growth has also been accompanied by an increase in poverty rates (Melendez, 1993). More recent arrivals to the state are Dominican elders, who comprise the second largest Hispanic group in Massachusetts. Very little is known about this growing aging Hispanic group, which along with Puerto Ricans comprises one of the poorest and most disadvantaged populations in the U.S. (Falcon, Tucker, & Bermudez, 1997; Falcon & Tucker, 2000). For the past three decades, Puerto Ricans, Dominicans and other Hispanics from the New York City area began dispersing to other areas of the country, with Massachusetts being one of their main chosen destinations of secondary settlement (Melendez, 1993).

Based on prior research studies and our own fieldwork, we anticipate the following: first, that older Hispanics in Massachusetts will be less integrated in a variety of social activities than same-neighborhood Non-Hispanic Whites, largely because of their lower levels of education and acculturation, and in general because Puerto Ricans and other Hispanic communities in Massachusetts are generally recent arrivals to the state, and overrepresented among the poor. These factors, we believe,

compound their levels of isolation and inactivity. Second, of special interest to this study will also be to discern whether a “Hispanic familismo” pattern—or a more pronounced family orientation among Hispanics—emerges in our Massachusetts sample, in order to either corroborate or refute earlier studies. Third, factors such as gender, age, socioeconomic status, ethnicity and health will be considered in relation to each pattern of social activity participation, in order to offer a more comprehensive profile of the emergent social activity patterns. Lastly, we will conclude by discussing implications of our findings for activity practitioners and organizations working with aging Hispanic populations.

LITERATURE REVIEW

Scholarship on Hispanic elders has underscored the importance of family orientation or *familismo* as a distinctive ethnic trait that is assumed to be beneficial to elders (Ruiz, 2007; Shwartz, 2007; Valle, & Cook-Gait, 1998). However, fewer research efforts have been directed at empirically testing this hypothesis, especially the question of whether contextual factors and other factors intervene in the relationship between familismo and well being (Losada et al., 2008).

The concept of familism has typically been used to describe an idiosyncratic family orientation among Hispanic groups, which encompasses more frequent contact with family members and beliefs of filial piety and deference towards the elders. It is argued that Hispanics, in general, tend to have stronger family attachments than

Non-Hispanic Whites, greater interaction with family members and that they also experience more satisfaction in familial relationships (Applewhite, 1989; Cortes, 1995; Montoro Rodriguez, & Koloski 1998). A question that is in itself of research interest is whether “familismo” is truly distinctive of Hispanics or else a construct that can be observed in other cultural groups. In a recent study, Schwartz (2007) set out to answer this very question by looking at whether familism differed between Hispanics and Non-Hispanics (White and Black American). He found that the factor structure of *familism*, as measured by the Attitudinal Family Scale, did not significantly differ between Hispanics and Non-Hispanics; however, familism endorsement was more frequently found in Hispanics (followed by Blacks) than among Non-Hispanic Whites (Schwartz, 2007). Nonetheless, scholars wonder how long this strong family orientation, or *familismo*³, will last as Hispanics become more acculturated into the more individualistic mainstream American culture. Among Puerto Ricans in Cleveland, acculturation was found to be associated with positive relationships with family obligations and support from relatives, but negative –though not statistically significant- relationship with family as referents. Indeed, demographic and background variables do not appear to affect the level of familism (Montoro Rodriguez & Koloski, 1998).

Older Hispanics are more likely to support co-residence with adult children than Non-Hispanic Whites, and Hispanic children are often expected to take their older

³ Familismo is a belief system that implies feelings of loyalty, reciprocity and solidarity, and the feeling that the family is an extension of one’s self (see Cortes, Dharma 1995: 249)

parents into their own home (Burr & Mutchler, 1999). However, there has also been an increase in the likelihood of independent living among unmarried elderly Hispanic females (Burr & Mutchler, 1992). Moreover, living arrangements may also vary across Hispanic subgroups. For example, Central and South American older men and older Puerto Rican women are the most likely to live alone (Zsembik, 1993). In general, Hispanic elderly tend to live in proximity to family members, and having on average a larger number of children increases the possibility of the frequency of interaction (Valle & Cook-Gait, 1998). Earlier social science studies have shown that older Hispanic Americans hold important roles in family interaction and combine the traditional patterns of roles and responsibilities with the adaptations due to their American experiences. In this respect, some of the traditional characteristics of Hispanic families are: strong family ties, more probability of providing economic and social support to extended family members, an important proportion of relatives residing in the same neighborhood or area, provision of care for ill or dependent family members, strong work orientation, and emphasis on respect for the elderly (Cuellar, 1990).

The traditional Hispanic familial structure includes at least three generations. The grandparents often play the role of passing on the traditions, the heritage of the culture and even teaching Spanish language skills. They often provide health care for their grandchildren, and when necessary they participate in the family decision making processes (Valle & Cook-Gait, 1998). Furthermore, in the last two

decades, the role of grandparent, especially grandmother, is often expanding to include more motherly duties, as seen in the increasing number of Hispanic grandmothers who are becoming the main caregivers of grandchildren. This growth of “skip generation households” is more generally associated with the crack cocaine epidemic in urban areas and related social problems (Roe et al., 1996).

