Chapter 4 DISCUSSION

General remarks

Aging is a complex process, and aging in the human population has both social and psychological dimensions in addition to the biological one. Thus an interdisciplinary study is essential to obtain a comprehensive understanding about human aging. It can be expected that the problems associated with different traits comprising these dimensions will increase in frequency and/or magnitude with age (vide Chap. 1). Gender difference in frequency/magnitude of these traits is also likely. Past studies (vide Chap. 1) have shown that many of these traits are correlated with each other, within and between the dimensions. However, adequate number of comprehensive studies dealing with these three dimensions of aging simultaneously hardly exist; the few extant ones are confined only to the study of the retired (≥60 years) age group, a single gender or traits belonging to a single dimension.

In view of this the purpose of the present research is to study the nature and prevalence of some selected traits (a few from each dimension) in relation to retirement status, age group and gender, in an occupationally homogeneous group of men and women, aged between 50 and 70 years, and residing in Calcutta. The possible existence of relationships among these traits are also studied.

Recapitulation of results and their implications

Retirement status group difference

It is expected that with age problems related to different traits (problems) will increase in frequency and/or magnitude; therefore the retired individuals are expected to be having more problems than the not-retired ones. The age group-wise trend is found to follow the retirement status group difference closely and so in most cases are not mentioned below.
The not-retired individuals seem socially more secure compared to the retired ones on grounds of being more often married and living in larger households. They are also economically better-off as their monthly income, expenditure and savings are higher compared to the retired ones. In case of living arrangement, there is a decrease with increasing age in the percentage of individuals living with their spouse and this decrease is more clear in women. This observation agrees with Brody's (1987). Many more retired individuals own houses and express satisfaction with living arrangement compared to the not-retired ones.

The not-retired individuals more often consider chronological age as the criterion identifying the “elderly” compared to the retired ones. The retired individuals in turn more often consider the health status as the criterion identifying the “elderly”, showing that compared to the retired the not-retired individuals more often associate aging with chronological age while the retired ones more often associate it with health problems. The not-retired individuals, when asked about the problems faced by the elderly cite (in order of prevalence) health problems, loneliness, long leisure hours, financial problem, less personal contact and accommodation problem. The retired individuals themselves cite health problems, financial problems, loneliness, long leisure hours, less personal contact and finally accommodation. Thus it appears that the retired individuals are apprehensive of the financial problem, while the not-retired ones are apprehensive of loneliness, next to the health problem, while visualizing the problems of the elderly. The accommodation problem has a very low priority in case of both the groups.

Blood pressures, both systolic and diastolic, are higher in the retired group and a corresponding trend also appears in case of the age groups. This observation agrees with the findings of studies by WHO (1978), Rao (1980), Reddy et al.(1990), McGarvey (1992), James and Pecker (1994) and Kapoor and Saksena (1994).

In women however a slight drop in the diastolic blood pressure is seen after the 60-64 years age group. The possible reason could be, as it has been reported in other studies (James and Pecker 1994 and James and Baker 1994), that while the systolic
blood pressure continues to increase the diastolic blood pressure levels off or even decreases after the sixth decade. However due to absence of data on subsequent age groups it is not possible to verify this statement. The prevalence of hypertension is higher in the retired (nearly 46% in men and 20% in women) compared to the not-retired (21% in men and 16% in women) individuals, thereby showing an increase in frequency with age. In men of ≥65 years age group it is as high as 66.67%, thereby endorsing the statement by Kapoor and Saksena (1994) that it is possible that more than half of the elderly population may be hypertensive. Moreover this shows that hypertension can no longer be said to be a disease confined solely to modern Western industrialized societies only.

The retired individuals have reported having more problems related to most biological traits, like those involving eyes and ears, digestive system, musculoskeletal system, skin, fatigability, miscellaneous diseases and frequency of illness, compared to the not-retired individuals. This agrees with Roy's (1989) study in which he observed an increase in the frequency of problems with age in various organ systems. Though the overall health status of the retired individuals is poorer than that of the not-retired ones the statement that the retired individuals are generally about twice as likely to report various health problems as those still working (Ekpenyong et al.1987) does not seem true in case of the present study; nor is there any rise in the frequency of problems just before retirement, as observed by Ramamurti (1970) and Sinha (1986).

