

PERSONAL NETWORKS AND SACRED TEXTS:
SOCIAL AGING IN DELHI, INDIA

ABSTRACT: Social aging of residents of a middle-class neighborhood of Delhi, India is examined from a personal network perspective. The analysis reported here addresses the size and composition of personal networks of a random sample of men and women 55 years and older. Analysis of the entire sample indicates no age related reduction in network size among people 74 years and below. Among older persons in age strata 75 years old and above there is a substantial reduction in network size. In addition to being influenced by a person's age, network size is also influenced by gender, health status, and household resource control but not by the material style of life of the household and household type. The results of this analysis are interpreted in terms of Hindu sacred texts that describe the ideal life course and comparison with related studies from India and the United States.

KEY WORDS: India, Social aging, Networks, Disengagement

Social aging is the life-span process of change in the content and meaning of a person's social behavior. This process is shaped by the person's adaptive decisions made in the cultural, economic, and spatial context of their communities and is conditioned by the underlying structure of human cognition. Cultural settings structure the social aging process because individual decisions about social life are shaped by the roles, institutions, ideology, codes of conduct, and facilities that make up a community. Therefore, cross-cultural research is useful for developing theoretical understanding of the social aging process.

Here we examine aspects of social aging in a neighborhood of Delhi, India from a personal network perspective. The Indian context manifests distinctive cultural institutions that are thought to influence social aging. These include *ashrama* (or conception of the four stage ideal life course); *varna* (or conception of rank based on ritual purity); the joint family pattern of organizing households; and the idea of *purdah* (or the conception of idealized female exclusion).¹ The *ashrama* institution is especially important because it has been interpreted as a culturally-constituted model for disengagement with aging (Vatuk 1980; ranade 1982). Although all of these institutions are important for understanding social aging processes, we will mainly focus on the *ashrama* institution in our analysis.

When we say disengagement we refer to the view of the aging process as originally conceptualized by Cumming and Henry (1961). They describe disengagement as a "thinning out of the number of members in the social structure surrounding the individual, a diminishing of interaction with these members, and a restructuring of the goals of the system" (1961: 37). Although they did not speak in network terms, it is reasonable to assume that disengagement would

result in smaller personal networks. They also argue that the process is inevitable and universal.

The Delhi study is a replication of research done in a rural Kentucky county (reported in Arcury 1984, 1986; van Willigen, Arcury, and Cromley 1985; van Willigen 1989).² Both studies used a combination of ethnographic observation methods focused on the social life of older people in the community and survey methods that included a technical approach to the study of personal networks (Barnes 1954, 1972; Mitchell 1969) of a random sample of older men and women. In the Indian survey, data were collected from key informants³ and a systematic, random sample of men and women, 55 years and older.⁴ The basic design of the data analysis is cross-sectional. Later in this article we use some of the data from the earlier study to interpret the outcome of the Delhi study.

Analysis produced descriptive statistics that serve to characterize the sample. About 53% of the sample are male and 47% female. The age range of the sample is 55 years to 90 years. The mean age is 65.6 years. Fully 75% of the sample are married and 23% are widowed. One person is divorced. The mean length of residence at the present location was 25 years. About 90% lived in their houses for more than 12 years. Mostly these respondents lived in houses they or another family member owned, only 15% rented their living quarters. Over 50% rated their health as good or excellent as compared to others of their age. The mean number of years of education is 10. At least 20% have no formal education and at least 10% have some higher education experience. About 93% of the respondents are Hindu and the remainder are Sikh. About 79% visit places of worship during their free time.

SOCIAL NETWORK ANALYSIS

Social network analysis is one of many ways that the social life of older people can be examined. The approach has advantages that make it useful for comparative studies, including the fact that network analysis question frames are easy to translate, network phenomena are general enough to allow observation in many social settings, and networks are directly observable for verification. The utility of a network approach to understanding social aging in India was recognized by K. D. Gangrade, as he noted, "Social workers engaged in dealing with the problems of the aged must make a good study of the social networks in the Indian social structure" (1987: 56). Gangrade's view of networks in the Indian setting emphasizes that network linkages serve to tie together families, workmates, neighbors, and others to form the lived-in social world of people. While this has always been important, current literature sometimes expresses the assumption that the family is changing and declining in importance, a view often expressed by people we interviewed. This decline implies that the broader social context provided by networks will become more important.

To obtain data on social networks, we used an interview schedule that was developed specifically for cross-cultural research. This instrument, resembling

techniques developed by Sokolovsky (1986), Pattison (n.d.), and Sanjek (1978), was originally prepared to study the social networks of older people in Kentucky and Abkhazia.⁵ We used frequency of interaction as the listing criterion. Persons were asked who they spoke with everyday, more than once a week but less than weekly, at least once a week and once a month. To illustrate, the first question is, "Tell me the names of the people you speak with everyday". There are no instructions to include or exclude specific categories of people such as members of the household. Questions asked produce a list of names. The total number of individuals listed constitutes the personal network of the individual as operationalized for this study. In the technical language of network analysis the data describe the first order network star (Barnes 1972: 8). This means that data were only collected on persons with whom the person interviewed interacted directly. No data were collected on the interaction between the persons that make up the network. In the terminology of network analysis, the listed persons are alters to the interviewee or ego. Following the listing, various questions were asked about the persons named by the interviewee. The network is not conceived of as something separate from family, but as an overlay of personally centered linkages that radiate away from the person to link them to neighbors, kin, work-mates, and others.

AGING IN INDIA

India represents an interesting case for the study of social aging because of the rapid increase in the numbers of older people and the nature of Indian social institutions. The 1981 Census of India showed that there were 37,000,000 persons 60 and over (Bhende 1982: 4) and that this age cohort was the most rapidly growing segment of the population. Projections suggest an 85% increase by the year 2000 from the 1981 base (Sahni 1982: 55; Hoover and Siegel 1986; Martin 1990). The population growth pattern is associated with a high dependency ratio (Ranade 1982: 80). The effects of the high dependency on social welfare must be interpreted in terms of India's limited capacity to allocate public resources to meet the needs of disadvantaged people. Prakash speaks of the difficulty in investing in "any qualitatively different, and exclusive provision for the aged" (1982: 22). There are almost no public sector institutional supports for older Indians. In spite of the scale and problems of the older segments of the Indian population there has been little research on these people (Bose 1982: 116; Vatuk 1991).

In India it is generally true that persons retire with little financial security except for that provided by the family or their savings. Savings made during the lifetime of the individual are often used to get the children situated through education, dowry payments, and expenses involved in major life cycle rituals such as birth and death. There is no universal pension scheme; even in government service the persons covered by pensions are few and largely male (Desai 1982).