The literature on Hispanic elders has also emphasized the importance of the larger social network, beyond the nuclear family. In point of fact, the extended kin network frequently includes non-consanguine relationships. Hispanics and Blacks are more likely than Whites to cultivate fictive kinship and community relationships as a way of dealing with discrimination (Calasanti & Slevin, 2001). Moreover, Hispanics develop these “fictive” kin relationships, both in the US and in their respective countries of origin. *Compadres* or *comadres* are co-parents, typically godparents or extremely close friends, that can include both blood and non blood kin, and who are expected to exchange reciprocal help. The *padrinos* or *madrinas* (godfathers and godmothers) are also very significant in relation to *ahijados* or *ahijadas* (godchildren) (Sotomayor, 1989). Much less is known about the role of friends and neighbors as a natural support system. A few decades ago, Cantor (1979) portended that they had been an overlooked resource for Hispanic elders, and this continues to be the case today, which suggests that research on aging Hispanics may need to move beyond the “familismo” paradigm in order to better understand the role of other natural support systems on well being. Baxter et al. (1998) in a

study comparing a group of Hispanics and Whites found that the number of close friends and relatives, the amount of home visiting and participation in outside group activities was associated with a markedly higher perceived quality of life in both ethnic groups, although this was even stronger for Non Hispanic Whites (Baxter et al., 1998).

A number of studies have looked at the use of formal social services and involvement in formal social activities among Hispanic elders—including activities directed at increasing senior citizen social participation. Linking the connection between integration in formal and formal social services, Judith Freidenberg (1998) studied the relationship between social networks and health care among a group of elderly Latinos in East Harlem, New York. She found that a strong social network predicts a more frequent utilization of the health care system and greater likelihood of addressing their medical needs (Freidemberg, 1998). In general, Hispanic elders have been found to be more likely to rely on informal support services (Dietz, Robert, & Roy, 1998) and frail Hispanic elderly are also more likely to use community- based services than Whites (Mui & Burnette, 1994). But among Hispanic groups, there are significant differences in the use of services by national origin. Research in this area has drawn differences among several Hispanic subgroups: Mexican, Cuban and Puerto Ricans (Tran & Dhooper, 1996); Cuban, Mexican and Other Hispanic (Tran, Dhooper & McInnis-Dittrich, 1997); Cuban, Mexican, Puerto Rican and Other Hispanic (Dietz, Robert & Roy, 1998). One of

the main predictors of utilization of social services is the level of needs of the population. Cubans tend to report lower rates of needs than both Puerto Ricans and Mexicans, who show similar reported needs (Tran and Dhipper, 1996).

Overall, with respect to the usage of formal services, there is a high degree of homogeneity among Hispanic elders, but differences arise in the level of use of these services. Ethnicity seems to have a direct effect on utilization of in-home and federal entitlement programs. Older Puerto Ricans and Cubans are more integrated into the use of services, whereas Mexican and “Other Hispanics” appear less integrated—a phenomenon that can be partly attributed to differences in legal status across the groups. However, the use of the senior center has been found to be similar for all Hispanic groups (Dietz, Robert, & Roy, 1998). With respect to Hispanics in Massachusetts, an exploration of existing needs among Puerto Rican low -income residents of a small community found that seniors reported problems with transportation, social and recreational activities and sense of safety in their community. Puerto Rican elders also expressed several barriers to the use of existing services, namely, lack of knowledge of existing services, transportation and language limitations, and lack of bilingual staff (Rosenthal Gelman, 2002). Undoubtedly, the perceived level of safety, as well as recreational and other services within their neighborhood limits—including the existence of activities targeting Hispanic populations— are likely to influence the types and levels of activity involvement.

Overall, the literature on social engagement (both formal and informal) among older Hispanics has highlighted the significance of the family and kin network as a source of support and social interaction. Although there are different levels of integration into the formal network of services offered to seniors by Hispanic subgroup, the use of senior centers as a formal site of socialization appears to be similar to that of non-Hispanic populations. The existing literature has also identified problems with linking Hispanic seniors to transportation services, which could detrimentally affect their ability to engage in different social activities outside of their immediate neighborhood. Finally, very limited empirical information is available on socialization with friends and neighborhoods, or any social networks outside of the family among older Hispanics.