Most psychological traits/problems, like inadequacy, tension and anxiety are greater in magnitude in the not-retired groups. Depression and anger are however greater in magnitude in the retired group. Rapp and Davis (1989) found that depression is lower in magnitude among the elderly than among the other age groups; the present study does not confirm this finding. In spite of having "psychological disturbance" more often, the not-retired individuals do not show higher frequency of "medically significant emotional disturbance" compared to the retired ones.

The overall level of satisfaction with life is higher in the retired groups compared to the not-retired ones. This does not agree with Hosmath's (1993) findings that life sat-
isfaction is higher among the younger respondents in a sample of 60-89 years old individuals. The chief reason for satisfaction cited by individuals in both the retirement status groups is "socioeconomic condition". The next commonly-believed reason, "attitude", is more often mentioned by individuals in the retired group than those in the not-retired group. In none of these groups does "health" get the first priority. Thus our results do not agree with Bearon's (1989) in which for the older women health was an important source of satisfaction.

The not-retired individuals have more often spouse support compared to the retired ones. In all other aspects of subjective well-being there is gender difference; while among women the not-retired individuals have a better level of subjective well-being in men the level is better in the retired individuals.

As expected the not-retired individuals spend more time in professional activity and less time in leisure activity and sleeping, compared to the retired ones. The retired individuals spend more of their leisure time in activities like reading, playing, watching TV/listening to radio, walking, chatting and resting, compared to the not-retired ones.

Thus it can be concluded from the findings presented above that the retired groups, in spite of being socioeconomically not as well-off, having more health problems and being out of employment, seem to be psychologically better-off than the not-retired groups, as the retired ones have fewer psychological problems and are more often satisfied.

**Gender difference**

Contrary to the general expectation that there will not be much difference between the two genders in respect of socioeconomic traits, a few differences have been found. Men seem to be socially more secure as they are more often still married and living in nuclear families, while the economic condition of women is better on account of there being more earning members in the family, higher monthly personal and
household expenditure and savings, and fewer debts and liabilities. This contradicts Biswas and Tripathi's (1990) findings in which elderly men were having better economic opportunity than elderly women.

Fewer women are found to be living with their spouses, compared to men. This agrees with the findings of Spitze and Logan (1989) and Brody et al. (1987). Also like in Brody's study, it appears in the present study that the percentage of individuals living alone is higher in women than in men. Fewer women own houses. However in spite of all these not-so-ideal living conditions, more often women have expressed satisfaction with living arrangement compared to men.

Compared to men, fewer women consider chronological age, and more women consider health, as the criterion identifying the “elderly”. When asked about the problems faced by the elderly, women cite (in order of prevalence) health problem, loneliness, financial problem, long leisure hours, less personal contact and finally accommodation. Thus it appears that the men assign more importance to long leisure hours and financial problem next only to health problems, while women refer to loneliness. In respect of percentage, more women mention health problems and fewer of them mention problems pertaining to long leisure hours, compared to men. In Gui's (1988) study also health has the first priority, but unlike his study accommodation does not have high priority in the present study. Unlike in Kabir's (1992) study, financial problem also does not seem to be an important problem faced by the elderly in the present study.

Blood pressures, both systolic and diastolic, are higher in men than in women. As both men and women belong to the same occupational group it may be tentatively suggested following James and Pickering (1993) that occupational stress may have greater effect on the blood pressures in men than in women. The systolic and diastolic pressures found in our study (for women) are much higher compared to those obtained by Sen (1994). Hypertension is more common in men compared to women but the frequency of hypertensives is not as high as 50% of the total elderly population as found by Kapoor and Saksena (1994). In the present study 18.5% women
and 33.53% men are hypertensive. Pulse rate in women is lower compared to men in the not-retired group while it is higher in the retired group. Compared to Sen's (1994) study the pulse rate of women in our study is relatively high.