Where they exist, pension payments do not make up for the loss of earnings associated with retirement (Soodan 1975). Private sector, non-familial support is focused mostly on the destitute. Because of these circumstances, the support provided by a person's network of family members, friends, and neighbors is crucial for older people. Gangrade summarizes this point, "The support system available through [the network], in absence of any other agency, will provide the much needed anchor and an effective alternative to deal with the problems of such people" (1987: 56).

As stated in the introduction, the circumstances of social aging in India are influenced by Hindu cultural institutions. The organization, ideology, and practices of Hindu society including the dimension of social aging are, to an extent, structured by the notion of *Chatur-varna-ashrama-purushartha*. This idea expresses that society is divided into four ranks, that life has four stages, and that it is directed at four goals. The four goals of life are *dharma*, *artha*, *kama* and *moksha*. That is to say, religious-moral duty (*dharma*), worldly affairs of an economic and political nature (*artha*), pursuit of pleasure (i.e., sexual and aesthetic) in the world (*kama*), and ultimate escape of the cycle of rebirth and merger of one's personal *atman* (soul) into the God head (*moksha*). The way that persons pursue these goals is both a manifestation and a result of their caste (*varna*) rank. For example, the moral duty of a person of one rank will be somewhat different from that of a person of another rank. Further, the effects of moral deviation on a person of one rank will be different from those on a person of another rank. The stages (or *ashrama*) are preparations for achieving goals that are the focus of the subsequent life stage; ultimately the individual seeks spiritual annihilation, the central goal in Hindu thought.⁶

SOCIAL AGING IN RANA PRATAP BAGH

We examined social aging in the context of Indian cultural institutions in Rana Pratap Bagh Colony.^{7,8} This upper middle class neighborhood in northwest Delhi was established in 1953 and provided accommodations to families displaced by the Partition of the country into India and Pakistan.⁹ It is a manifestation of what Robert W. Stem refers to as "the bourgeois revolution", which he characterizes as the "dominant pattern of change in India" (1993: 1). The Indian middle class is small as a percentage of the Indian population but represents a very large number of people. Estimates run as high as 200,000,000. The older segment of this population is undergoing explosive growth.

The Government's policies concerning the development of new neighborhoods increase the likelihood of social and economic homogeneity at the neighborhood level. Many new neighborhoods are formed through an application process that might be initiated by an occupational voluntary association or some other group, although Rana Pratap Bagh was formed as a commercial, private-sector development. The circumstances of Rana Pratap Bagh's creation were a major factor

determining the nature of its population. Many current residents are Punjabi and many are merchants of various kinds. Its estimated 10,000 population is homogeneous in other ways. It is about 90% Hindu, 6% Jain and 4% Sikh. There are almost no Muslims or Christians.

The neighborhood has an irregular perimeter enclosing a total area of just over 19 hectares located on the Grand Trunk Road, a national highway that goes from Calcutta to Punjab. It is about 4 kilometers from Delhi's Central Business District. Most traffic in and out of the neighborhood comes off the Grand Trunk Road. The neighborhood should be thought of as an enclave as there are few ways to enter it. One side is completely cut off by a railway line, while elsewhere the nature of house construction creates walls that serve as boundaries. Sandwiched between Rana Pratap Bagh and the railroad track grading, astride a small drainage ditch, is a squatter settlement called Kabir Nagar. Sangam Park, a similar squatter settlement, is to the east. Some of the people living in these neighborhoods are servants to the households of Rana Pratap Bagh and use various community and market facilities. Also apparent nearby are government sponsored low-income housing probably directed at providing better quarters for squatters.

The focal area of activity in the neighborhood is a marketplace. The market contains diverse shops including groceries, prepared food stuffs, clothing, furniture, shoes, toys, video rentals, and drugs. Also apparent are caterers and jewelry shops for the wedding trade. Along with these stores, there are vegetable vendors along the sidewalk and a government milk outlet. The market is served by taxicabs, auto-rickshaws, and cycle rickshaws. At the center of the market area are a fenced garden with benches, a playground, an outdoor theater,¹⁰ and a community hall. During the day, the garden is a place for older men to get together and spend some time conversing and playing cards. Depending on their religious affiliation, women more typically go to Hindu, Jain, or Sikh places of worship. The Community Hall offers some special services for older people including occasional lectures and non-profit milk sales. The second floor of the Community Hall includes a large room that can be rented for a nominal fee for wedding celebrations.

Within Rana Pratap Bagh, medical services are provided by a number of clinics and pharmacies and a small hospital. Neighborhood residents also use medical care facilities in other parts of the city. Within the neighborhood there is a wide array of choice with at least three different medical systems represented; allopathic (biomedicine), homeopathic, and ayurvedic. Being a large and important city, Delhi offers access to some elaborate biomedical technology. People can be served at private fee-for-service clinics, charitable clinics, or government-supported clinics. The health care system is almost entirely oriented toward acute care. Person with the chronic conditions associated with aging are cared for at home.

The neighborhood is the basis of various organizations. Groups of residents in different blocks organize to hire a chowkidar (i.e., night watchman) to provide

surveillance through the night. Along this line, neighbors cooperate to pay for the construction of steel gates at the ends of the street as was done in a few alleyways near the market.

Vridha Sabha (Old People Society) is an organization for older people that started around 1985 and meets at the largest Hindu temple in Rana Pratap Bagh. This group organizes readings of religious texts, presentations of religious discourses, social services, and the maintenance of the temple. *Vridha Sabha* supports a free homeopathic dispensary. The *Khush Dil Sabha* (Happy Soul Society) is more secular and facilitates daily sessions of witty conversation among men. Although the group is secular, its daily meetings involve prayer and devotionals on Tuesday because of its religious significance. The group meets virtually everyday after tea and before dusk. The timing of this activity allows them to get out of the house when it is most congested.

Women are more involved in daily worship and weekly group religious activities than men.¹¹ Women report participating in devotional groups. One such group met in another North Delhi neighborhood. It was led by a woman, had male and female members, met in a member's home, and focused on religious discourses. One woman reported participating in the Jain Women's Society in a nearby neighborhood. This group includes women 45 years and older, collects dues for snacks, and meets monthly. Their program consists of the singing of devotional hymns (*bhakti kirtan*) and visiting.

Another kind of organization in which women participate is the kitty party, as it is called in English. Kitty parties involve a group of women who meet regularly in various members' homes to enjoy each other's company. At the party they contribute a small amount of money such as Rs. 500 (US \$25) to a kitty; through a lottery a member of the group gets the lump sum. Some groups will have an additional fund for the purchase of sarees for the winner in addition to the lump sum. Winners are ineligible for further drawings until all have won the kitty. These cooperative savings groups include persons of various ages and are quite widespread in Delhi.