Theoretical Framework

This paper relies primarily on *Activity theory* (Havighurst 1968; Rosow 1967) and secondarily on *continuity theory* to help shed light on the relationship between involvement in different patterns of social activities in our sample of Hispanics in Massachusetts and its association with socio-demographic variables and health variables. Activity theory poses that unless constrained by health problems or disabilities older people have the same psychological needs that middle age people have. The decline of social interaction is a result of the withdrawal of society from older people, but most elders do not really wish to do this. Indeed, retirees are

expected to find alternative activities to work and the bereaved are expected to find new friends and intimates. Furthermore, healthy people who keep being active have higher life satisfaction than people who are inactive and in poor health (Atchley, 1997). Social activities are important to a person's overall quality of life. Family, friends, and social support systems provide: interdependent relationships; opportunities for intimacy; and a sense of belonging to small and larger social units among other things. Moreover, Krause and Shaw (2000) argue that it is not only receiving, but also giving social support, that enhances higher levels of self-esteem and psychological well being; although this beneficiary effect might be mediated by the elder's socio-economic status. In fact, it provides greater salutary effects for those in the upper socioeconomic strata, because these elders tend to have access to better means of helping others (Krause & Shaw, 2000).

Continuity Theory will further help us examine patterns of social activity engagement in later life. This theory posits that people tend to maintain different behaviors and skills to adapt and act over time. Thus, people make decisions about how to act based on prior experiences, and these experiences are simultaneously shaped by social and cultural contexts. Indeed, an important aspect of this theory refers to the creation and maintenance of one's social support network in adulthood, and social activities provide a context for human relationships to develop (Atchley, 1997). A case in point is Dorothy Jerome's (1992) study of older people in Edinburgh. This author describes the benefits of participation of the elderly in old

people's clubs and Christian fellowships. Some of the beneficiary effects of such involvement in social activities are that people are socially connected, have high morale, and share a mode of aging that stresses struggle and resistance. They also receive benefits of social, psychological and practical nature: companionship, confirmation of identity, means of self-expression and recognition. Friends play crucial role in acceptance of physical aging, management of transitions such as retirement and widowhood, and coping with age related losses such as physical health and fitness, home, kin and friends (Jerome, 1992).

There are several implications of activity and continuity theories for the present study. First, because the activities in which elders partake are shaped by the social and cultural contexts of their Hispanic heritage and immigrant experience, it is expected that Hispanic elders in our sample will be more likely to continue their participation in activities with family members than Non-Hispanic Whites, due to their more frequent adherence to "familismo" values. Simultaneously, the lower levels of acculturation and education may impede access to a more varied set of activities. Second, the higher numbers of health problems and depression among Hispanics in our sample may hinder their participation in a variety of social activities; therefore, we can expect a relative social disengagement in a variety of activities outside of the household, which can be seen as a direct result of cultural and linguistic barriers. Finally, because of the existence of a Spanish language senior center and adult day care center in the area, we expect that Hispanics will be

similarly linked to those services as non-Hispanic Whites, and therefore we do not expect major differences in the level of usage of formal activities for seniors among Hispanics.

Research Questions

The purpose of this study was to examine patterns of social activity engagement among Hispanic elders in Massachusetts and whether these differ from the neighborhood-based comparison group of Non-Hispanic Whites. We also explore the association of each pattern with several socio-demographic and health variables.

The research questions are:

Research question 1: Are older Hispanics more likely to engage in social activities with family members than the comparison Non-Hispanic White group?

Research questions 2 & 3: What are the emergent social activity patterns? and how do these relate to socio-demographic and health variables?

Based on existing research and activity theories we hypothesized the following:

Hypothesis 1: Hispanic elders will be more likely to use family and kin networks than Non-Hispanic Whites.

Hypothesis 2: Higher levels of education and acculturation will be associated with higher levels of use of different community resources and participation in a more

varied set of activities.

METHOD

Study sample

The data used for this study was the Massachusetts Hispanic Elders Study (MAHES)—a representative sample of Hispanics, aged 60 years or more, in the state of Massachusetts and a neighborhood based comparison group of non-Hispanic white elders completed in 1995. Although the data was collected over a decade ago (P.I. Luis Falcon), it is the only of its kind which includes neighborhood based Hispanic and non-Hispanic White groups—even our current survey, the NIH funded “Boston Puerto Rican Health Study,” does not include a comparison group. Moreover, findings from our current survey suggest that the challenges in terms of health and social problems that the mainly Puerto Rican origin population faces remain the same.

A two stage cluster sample was used to identify subjects, with sampling proportionate to size by county for Hispanics aged 60 years and older within counties in Massachusetts. It is important to note that because this is a regional sample, the sample sizes for subgroups are smaller than would be the case in a national sample. Counties and census blocks served as the two levels of the hierarchy. Sample clusters (30) were randomly assigned to counties based on the proportional representation of Hispanics aged 55 years and older (in 1990) in the

county (Levy & Lemeshow, 1980). The age distribution for this sample was 60 to 93. After cluster samples were allocated to counties, samples of 25 subject blocks were selected, with proportionate probability of selection of a block to the number of eligible Hispanics in the block. Blocks drawn into the sample were enumerated and respondents were selected randomly. There were 1,033 face-to-face interviews completed, which include 475 Puerto Ricans, 146 Dominicans, 160 other Hispanics, and 252 non-Hispanic Whites (NHWs). The comparison of non-Hispanic Whites is comprised of subjects living in the same neighborhood with Hispanics. The respondents were asked to complete comprehensive questionnaires, including modules on social and economic background, migration history, health history, physical functioning, depression, cognitive function, dietary intake, and prescription drug use. In addition, body measurements of weight, height, blood pressure, and blood samples were also collected. Bilingual interviewers trained in the administration of questionnaires conducted the interviews, which in the majority of cases were orally administered in Spanish. The vast majority of subjects answered the questionnaire in Spanish.

Dependent variables

To create the social patterns measures we used the Norbeck Social Support Questionnaire (NSSQ). This questionnaire was developed to measure the various dimensions of social support and has been utilized extensively in studies on social networks and social support (Norbeck, Lindsay, & Carcieri, 1981; Norbeck, Lindsay, & Carcieri, 1983) including research with Hispanic populations. In fact,

the measure is commonly employed in community based studies with health components. According to Web of Science, the original article that describes the development of the original scale (Norbeck, Lindsay, & Carcieri, 1981) has been cited a total of 283 times while a subsequent article (Norbeck, Lindsay, & Carcieri, 1983) that offered a further elaboration of the scale has been cited 134 times. The instrument collects data on various aspects of social support. Respondents are asked to list important people in their lives and, then, are asked to respond to a series of questions about each person listed. The two key dimensions measured are emotional support and tangible support. In addition, it collects information on network characteristics including number of contacts, frequency of contact, relationship to contact, etc. In our analysis, we used the network characteristics component of the scale.

In our study, the dependent variables based on the NSSQ consisted of 3 different patterns of social activity utilization. We performed the Factor Analysis using principal component analysis rotation method, which yielded 3 factor groupings - these were saved as variables and utilized as the dependent variables in subsequent analyses. These variables were labeled according to the type of social activity participation pattern they describe as follows: 1) Friends and Activities Active; 2) Children and Relative Active; and 3) Senior Services Active. These variables were obtained through a data reduction factor analysis of social activities that the subject has engaged in during the two weeks prior to the survey. These include frequency

of children visits, frequency of telephone talks with children, attendance to senior center, use of meals program for elders, use of day care program for elders, get-togethers with friends, volunteer work, phone talks with friends/neighbors, get-togethers with any relatives, phone talks with any relatives, attendance to church/temple, movie going/meeting/group event, participation in any sports/exercise, caring for family members not living in their same home, and help to friends/neighbors.

(a) Children and Relative Active. This variable describes social activity engagement as talking on the phone with relatives, visiting with children, talking on the phone with relatives, meeting with relatives and, to a lesser extent, providing care for a relative not currently living with the subject. Therefore this pattern of social engagement is indicative of a “familismo” orientation, as most of the social contact involves immediate and extended family members.

(b) Friends and Activities Active. This variable describes social activity engagement as getting together with friends, talking on the phone with friends, helping friends and neighbors, going to movies or other meetings with friends and acquaintances, doing volunteer work and, to a lesser extent, going to a church or temple. Thus, this pattern of social engagement involves non-kin networks of friends and other people in the community, and also a more varied set of social activities participation.

(c) *Senior Services Active.* This variable presents a pattern of social activity engagement that mainly revolves around formal services for senior citizens: participating in meal services for seniors, attending senior centers, and attending adult day care centers.

Independent variables

The independent variables selected from the MAHES survey include the following broad categorizations: ethnicity, sociodemographics, and health-related variables.

Ethnicity. Ethnic groups included Puerto Rican, Dominican, Other Hispanic and non-Hispanic Whites living in the same neighborhoods in the Boston Metro area. Indicator variables for each of the three Hispanic sub-groups were included in the analysis, with non-Hispanic Whites as the reference category.

Sociodemographics. Sociodemographic variables included sex (male=1), age, household income above the poverty threshold (below threshold=1), total years of education (number of education years), and living alone (living alone=1), and male living alone (male living alone=1). Age was included as the number of years.

Acculturation. The acculturation variable, *language inclusion*, was created from a set of variables that asked the respondents which language they used in daily activities such as talking to friends in their neighborhood, reading, and listening to

the radio. Respondents were categorized into three groups that correspond to the frequency of use of English are seen as being language included, whereas those who are low-frequency users are seen as being language excluded or isolated.

Health variables. The two health variables used for this study were a count of health problems and depression symptoms measured by the CES-D.

Health problems. As a measure of health status, we used a count of the number of existing chronic health conditions, excluding depression. Respondents were asked whether a physician had ever informed them that they had specific illnesses or conditions. The list included 20 common conditions affecting elders; in addition, this item allowed the opportunity to enumerate additional conditions not included in the list. Respondents were also asked if the condition was a current health problem that was bothering them at the time. An additive scale was created that indicated the number of currently problematic existing health conditions listed by the respondents.