Typical Rana Pratap Bagh housing consists of one to three story, privately owned, concrete and brick buildings that may be inhabited by more than one household. Often these buildings have been in the family for many years and serve as places where kin who live in other parts of the city come to visit. Children of the family living with their parents elsewhere will return for parts of their school holidays to visit with grandparents and others. Often these buildings have interior courtyards where women can do household work sequestered from the life of street and market. Guests, when received with formality, may be attended to in the *baithak*, a formal, well-furnished, and infrequently used sitting room that serves as a buffer between the domestic sphere and the world outside. The commitment to these homes can be very strong and they may be viewed as a kind of ancestral property. A person we interviewed related how one old woman, when confronted with family plans to move, resisted and insisted she would only leave in a shroud. Members of the family that live elsewhere may

have strong sentimental attachment to these homes, rather like the meanings some rural Kentuckians associate with their "homeplace".

HOUSEHOLD

An important part of the social framework of aging is the household (Figure 1). The households within which people in the sample live are large and complex. Mean household size is 6.8 persons. The range was 2 to 24 persons. About 67% of the households had between four and nine members. Only about 13% of the sample lived in nuclear families. Slightly over 17% lived in extended family settings. Fully 69% lived in households consisting of multiple families, the classic Indian joint family. The significance of this to the social aging process is thought to be profound. Most older people live in three generation households consisting of their spouse, their sons, their daughters-in-law, unmarried daughters, and their grandchildren. This pattern is consistent with other sources. According to D'Souza (1982: 77) three-quarters of older people in India reside with their relatives in addition to their aging spouse.

Many interviewees pointed out the benefits of the joint family, consistently reporting that their spouse, son, and daughter-in-law were the most helpful to them. Important for understanding these relations is the idea of *seva* or service. Vatuk, in her study of aging among women of an urban village in Delhi, describes the concept in the following way: "The concept of *seva* is a broad one, and implied in it is not only the performance of all necessary tasks for the comfort of the older person, but love, consideration, thoughtfulness, and devotion as well" (1975: 153).

The joint family is thought by many of the key informants to be declining in importance. One man described his perception of the general situation in India,

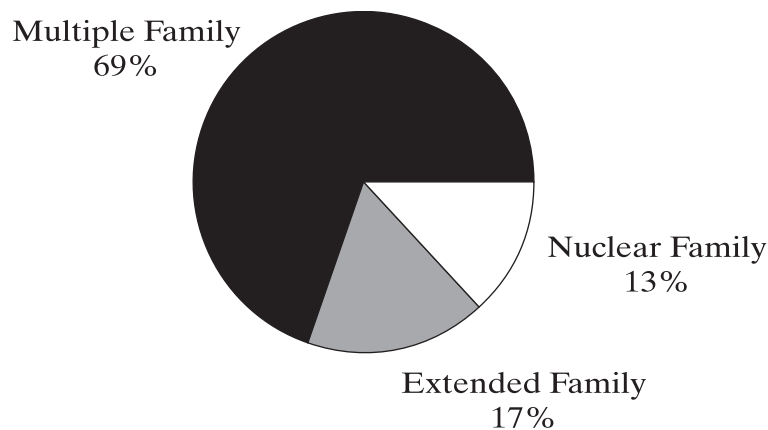


Fig. 1. Household types.

“Older persons want to live with families, but sons and daughters-in-law do not favor this”. This perceived decline is thought to be caused by the increasing extent to which social arrangements are based on economic considerations, the increasing impact of western society and urbanization, and lessened adherence to the principles of religious texts such as the Ramayana that “teaches how to love one's elder brother and honor the father and mother”.

Some key informants felt that the values of the old and young were diverging and that children sometimes do not respect their parents. Older persons were regarded as more religious. As one noted, “when they grow older they start remembering God the almighty”. The younger people are thought to pay more attention to films and television. Children are seen as spending less time on school work. Some informants reported that in the past sons would never smoke in the presence of their father. Older persons also received food first, and the son and daughter-in-law would touch the feet of the father as a mark of respect. This practice does occur in some households but apparently is not that common.

The median household income of the sample falls in the category of 4000-6000 Rs. per month.¹² About 43% of the older people do not contribute to household income. About 21 % of the sample are currently employed; almost all employed persons are male. Income was cited by some as the biggest problem of older people as retirement results in a much reduced income. The amount of respect and care that the older person receives is thought by some to be related to their financial resources. Some older people take another job after retirement.

Major financial obligations must be taken care of prior to the reduction in income associated with retirement. The need to have children educated and married before one's retirement and for male children to be employed were frequently mentioned. The marriage of daughters is especially problematic because of the substantial dowry expectations and marriage costs and that marriage of sons may result in substantial amounts of money coming to the family in the form of dowry payments (Srinivas 1984; van Willigen and Chana 1991). Some older people advised maintaining control over some resources to maintain the respect of the children and to keep themselves from feeling that they are a burden. Retirement savings and provident funds may be used for retirement income but more frequently the money is used for marriage expenses and a house. For businessman, the business may be transferred to the son to maintain the income of the household. Some informants suggest that retirement is difficult to adjust to. As one said, referring to older men in general, “the day he gets retired he gets a shock and feels that something has been snatched from him and has grown old. The worthiness of the person gets shaken up”. While Ross argues in her classic study of urban family life that the prestige of the older person is not influenced by the reduction of their financial contribution as happens in the “western” family in industrial settings, our interviews suggest that this is not true in Rana Pratap Bagh (Ross 1961).

While some speak of “giving their children their freedom”, key informants

participated extensively in household decisions. Especially important decisions are those associated with marriage negotiations. The survey data show that this decision is typically retained by older people. Key informants indicated that school selection is something done by younger people because they are better informed about the alternatives. Older persons may take an increased role in daily household management decisions because they may have more free time.

Informants indicated that old men have little work to do in the house, but they often do household chores outside. For example, they buy milk in the morning and vegetables and general provisions in the afternoon. Some will have the responsibility of escorting their grandchildren to the school buses. Women have a much heavier work load than men including helping with cooking and child care. An allopathic physician interviewed thought the most important problem reported to him by older male patients was loss of authority and respect whereas older women reported that they were physically overworked. Women also play a major role in maintaining ritual obligations.

Most of the key informants were allotted separate space in the house and for the most part they moved about the house at their liberty although one person mentioned that they made an announcement when they entered certain parts of the house. Sometimes they are given the preferred space. Informants mentioned how *purdah* structures space use. This institution is expressed in female role segregation. One person mentioned that after a son's marriage the parent did not enter his bedroom without giving an alarm such as a cough or other sound. Also mentioned by key informants was that older men tried to spend time out of the house so that the daughter-in-law felt more comfortable.