Depression. To measure symptoms of depression, we used the Center for Epidemiologic Studies Depression Scale (CES-D). This scale is widely used in survey studies and has been shown to have good consistency and validity (Moscicki et al., 1989; Radloff, 1977; Radloff & Teri, 1986). Depression score was measured with the CES-D depression symptomatology scale and

has been widely use in epidemiological studies. In addition, this scale has been validated for use with Hispanics, and Hispanic elderly in particular (Mahard 1988; Robison et al., 2002). The subjects are asked to indicate whether or not they had experience a range of indicators of depression symptoms in the past week. A score of 16 over 40 is typically used as the cut off to indicate depression caseness.

Analysis plan

We used the Statistical Package for Social Sciences SPSS 16.0 version to manage and analyze the data. Mean comparisons are presented first to highlight differences in socioloeconomic and health indicators for each of the ethnic groups. We performed the Factor Analysis using principal component analysis rotation method, which yielded 3 factor groupings -these were saved as variables and utilized as the dependent variables in subsequent analyses. These variables were labeled according to the type of social activity participation pattern they describe as follows: 1) Children and Relative Active; 2) Friends and Activities Active; and 3) Senior Services Active.

Linear regressions models were then used to examine each of the outcomes in relation to a set of independent variables. The models were built sequentially with related independent variables added in groups.

Results

Table 1 presents general descriptive statistics of the respondents by ethnicity. The average age in our sample was about 70 for all Hispanic groups, and slightly higher for non-Hispanic Whites at 72. Overall, the percentages by sex were 62.8% for women and 37.2% for males. However, among Dominicans the proportions were much higher for women (69.9%) than men (30.1%). The results also show that Puerto Ricans and Dominicans are the most disadvantaged groups as highlighted by several indicators. Puerto Ricans have an average income that is only 9.4% above the poverty threshold, compared to 92% above it for Non-Hispanic Whites. Only Dominicans have an even lower average income -5.2% below the poverty threshold. Average education among Puerto Ricans and Dominicans in the sample falls in the elementary school category with 4.8 years while Non-Hispanic Whites have the highest average years of education at 11.29 years. Puerto Ricans also experience the greatest number of health problems (2.32), while the Other Hispanics group have the lowest (1.68). Puerto Ricans also show the highest average score in the depression variable (16.17), a number that is indicative of depressive symptomatology in the CES-D scale. In comparison, Non-Hispanic Whites have the lowest depression score with 9.98 points. Dominicans also show several indicators of disadvantage. In addition to the lowest average income, and education they experience less language inclusion than the rest of the groups (1.83), and are second to Puerto Ricans in the number of health problems (2.08) and the depression score (13.24).

With regard to the patterns of social activities participation in this sample (table 2), three main factors emerged from the list of social activities, which explain 44.53% of the variance. Factor 1, which we will call “Children and Relatives Active” and explained 16.77% of the variance, is highly correlated with: getting together with any relatives, talking on the phone with relatives, having children’s visits, and talking on the phone with children. Factor 2 “Friends and Activities Active” explained 14.51% of the variance and is highly correlated with: talking to friends or neighbors on the phone, getting together with friends and neighbors, helping friends or neighbors, doing volunteer work, going to church or temple, and going to see a movie, a meeting or a group event. Finally, factor 3 named “Senior Services Active” explained 13.26% of the variance and is correlated with attending a senior center, eating in meals programs for elders, and attending a day care programs for elders.

Table 3 presents the regressions of factor 1 “Children and Relatives Active” as the outcome and ethnicity, socio-demographics and health variables as predictors. In Model 1 only the Hispanic subgroup variables (Puerto Rican, Dominican and Other Hispanic) were entered. Relative to non-Hispanic whites, All Hispanic groups had a positive and significant relationship with being children and relative active: for Puerto Ricans, Beta= .276, Dominicans Beta=-.232, both very significant at $p = .000$, and Other Hispanics Beta= .109; also very significant at $p = .004$. This, as suggested in the literature, shows that Hispanic elders are more likely to interact with children and relatives than are Non-Hispanic Whites.

In Model 2, socio-demographics and health variables were entered. It should be noted that each of the regression models included a dummy variable indicating whether the respondent had any living children or not to account for the possibility that some of the observed patterns are a function of having children available for interaction. Despite controlling for socio-demographic and health differences, all the Hispanic subgroups remained significantly more likely to be children and relative active than non-Hispanic whites. In this model, Education was also positively associated with being Children and Relative Active (Beta= .085, significant at $p=.037$). Being a male was negatively associated with a children and relative active pattern of activities. There was also an interaction effect between gender and living alone with strong negative effects for men who lived alone. Given demographic profiles for men and women, in this age group, being a male living alone is far less common than women living alone. Thus, the lower pattern of children and relative activities could be seen as potentially a result of marital separation and divorce, which is quite common among Hispanics—particularly Puerto Ricans. Thus, women in general and women living alone in particular have more interaction with children and relatives than do males; and Hispanics and the more educated also interact more often with children and relatives.

Table 4 shows results for linear regression models with factor 2, “Friends and Activities Active”, as the dependent variable and ethnicity, socio-demographics and

health variables as predictors. In the first model, only the ethnicity variables were entered. The linear regression shows that all Hispanic groups are less likely to engage in activities with friends and other social activities than Non-Hispanic Whites, and this relationship is very strong and significant. For Puerto Ricans the Beta= $-.275$, Dominicans Beta= $-.150$ and Other Hispanic Beta= $-.181$, all very significant at $p = .000$.

In model 2, after the socio-demographic and the health variables were entered, the Hispanic ethnicity variables have no significant effect on being Friends and Activities active. The variables that explained the Hispanic effect in this model were: the Subject Living Alone (Beta= $.164$, significant at $p = .000$), Education (Beta= $.157$, significant at $p = .000$), and Language Inclusion (Beta= $.086$, significant at $p = .036$) –all positively associated with being active with friends and activities; and, on the other hand, Depression Score (Beta= $-.117$, significant at $p = .001$), Age (Beta= $-.089$, significant at $p = .006$), Being Male (Beta= $-.086$, significant at $p = .035$) and Health Problems (Beta= $-.066$, significant at $p = .053$) were negatively associated with being friends and activities active.

Relative to non-Hispanic whites, Hispanics in this sample exhibit a distinct pattern of less interaction with friends and activities in general. The results, though, show that these ethnic effects are the result of a lower education and linguistic profile, different household arrangements, and more health problems and symptoms of depression when compared to non-Hispanic whites. The finding of an effect for

education and for linguistic inclusion is important as it suggests that cultural barriers limit these Hispanic groups from participating in a number of social activities.

Table 5 presents results of the relationship between Factor 3 “Senior Services Active” and ethnicity, socio-demographics and health variables. The results are shown in just one model. We found no differences between the Hispanic groups and non-Hispanic whites in the pattern of senior service activities. Only being older (Beta= .126, significant at $p = .000$) and a higher number of Health Problems (Beta= .082, significant at $p = .022$) are associated with being Senior Services Active. This is important since it suggests that there may not be linguistic or socio-demographic barriers to being active in these kinds of activities.

Discussion

The goal of this study was to describe patterns of social activity participation among older Hispanics and examine how these relate to social and health factors. Consistent with prior findings in studies on *familismo* (Ruiz, 2007; Shwartz, 2007; Valle, 1998), we found support for hypothesis 1; that is to say, Hispanics are more likely to engage in social activities with children and relatives than Non Hispanic Whites, even after controlling for a set of socio-demographic and health variables. This is also true for all Hispanic group sub-categories: Puerto Ricans, Dominicans and Other Hispanics. Therefore, it is possible to conclude that older Hispanics in Massachusetts have maintained a level of familismo in the US context, and that the

stronger reliance on family members for social interaction represents a socio-culturally distinct pattern when compared to Non-Hispanic Whites. Earlier research with Puerto Ricans in Cleveland had shown that demographic characteristics were not significantly associated with the level of familismo orientation (Montoro Rodriguez, 1998). Although we did not test the “familismo” construct in our research per se—only a family activities orientation—our findings indicate that both sex and level of education significantly affect the level of involvement in those family activities in our Boston sample. Males, and especially males living alone, are less likely to engage in activities with children and relatives, which suggests that there is a strong gender component to the family-oriented social activities pattern. Additionally, the level of education is positively associated with the level of activities with children and relatives, a significant finding that deserves further investigation as to the possible causal mechanisms between these two variables.

Our findings further suggest that educational, language and health barriers constrain social engagement outside of the family and senior services domains. As hypothesized, education is one of the strongest predictors of participation in a more varied set of social activities, especially being active in social activities and activities with friends, but also in activities with family and relatives as we have already indicated. A question that remains unanswered is: what is it about increased levels of education that has implications for socialization? It is possible that more educated Hispanic elders have better knowledge of and access to

organized activities offered in their communities, such as cultural events and opportunities for volunteer work. It is also plausible that the more educated the elder the greater quality of life in general s/he possesses and more time to devote to social and leisure activities. A third possible scenario is that possessing lower education levels—used here as an indicator of socio-economic status— may be also associated with the SES of children and relatives in their network, who may in turn be more likely to rely on Hispanic elders for informal assistance (e.g. child care), and also to have more frequent and close contact with them.

Older Hispanics were less likely to be “friends and activities active,” but this pattern was explained by several socio-demographic and health variables. The results show that increased age, higher depression symptoms and the number of health problems all present a challenge for being friends and activities active. This finding provides support for activity theory in relation to Hispanic elders. In other words, Hispanic elders would remain as active in these social activities as Non-Hispanic Whites, were it not for a range of social and health factors that inhibit their participation. Depression and health problems are very prevalent in this Hispanic group (Falcon & Tucker, 2000; Rodriguez-Galan, & Falcon, 2009). Those who experience a greater number of health problems, and especially those who show more elevated symptoms of depression, are less likely to be socially active outside of the family or formal services. In a prior longitudinal study, Glass, Mendes de Leon and colleagues (2006) also showed the connection between depression symptoms and

decreased social participation among seniors, arguing that social activities are generally beneficial to those experiencing depression symptoms; however in their study only those do not reach a level indicative of clinical depression benefit significantly from social activity participation.