ASHRAMA: LIVED TEXT OR OBSOLETE INSTITUTION

As mentioned in the introduction, the *ashrama* concept is thought to influence or pattern social aging in India and therefore we wish to discuss it and its manifestations in Rana Pratap Bagh (Ranade 1982; Tilak 1989; Vatuk 1980). This concept has its roots in Vedic literature (1200-900 BCE) and is expressed in different Hindu texts such as, *Upanishadas* (900-200 BCE), *Dharam Sutras* (600-200 BCE), *Manusamhita* (200 BCE-100 CA), *Mahabhrata* and its central episode the *Bhagavadgita* (500 BCE-200 CA), *Ramayana* (200 BCE-300 CA), *Dharma Shastras* and *Manu Smriti* (100-300 CA), and *Puranas* (300-500 CA). The main discourse about *ashrama* appears in the *Dharam Sutras* and *Dharam Shastras* (Basham 1963; Kapadia 1966; Muller 1882; Prabhu 1963). The literal meaning of the word *ashrama* is 'a halt or a stage' to prepare oneself for further journey on the way to *moksha* (final liberation) in life. Each stage defines the duties and obligations with a sense of commitment, accomplishment, and pleasure to attain *moksha*.

In Hindu society, social involvement and disengagement are built into the four stages (*Chatur-ashramas*) of life through which an individual is ideally sup-

posed to pass. These stages are *brahmacharya* (student), *grahastha* (householder), *vanaprastha* (hermit), and *samnyasa* (renunciate). The nature and duties associated with *ashramas* are described in different texts with a little variation. Almost all traditional Hindus are familiar with the main themes pertaining to the four *ashramas* as these ideas are passed down through oral tradition or the literature prescribed in the early years of schooling. These notions are also reinforced by popular literature embodying moral stories of a religious nature that target mainly younger audiences. As the original texts were written in Sanskrit and are not easily accessible, most people use secondary sources consisting of a translation and sometimes commentary in either Hindi or English. Even among literate people few directly study the texts that contain these ideas, although people generally are familiar with the major texts. The texts refer to these relationships and stages as male activities, although the process can be applied to females.

The entrance to the first stage, *brahmacharya* is marked by the ceremony of initiation to Vedic studies (*upanayana*, lit. 'taking near', i.e., near the preceptor). The chief rules to be observed by a student consist of regular Vedic study, obedience to the preceptor, begging alms, and strict discipline in daily life. Rules of rigid self control are to be strictly observed by a student. He must abstain from sexual activity and rich and intoxicating food (Kapadia 1966; Muller 1882: 40-49).

In *grahastha*, the second stage, three *purusharthas*, *dharma*, *artha*, and *kama*, can exist together and the individual can fulfill his three debts (*rinās*) namely, the debt to the God (*deva-rina*), the debt to the ancestors (*pitra-rina*), and the debt to the sages (*rishi-rina*) by living through the *grahastha ashrama*.

The achievement of the *vanaprastha* stage lies in the discipline that prepares a man finally for the renunciation of familial ties and social relations. This is to be done through a gradual process. The qualities and virtues a person needs to cultivate, as a hermit, were self restraint, friendliness, charity, and a compassionate attitude toward all creatures. *Vanaprastha* requires the individual to withdraw from worldly affairs. He enters the third stage "when his skin gets wrinkled, when his hair turns white and when he sees sons of sons" (Prabhu 1963: 88). Since procreation, specially begetting male children, is a duty that a person in *grahastha*, which precedes *Vanaprastha*, must assiduously perform, he may normally be expected to become a grandfather at the age of 45-50 years. Age is an uncertain factor in a rural community but the fact that a person has grandsons is clear evidence that he is no longer young or even of middle age (Vatuk 1980; Ranade 1982: 82). The life of a hermit is a time of inquiry and searching, a life devoted to meditation and contemplation to realize the true being of oneself (Kapadia 1966: 35).

The fourth stage, *samnyasa*, stands for complete severance of worldly ties (Prabhu 1963). The duties of a *samnyasi* mainly relate to the development of the soul. This stage is to be devoted to self-expression and self-expansion for the fuller realization of inner spirituality. In both of the last two stages, the dedication to God should be at its zenith to ease the smooth merger of *atma* (individual soul) to the *paramatma* (Universal Soul that is God) the final goal in life.

While it is unlikely that this scheme was followed with any frequency in

Indian history, it exists as an ideal model that, according to Ranade, serves to "provide guidelines for reformulating relationships within and outside the family in the context of one's children having reached adulthood (1982: 82)". Vatuk presents this idea as a culturally expressed disengagement theory.

When one examines the Hindu scriptural concept of the ideal life cycle, or its contemporary version as manifested in the words of religiously unsophisticated Hindu villagers, it becomes evident that they display significant parallels to some of the ideas put forward in the context of certain gerontological discussions of the nature of the aging process. I refer to so-called disengagement theory, which postulates, in brief, that as a person ages a mutual withdrawal occurs between the aging individual and the society of which he is a part (Vatuk 1980: 136-137).

The *ashrama* institution may represent a culturally-constituted model for disengagement, in that knowledge of it is almost universal and shared, it is expressed in sacred text, it is comprised of idealized role models that manifest a phased reduction of engagement in the social and material world throughout the life course and it is manifest in actual practice (see below). It presents a script for disengagement.¹³ It is, of course, highly relevant to research on social aging in India (Ranade 1982: 82).

There is some ethnographic research that reports the nature of this institution in practice. Based on his study of a rural village in Andhra Pradesh, Hiebert states, "The concept of the four stages plays an important part in the old-age strategies of [the] villagers, but tension between the demands of everyday living and the ideal of total withdrawal from society produces diverse results in their life histories" (1981: 216). He makes it clear that the system is more strongly expressed among the higher castes and males (1981: 216). Through the presentation of cases he shows that some individuals make strategic use of the ideas to manage aspects of their lives. As an example of this, he cites a case in which renunciation was used to deal with a bad marriage (1981: 218).

In her study of aging processes in a North India peri-urban village, Sylvia Vatuk found that villagers collapsed the four stages of the sacred texts into three (1980: 137). She also found that elderly persons often disclaimed involvement in the world but in fact still were "bound up in the life of the householder" (1980: 143).

In our interviews in Rana Pratap Bagh we found a variety of attitudes about the *ashrama* idea. One person said, "everyone is ignorant of this aspect. Had it been in practice I should not have been here [but] would have gone to the forest worshipping God". Many others regard the concept as absolutely obsolete and argue that such practices cannot be maintained now. Various reasons for this are given. Some say that it is impossible because of the "space problem". Others suggest that they have become too attached to their family.