Older age is also negatively associated with decreased participation in the “friends and activities” pattern, but it is positively associated with the “senior services active pattern. Viewed from activity theory’s perspective, the decline of participation in activities with friends and community activities is a result of society’s alienation of elders, but most do not desire such disengagement (Atchley, 1997). It is possible that as age increases so does the possibility of losing older friends due to death or disability, and this severely affects an older population that is plagued by health problems and increased mortality risk. The oldest may also find in senior activities a replacement for informal or “natural” non-age segregated socialization, which becomes increasingly difficult to attain at older ages in contemporary US society.

The proxy for acculturation, “language inclusion,” also worked as hypothesized. The effect of language inclusion was significant for being “Friends and Activities Active,” thus experiencing relative language isolation—as opposed to language inclusion—is associated with being more active with friends and activities in the community. Therefore, it is possible that many Hispanic elders with limited

English skills live in areas where they have inadequate access to Spanish speaking events and activities in which they can partake.

Finally, in this study Hispanic elders did not differ in their use of senior services from Non-Hispanic Whites. This finding corroborates studies indicating that the institutional effort to make senior services more accessible to Spanish speaking elders has indeed achieved its objective- at least in urban areas such as the Boston metro area—and that, instead, the main predictor of utilization of these services is the level of needs of the population (Tran, & Dhooper, 1996). In the sampling area, there are a number of existing programs for older residents that are provided by agencies specifically targeting Hispanics. These agencies have increased access by recruiting bilingual staff, therefore language barriers in relation to the use of senior services may no longer be an issue in the Boston area.

Hispanic families are unable to meet all the socialization needs of older Hispanics. In some cases—especially for women—because of the intensity of family relations and gender expectations, family networks can also be a source of burden and stress. However, stress and mild depression symptoms could be buffered through friendships and social activities outside of the family network. Of special interest for future research, will be studies that examine Hispanic elder’s socialization outside of the family and formal assistance services. For example, what venues best facilitate friendships for older Hispanics? What factors limit their socialization

within the communities where older Hispanics live? And what types of social activities are they interested in? As we have shown earlier, there is an association between being active with friends and activities in the community and indicators of well being (less health problems and lower symptoms of depression). By further understanding this socialization pattern and the constraining factors that undermine its development, it will be possible to create interventions that foster social integration of Hispanic elders in their communities, and their sense of social, psychological and overall well being.

Implications for Activity Professionals

We would like to conclude by examining several implications of our findings for activity professionals in a variety of settings, especially for those working in areas more densely populated by Hispanics. Our findings indicate that older Hispanics are less likely to be active in activities with friends, such as getting together with friends, calling them on the phone or helping friends and neighbors; and activities in the community, such as going to a movie, meeting or event; doing volunteer work or going to church or temple. Simultaneously, those who tend to participate in these activities are healthier physically and psychologically (i.e. less depression symptoms and health problems). It is possible, as suggested earlier, that these kinds of activities promote well being among elders, therefore increasing opportunities for participation among Hispanic elders through different community organizations would likely be beneficial, and potentially buffer symptoms of

depression and improve mental well being for those who display moderate symptoms of this condition (Glass, Mendes de Leon et al., 2006). Creating opportunities for participation in those activities would entail the hiring of more Spanish speaking personnel in community agencies—a measure that has been successful in the area of senior services in places like Boston—and offering culturally appropriate activities for non-English speakers. These initiatives would also need to be accompanied by a concerted effort to attracting and recruiting Hispanic elders to community programs, both senior oriented and non-age segregated programs and activities. In this regard, our own fieldwork observations indicate that Hispanic elders crave connections with others in the community; they have a desire to help others, to socialize, and to feel that they are still an integral part of, and contributing member to, the community.

Our results also showed that older men in general are less socially active than older women. Men were less likely to participate in social activities and activities with friends. Additionally, older men -especially older men living alone- were found to have less interaction with children and relatives. In point of fact, when designing interventions it is important to take into consideration these and other gender issues. Since traditional gender roles for women tend to place them at the center of the private sphere's nuclear family interaction, this may explain the social isolation that many men, particularly those living alone at older ages, experience once the nuclear family is dissolved or contact is lost with relatives. Furthermore, because lack of

participation in social activities –especially activities with friends—may place older people in a vulnerable position that has implications for depression, it is necessary to address the problem of social inactivity among older men. In this population, men are more likely to have a living spouse, around whom they orient their activities. This may explain the lower pattern of participation in social activities among men living alone. Neill and Kahn (1999) found that one of the ways in which widowed women maintain a level of life satisfaction after their loss is through their participation in religious social activities (Neill & Kahn, 1999). Men may also prefer to engage in secular social activities rather than religious ones. Thus, increasing social participation for elderly men remains a public policy concern that may need to be addressed through different venues. For example, through the creation of grants aimed at supporting leisure programs as well as adult education and social programs for older people that are sensitive to both men and women’s issues and social circumstances, such as: their sense of safety, scheduling problems, as well as their tastes and interests. Indeed, many urban dwelling older women -even when healthy and mobile- may be less likely to venture out in the evening because of real or perceived unsafe neighborhood conditions. On the other hand, it is possible that some of the men who are isolated do not find activities of their interest, such as those hobbies and other activities that have traditionally been more gender specific. In addition, the activities would need to be accompanied by more efforts to reach out to older men. It is also possible that some elders may, for health or other reasons, prefer a one-on-one interaction rather than group activities.

In this case, an alternative could be the creation of befriending services (Andrews, Begley, & Brodi, 2003), in which a volunteer is paired with an elder person to spend time together. This could help establish social connections among isolated older people in general and men in particular. Given the high levels of depression and of health problems documented in this population, policy efforts directed at increasing the level of social participation may contribute to ameliorating these health problems and to increasing help-seeking behavior.

Our previous research with this population indicates that transportation problems are common among Hispanic elders (Rodriguez-Galan & Falcon, 2009). Although these problems were found in association with problems to access medical care, it is possible they also present a barrier for engaging in different types of social activities. Therefore, agencies which are interested in improving access to social and leisure activities for Hispanic elders need to be especially attentive to their transportation issues. Finally, we would also like to conclude by recommending the creation of more opportunities for volunteer work for Spanish speakers. In our fieldwork with this population we have found that Hispanic elders want to engage with others and help their communities; moreover, they wish to remain vital and contributing citizens to the extent possible. This could be accomplished through different forms of service and volunteer work that would enhance their sense of mastery and of being valued members of a society, while at the same time allowing them to make a difference in their communities.

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Tables' Appendix

Table 1: Means/Percents for Respondents by Ethnicity

Variables	P Rican	Dom.	Other H	NHW	Total
Age (60-93)	69.72	69.16	70.90	72.94	70.61
Female	58.1	69.9	63.4	59.7	62.8
Male	41.9	30.1	36.6	40.3	37.2
Income Above Poverty*	+9.4%	-5%	+74%	+92%	+38%
Education (years)	4.86	4.86	7.43	11.29	6.67
Language Inclusion **	2.12	1.83	2.29	2.99	2.32
Health Problems (#)	2.32	2.08	1.68	1.90	2.08
Depression Score***	16.17	13.24	11.71	9.98	13.517
Total %	46	14	16	24	100

Notes

* Income Poverty threshold=1

** Language Inclusion: 1= Isolated, 2= Partial Inclusion, 3= Inclusion

*** Depression Score ≥ 16 = Symptomatic of depression

Table 2: Factor Analysis of Social Activities: Factor 1 “Children and Relative Active”, Factor 2 “Friends and Activities Active”, and Factor 3 “Senior Services Active”

Variables	Factor 1	Factor 2	Factor 3
Talks on the phone with children	.811		
Visits with children	.795		
Talks on the phone with relatives	.657		
Meets with relatives	.623		
Cares for relatives not living with	.373		
Gets together with friends		.648	
Talks on the phone with friends		.626	
Helps friends/neighbors		.590	
Goes to movie/meeting with others		.525	
Does volunteer work		.513	
Goes to church/temple		.348	
Attends congregate meals for elders			.828
Goes to Senior center			.759
Attends day care for elders			.734
% of variance (total=44.53)	16.676	14.507	13.262

Table 3: Regression of social activities pattern “Children and Relative Active” on Ethnicity, Socio-demographics and Health Variables

Variables	Model I	Model II
Puerto Rican	.276***	.167**
Dominican	.232***	.143**
Other Hispanic	.109**	.091*
Sex (Male=1)		-.104**
Age in years		-.020
Income above threshold		.008
Education		.085*
Living alone		.031
Male living alone		-.145**
Language inclusion		.019
Health problems		.017
Depression score		-.040
R2	.063	.205
N	1030	1030

Note Control variable “Number of Living Children” not shown

*p<05 **p<01 ***p<001

Table 4: Regression of social activities pattern “Friends and Activities Active” on Ethnicity, Socio-demographics and Health Variables

Variables	Model I	Model II
Puerto Rican	-.275***	-.038
Dominican	-.150***	.022
Other Hispanic	-.181***	-.073
Sex (Male=1)		-.086*
Age in years		-.089**
Income above poverty		.056
Education		.157***
Living alone		.164***
Male living alone		-.045
Language inclusion		.086*
Health problems		-.066*
Depression score		-.117**
R2	.052	.138
N	1030	1030

*p<.05 **p<.01 ***p<.001

Table 5: Regression of social activities pattern “Senior Services Active” on Ethnicity, Socio-demographics and Health Variables

Variables	Model I
Puerto Rican	.004
Dominican	-.050
Other Hispanic	-.027
Sex (male=1)	-.017
Age in years	.126***
Income above poverty	-.039
Education	-.007
Living alone	.051
Language inclusion	-.032
Health problems	.082*
Depression score	-.010
R2	.193
N	1030

*p<05 **p<01 ***p<001

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