Yet in spite of these views there are reported cases of individuals who work to achieve a kind of latter-day *samnyasi*hood. This can take various forms, including a planned reduction of attachment from the family and community both

socially and materially, sometimes including living in an *ashram* (a spiritually focused hostel) at some place like Haridwar, a Hindu pilgrimage site. For example we interviewed the 50 year old son of one of the sample about *samnyas*. He made the point that some people, while not really becoming *samnyasi* do, never the less, go to Haridwar to retire where they arrange to stay at an *ashram*. Some, such as his father, will go on sort of a holiday. Husbands and wives will stay together. He said that few people do this because they are attached to their families. Another person argued that those who go to *ashram* in Haridwar are ones who do not have a family to look after them and if they have family behind they come back and join them as they cannot leave the material world (*maha maya*). As another example, one woman interviewed limits the amount of care she gives her granddaughter to avoid increasing attachment. She is primarily concerned about her capacity to participate in *kirtan* and to worship God. This woman meets regularly with a devotional or *bhakti* group in another neighborhood. Another woman stated that she was actively working on the reduction of attachment through religious study. She said that she was enjoying the company of friends less and that her network was decreasing in size.

Upon indepth probing, knowledge of the idea of the ideal life course based on the *ashrama* idea appears universal among the people we interviewed. In addition the values expressed by the *ashrama* concept may still operate in the sense that the value legitimatizes a strategy of changing reduction of social involvement. The *ashramas* are widely regarded as a good way to model one's life. Many people know a friend or acquaintance that has worked for a kind of *ashrama*-like disengagement and all have observed renunciate holy men on the streets of Delhi. While it is true that no one becomes a hermit or wanderer in the literal sense of the *ashrama* concept, we interviewed some older men and women who actively practice means of spiritual development as part of the aging process that are highly consistent with the *ashrama* process.

COMPOSITION OF THE NETWORKS

Within the social framework of neighborhood and household and the ideological context provided by sacred text we find individuals and their networks. It is useful to remind ourselves of Gangrade's view of networks in the Indian setting as the social phenomenon that links different social realms together (1987). We start with a discussion of the composition of the networks. We then talk about the scale of networks and conclude with a comparison with other research on networks.

We looked at some of the characteristics of the 3,623 persons with whom the people we interviewed said they interacted. We asked each person we interviewed to indicate whether the person listed was a man or woman, Rana Pratap Bagh resident, kin, neighbor, friend, service provider, co-worker, or fellow member of an organization.

The neighborhood is an important source of network ties. Over 54% of the alters were from the neighborhood itself. The neighborhood is organized in different spheres. Men will much more commonly get together in secular settings. We were not aware of any public places for women to spend leisure time. Some older men would spend the time before supper in the park, while women were preparing food at home. Some women regularly visit neighborhood temples for worship [puja]. Many do this every day at dawn. They form relationships of friendship with other worshippers.

We determined that about 15% of the alters were from the interviewees' households. The large and robust households within which most of the people interviewed lived often serve as means of maintaining network ties with persons outside the household. The most obvious means for doing this are the younger children who will run errands for older members of the household. Members of the family were often observed carrying out inter-household social responsibilities in the name of an older person. Wedding invitations may be responded to in this way. Usually, because of the presence of sons, daughters-in-law, and their children the households are lively and interesting places for older people. While there is conflict, real and potential, subjectively these households provide a very comfortable life for older people.

Some elderly meet in formal organizations, both secular and religious. This participation contributes to the development of network ties. Almost 16% of the listed alters were "fellow members of organizations" with the people we interviewed.

Most residents are of the twice-born castes¹⁴ - of these most are of Kshatriya sub-castes. In addition there are a few Brahman and Vaishya. We were able to determine the caste of the alters. Almost 65% of the alters were of the Kshatriya caste, over 18% were Vaishya, 12% were Brahman, only 0.1 % were Shudras and 2.3% were of the scheduled castes.¹⁵ The larger number of scheduled caste members relative to the Shudra probably reflected regular encounters with the washermen [Dhobi], sweeper [Bhangi], and cobbler [Mochi] sub-castes. Many of these households would have Dhobis, Bhangi, and Mochis with which they would have an on-going relationship. Just over 4% of the alters listed were service-providers.

About 45% of the persons in the networks were related through kinship, either consanguineal or affinal. The consanguineal – affinal distinction is especially important in the Indian setting. The household is a consanguineal descent group augmented by the women that are married in to it. To a great extent real property is owned by the males (fathers, sons, and brothers) as copartners with more or less indivisible rights. Relatives by marriage consist of wives and daughters-in-law who occupy when older a crucial but paradoxical role as outsiders at the center of the reproductive activities of the household. The internal work of the household is theirs.

Because of the residential stability, population density, and residential propinquity of the neighborhood, neighbors tend to know each other well and interact

in association with life crises such as marriages and funerals. Twenty-two percent of the alters were reported as neighbors. The relationship is important, one informant notes that, "neighbors have the moral duty to give aid and attend gatherings". Neighbors will give gifts as well as lend and borrow tools and small amounts of food. Gifts from neighbors, usually consisting of money, include those given at weddings, house dedications, and head-shaving rituals for young boys. The amount is subject to some inter-neighbor negotiation and some ritual requirements (i.e., the amount must always end in 1, that is 11, 21, etc.). A very typical food to be lent and borrowed is milk. Milk is used continually and can not be easily stored. When guests arrive, it is very important to serve tea with milk. If you are out, it is necessary to get some. Milk is not conveniently available in the market much of the time. Typically a younger male of the household would be sent to the neighbor to borrow some. Also borrowed are sugar and cooking gas cylinders if the need should arise. The borrowing of wheat flour and oil is rare and avoided as unseemly. Neighbors will do things together such as marketing, visiting, and evening strolls. Neighbors and others are rarely invited for a meal, although giving of tea and the associated food is very common.

THE SCALE OF THE NETWORKS

Let us consider the evidence on network size from Rana Pratap Bagh. The persons interviewed had a mean network size of 25.3 persons (SD 10.4). In order to better understand social aging we compared the mean network size of persons of different ages and found significant differences.¹⁶ This analysis reveals a pattern of stability through the 70 to 74 age category. All age strata 75 and younger have mean network size scores very close to the sample mean. The networks of persons 60 to 64 are somewhat larger than the networks of persons 55 to 59. Following this initial increase there are slight mean network size decreases. Decreases in the size of networks occur after both the 70 to 74 age strata and the 75 to 79 age strata. The interstrata reduction between 70 to 74 and 75 to 79 is 9%. The reduction between 75 to 79 and 80 plus is 22% (Figure 2).

In addition to showing a relationship with age, network size is related to other factors. Self-reported health status is associated with network size. We found that mean network size of individuals who rated their own health in the middle and high health self-rating categories are above the sample wide mean. The magnitude of the difference in network size among these groups is trivial. In contrast, persons who self-reported health status in the low category have much smaller networks.¹⁷ Their networks, on the average, include 6.12 fewer persons, and are 75% of the size of the sample-wide mean (Figure 3). In this regard it is important to point out that Indian older people and their families do not have any attractive alternatives for long term care. There are very few beds, virtually all are allocated as charity and filled by persons who are socially bereft and destitute. We feel that many people of Rana Pratap Bagh would regard the use of homes for

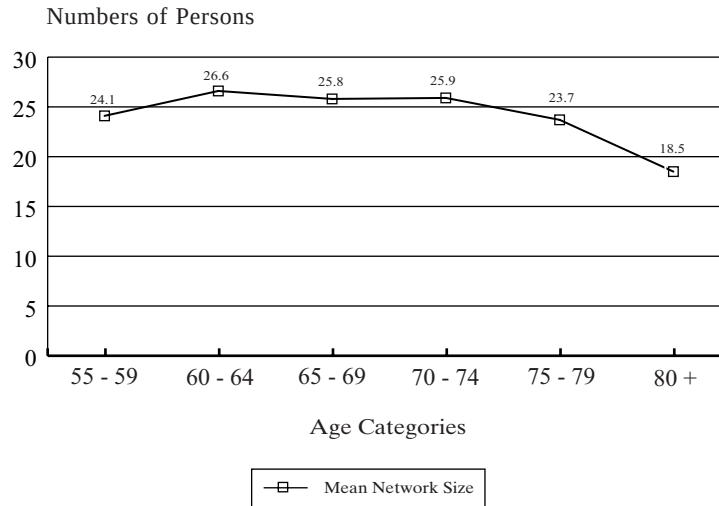


Fig. 2. Network size and age.



Fig. 3. Network size and health.

the aged for the care of members of their family as shameful.

The differences between the social aging processes of men and women in Indian life are substantial. Males appear more socially active outside the home. The social life of women is more domestically centered than men. They manage the household and servants. In addition to these contrasts there are striking differences in network size. The mean network size of men is 28.1 (SD 11.3) and that of women is 22.2 (SD 8.4).¹⁸ On the average the networks of women are 20% smaller than those of men. This pattern is apparent in all age strata except those in the 75 to 79 category (Figure 4).

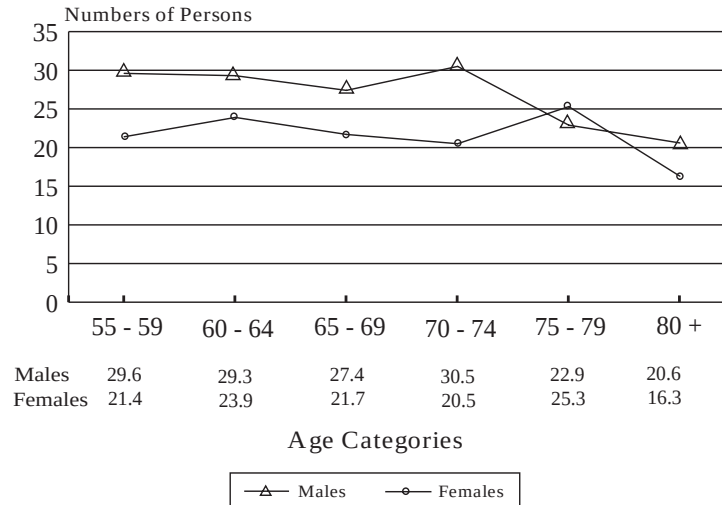


Fig. 4. Network size, age and gender.

Besides being smaller the networks of the women we spoke with contain a larger percentage of kin. For men 40% of the persons they interacted with were kin, with women the percentage was 51 %.

The difference between the mean network size of men and women needs to be interpreted. Because of the norms of purdah restrict women in their movement outside the home one would expect that their networks would be smaller and that the percentage of kin would be higher. Further examination of the data show considerable difference in the way men and women rate their health. The women interviewed rated their health in the low self-rating category in 47.9% of the cases, whereas the men interviewed used the same self rating in 17.9% of the cases.

We examined network size in terms of some household variables. The mean network size of persons living in nuclear households and joint households are very similar in size. The mean network size of persons living in nuclear households is 26.1 (SD 12.6). Those living in joint households had a mean network size of 25.3 (SD 10.1).¹⁹ In interpreting this result it is important to remember that that network rosters include people from within the household. Because of this one might expect that persons living in the more complex joint households would have larger networks (Figure 5).

We asked a series of questions about possessions of the household²⁰ that allowed us to rank households into four categories in terms of material style of life. The mean network size of persons from the four categories were compared and found to be very close to the population mean. The mean network size of the lowest and the highest categories were slightly elevated but the differences are trivial. It appears that wealth as manifested in household possessions is not related to network size of older people in this case.

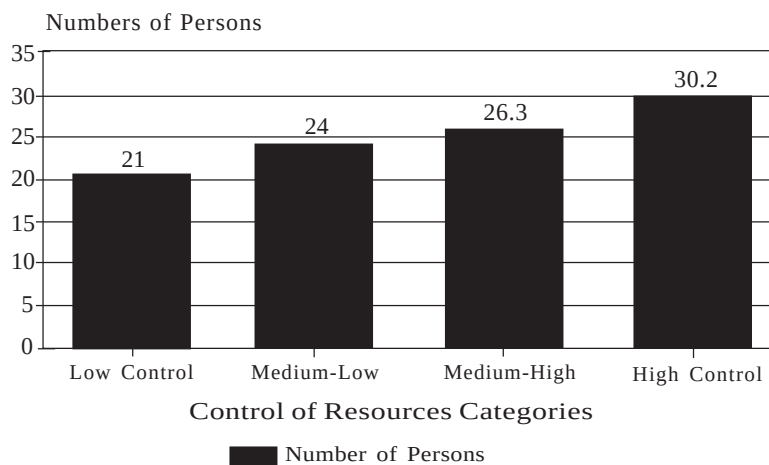


Fig. 5. Network size and resource control.

We asked the people we interviewed a uniform series of questions about their participation in household decisions concerning purchases of various types, marriage arrangements, investments, gift giving, travel, and children's schooling.²¹ We feel that responses to the questions can be construed to be a measure of their control over household resources. There is an apparently strong relationship between control over household resources and network size.²² This is displayed in the following figure.

The control of household resources variable was examined using the regression procedure in the context of health status, household income, age, education, material style of life and sex. The control of household resources variable showed the strongest relationship to network size of all these variable.²³

In summary, we found that differences in network size are found in association with age, sex, self-reported health status, and control of household resources. Regression analysis indicates that control of household resources has an especially important relationship with network size. We did not find differences associated with material wealth and household type. In the following segment of this discussion we attempt to extend our interpretations through comparisons with related studies.

NETWORK COMPARISONS

Comparison of both sample-wide and age cohort mean network size found in Rana Pratap Bagh with those found in the Kentucky study show a very similar pattern.²⁴ The network size sample means from the two places are essentially identical. As noted earlier the sample mean for the Delhi sample is 25.3, for the Kentucky study the sample mean was 24.9. The network sizes associated with different age categories are very similar. Comparison of the two samples in

terms of age cohort mean network size shows similarity of pattern throughout the life course, although the Kentucky life course pattern is more variable. This similarity in network size is only manifested in the sample-wide analysis however. When we look at gender we find that the male-female network size differences that appear in the Rana Pratap Bagh sample are not duplicated in the Kentucky data. There is no apparent difference between the network size of men and women in the Kentucky sample (Figure 6).

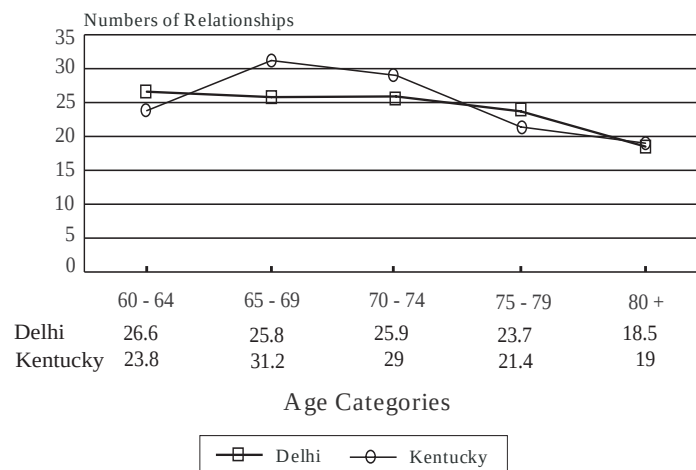


Fig. 6. Network size and age: a Delhi - Kentucky comparison .

If disengagement is manifested as "decreased interaction between the aging person and others in the social system" (Cumming and Henry 1961: 37) it seems as if the extent of disengagement found in Rana Pratap Bagh is no greater than what is found in the Kentucky population. The religious ideologies of attachment associated with the two communities are different, one might say diametrically different.²⁵ One conclusion that can be reached is that the presence of the ashrama institution in Indian society seems to have little impact on the size of social networks of persons of different ages. This result is consistent with Vatuk's conclusion based on her ethnographic study in a peri-urban village that older people "maintained relatively high levels of social participation" (1980: 146) in spite of the existence of the disengagement ideal. The network data indicate more or less the same result as the Vatuk study. Clearly there is not as large a reduction in social involvement as manifested in network size as one might expect from a literal interpretation of the *ashrama* texts and a narrow reading of disengagement theory. There are many possible explanations for this. Some that come to mind are 1) the ashrama concept is historically passé and has succumbed to the forces of modernization; 2) persons that disengage in this sense leave the community and would not appear in the sample; 3) disengage-

ment of this type is psychological and is manifested in a "restructuring of the goals of the individual" and not a "thinning out" of social ties (Cumming and Henry 1961: 37); and 4) the process is one alternative pathway or discipline for spiritual development²⁶ and therefore, while it exists, it is in such low frequency that it is not apparent in the face of other factors that cause variation. While all of these explanations are plausible, it is also reasonable to say that these results are consistent with the research that posits that humans have a network norm (Pattison, Francisco, and Wood 1975; Killworth and Bernard 1974). Pattison's study of a sample of 200 "psychologically normal" persons from cities in Southern California supported his contention that normal people have a "primary group of about 25" (1975: 1249). Killworth and Bernard argued from a cognitive perspective and asserted that normal network size for humans would be 24 to 27 people (1974). This is not to say that the networks of samples of older people are always in this range. When smaller (or larger) networks are found this deviation needs to be explained. There are numerous studies of aging and social network that show that samples of older people have networks smaller than the 20 to 30 range indicated in the field studies reported here (Eckert 1980, 1983; Cohen and Sokolovsky 1981; Sokolovsky and Cohen 1978; Stephens and Bernstein 1984). In all these cases the study populations were economically marginalized²⁷

To conclude, this research is consistent with the view that the scope of the social world of the older person will tend to consist of about 25 persons unless their health is compromised and/or the extent that they control of economic assets is limited. The research suggests that these relationships are robust in the face of a culturally-constituted disengagement ideology.

NOTES

1. *Purdah* (from the Urdu word for 'veiled') is an institutionalized norm of female isolation. It is most clearly expressed in modesty of women's dress, very low labor force participation of women, and the restricted movement of women in public. This practice structures women's lives more extensively between menarche and menopause.
2. The county is located in central Kentucky. The occupational structure is based on mixed farming and out of county industrial employment. Religious life within the county is entirely based on evangelical protestant churches of various orientations. As a county it is neither rich nor poor. Until recently its population was in decline.
3. Early in the project a panel of eight men and eight women were identified as key informants. The average age of this group was 69 years. The range was 59 to 91 years of age. These individuals were interviewed to help us better understand the situation of older people in this study and help us design aspects of the survey data collection process. This qualitative data was supplemented by information obtained during the structured interviews. Most of the quotes used in the body of this article are derived from interviews with the panel of key informants.
4. The survey interviewing was done over a 12 month period starting in 1990. The sampling frame was the Delhi Administration Election Commission Office voter registration list. Indian voter registration procedures are such that virtually everybody in the sampling universe is listed. The sampling frame includes names, ages, sex, and address. The sample consisted of 150 persons. The response rate was high. While

there were no refusals to be interviewed, there were seven persons [4.6%] who declined to finish the entire interview. A census survey was not taken because of the cost in time and money. When a unit was contacted a simple screening question was asked to identify whether the person on the sampling frame list was present. In contrast to most other studies done in India, we interviewed both men and women. Although the sampling units are individuals, not households, it was important to the analysis to know what kind of residence units the persons interviewed live in. The composition of the sample by age category and sex is as follows: 55-59 males, n=9, females, n=18; 60-64 males, n=25, females, n=24; 65-69 males, n=18, females, n=7; 70-74 males, n=13, females, n=11, 75-79 males, n=8, females, n=4, 80 + males, n=3, females, n=3. All persons in the household were listed by name, relationship to the respondent, identified as to household head status, educational attainment, sex, and age. The interview included items on personal description (age, education, marital status, birth place, etc.), household composition, household material style of life, household division of labor, role in household decision making, health status, quality of life, leisure time activities, and social networks. The interviews were done by N. K. Chadha. Chadha is a faculty member at the University of Delhi, Department of Psychology, fluent in the languages used in the interviews [Hindi and Punjabi], and similar in background to the persons being interviewed. Interviews ranged from about one hour to two hours.

5. The techniques used are described fully in van Willigen (1989: 63-75) and van Willigen and Chadha (1990). While the Kentucky component of the study was carried out, the network research was not done in Abkhasia.
6. The textual basis of Hindu institutions that are relevant to social aging is thoroughly discussed in *Religion and Aging in the Indian Tradition* (Tilak 1989).
7. The study area was selected from three possible sites in North Delhi. All sites could be described as having upper middle class populations, being far from the urban congestion of Old Delhi, and existing since Independence. All were accessible from the University by city bus. Employed persons in these neighborhoods tend to work in the private sector rather than government service.
8. Much of the information about Rana Pratap Bagh as a place was obtained from R. L. Patni's *A Geographical Study of Rana Pratap Bagh (As a Residential Neighborhood)*. Mr. Patni carried out this study in 1962 as a thesis project in human geography. He made this useful document available to us. Rana Pratap is a historic figure. Bagh means garden.
9. Following Partition of India and Pakistan after Independence, many refugees from Punjab migrated to Delhi. The population of the city expanded very rapidly causing a strain on urban services. Many of the people in the sample were part of this massive and often tragic movement of people.
10. This is a Ram Lila. It serves as the venue for annual performances of the religious epic, the Ramayana.
11. A *kirtan* is a religious activity that involves the singing of devotional hymns called *bhajans*. These activities usually take place in people's homes and involve both men and women.
12. The range is \$235 to \$352 per month. This conversion does not really do justice to their income. While these people might not be called wealthy they are very well off for the most part.
13. This is a paraphrase of Peggy Reeves Sanday's concept of the script for power that she used in her analysis of the relation between myth and the development of gender inequality (Sanday 1981).
14. In this report we use the term caste to refer to the large ranked groups termed varna in Sanskrit. These include *brahman*, *kshatriya*, *vaishya*, and *shudra*. We use the term

sub-caste to refer to the smaller, localized ranked groups usually called *jati*. Twice-born castes are the three highest ranking varnas, that is all the *varnas* except *shudra*. In addition to these four categories there are sub-castes that are 'outside' the four varnas. These groups have been referred to as 'untouchables', Harijans, Dalits, and scheduled castes. Much can be learned about the caste system from reading Kolenda (1978) and Dumont (1970).

15. Most formerly 'untouchable' castes are listed [i.e., scheduled] in an addition to the Indian Constitution as potential beneficiaries for various government programs. Shudras would include low but not 'untouchable' castes like tailors, potters, and carpenters.
16. The relationship between age and network size was examined using ANOVA. $F \text{ Prob.} = 0.0377$.
17. We collapsed the five self-rating of health categories used in the interview in the following way. Very poor and poor became low self-rating category [$n=48$], fair and good became the middle self-rating [$n=74$] and excellent became the high category [$n=27$]. The relationship between network size and inclusion in these categories was found to be significant with ANOVA. The $F \text{ prob.}$ was 0.0000.
18. These differences are statistically significant at the 0.000 level as determined by a T test.
19. The difference between household types was not significant. The probability value was 0.785.
20. Through key informant interviews we identified various possessions consisting of various consumer durables including furniture, household appliances, bicycles, and automobiles. These were weighted in terms of the inverse of their frequency as a percentage in the sample. These values were aggregated and subdivided into four categories. The mean network size of persons from these four categories was calculated.
21. The household decision making data collection was done in the following way. The informants were presented with eleven different decision making activities. These were selecting items for purchase like refrigerators, televisions and cars; selecting items for purchase like furniture; selecting school for children; investing family money; negotiating marriage arrangements; planning meals and food preparation, purchasing clothing, purchasing property (such as houses, land and shops); giving gifts on relative's marriage; selecting occupation and life career; and destinations for visiting. These categories were derived from interviews with older people from Rana Pratap Bagh. In each case they were asked to respond in the following four categories: normally makes decisions alone; normally makes decisions with the advice of others; normally is consulted on decisions or gives advice; and is not directly involved. These responses were given points; four through one. The points for each item were totaled and divided by the total number of possible points. A person that was maximally involved in decision making could have a score of 1.00. Based on these scores persons were put into a high, medium-high, medium-low and low household decision making participation categories based on the mean and standard deviation.
22. There is a significant difference between control of household resources scores and network size as determined through ANOVA. The $F \text{ probability}$ is 0.002.
23. The regression procedure involved the following variables: health status, household income, respondent's age, respondent's educational attainment in years, control of household resources, material style of life and sex. The R^2 is 0.23, the $F \text{ score}$ is 6.01, the $F \text{ significance score}$ is 0.0000 and the significance T score of the household resources control variable was 0.008. This was the only variable that was significant at less than the 0.05 level.

24. The India – Kentucky comparison came about because the two senior authors decided to collaborate and did so by studying communities with which they were familiar and “at home”. They came in contact when van Willigen was in India on a Fulbright Lectureship during which he made research seminar presentations on the Kentucky research at University of Delhi. When evaluating the legitimacy of the comparison it is important to remember that both studies were done in stable community settings that foster long term relationships and in which religious life and family are very important. While one is urban and the other consists of small town and rural residents, neither population is dominated by wage-laborers or salaried people; in both cases the people typically own the “means of production”. There are some very significant differences in household composition, religious ideology as it relates to social attachment, availability of pensions, and access to long-term care facilities.
25. There is no equivalent to the ashrama idea in Christian sacred texts. Christianity does not posit disengagement as a mechanism to achieve its final valued state, salvation. The social relationships of this world are seen by many as being transposed to the next world in the theology of the Kentucky community.
26. The concept of alternative pathway is very well developed in Hinduism. Three major alternative pathways, devotion [bhakti] , good works and service [karma], and the more contemplative pathway associated with the ashrama idea are manifested in specific cases.
27. This comparison is made in van Willigen (1989). The studies were carried out with single resident occupant hotel residents, male residents of New York's Bowery, and residents in subsidized housing for the elderly respectively.

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