Women have more problems related to cardiovascular, musculoskeletal, genitourinary systems, skin, fatigability, miscellaneous diseases, while men have more problems related to respiratory and digestive systems and frequency of illness. Thus our study confirms Liang's (1993) findings that men have more respiratory tract problems (tuberculosis, etc.) and women have more musculoskeletal (arthritis/rheumatism, back pain) and cardiovascular (BP, heart disease) problems. Overall women report more biological problems compared to men. This agrees with the findings of Ekpenyong et al. (1987) in which women report problems more often than men, and of Yu and Wang (1993) in which men report higher evaluation scores than women.

Women have more problems related to psychological traits like tension and inadequacy, while having less problems related to anger, compared to men. While the not-retired women have less problems related to anxiety and depression, the retired women have more of those problems, compared to men. The present study therefore agrees with Atchley's (1976) work in which women retirees are more depressed than men retirees. When the frequency of individuals with "psychological disturbance" are considered, the figures for men surpass those for women, while in case of "medically significant emotional disturbance" the figures for women surpass those for men.

The overall level of satisfaction with life is higher in men compared to women. This finding agrees with Kant and Sharma's (1996) results. While in the present study 85.74% (83.25% women and 88.24 men) are either "very satisfied" or "complacent", Gui (1988) found that 87.6% of the elderly respondents were either "very satisfied" or "satisfied" and Ramamurti et al. (1992) found that 62% are either "very satisfied" or "somewhat satisfied" with life. The most frequent reason cited by both men and women is "socioeconomic condition" though the frequency is much higher among men, while the frequency of the next popular reason "attitude" (of individuals) is higher among women than among men.
Women report the positive aspects of subjective well-being more often than men, while men report the negative aspect (like general well-being - negative affect) more often. Thus it may be presumed that the level of subjective well-being of women is better than that of men.

Women spend more time in household maintenance and personal chores and less time in professional activity, leisure activity and sleeping, compared to men. During leisure hours women spend more time reading and playing and less time in walking and chatting, compared to men.

Thus it may be concluded from the findings presented above that in spite of being economically better-off, women are socially less secure and have more biological health problems than men. Psychologically they appear to have a better state of subjective well-being but are satisfied less often.

**Relationships between traits**

Age is positively correlated with systolic and diastolic pressures and this finding confirms the results of several other studies (WHO 1978, Rao 1980, Reddy et al.1990, McGarvey 1992, James and Pecker 1994, Kapoor and Saksena 1994). Age is positively correlated with the CMI score. As CMI score represents the severity of health problems, the present study agrees with Roy's (1989) study about the increase in problems with age. The finding that age is positively correlated with time spent in personal chores, leisure activity and sleeping, and negatively correlated with that spent in professional activity, also conforms with expectation, as retirement implies reduction in the time spent in professional work. No significant increase in time spent in household maintenance is seen after retirement in either gender.

As expected correlation between the two socioeconomic traits, total number of members and total number of earning members in the household, is positive. The two blood pressures, systolic and diastolic, are also positively correlated. Negative correlation is found between time allocations for many of the activities.
Satisfaction is found to be positively associated with the economic aspects and negatively associated with traits related to the biological aspects of health. This finding agrees with Clemente and Sauer's (1976) results showing that the quality of perceived health is a salient predictor of satisfaction, while marital status is not. In the present study, the associations between satisfaction and socioeconomic traits, like marital status, education, family type and living arrangement, are non-significant.

The presence of “serious disorder” is found to be associated only with health traits (biological dimensions), while that of “psychological disturbance” is associated with some social traits, e.g. number of members in the household, in addition to health traits.

Systolic blood pressure is found to be associated with a number of economic traits like medical expenditure, budget, personal liabilities (all positively) and income (negatively), while diastolic blood pressure is associated only with income (negatively). Neither systolic nor diastolic blood pressure is associated with living arrangement and other social traits. Interestingly no significant association is found between blood pressure and presence of “serious disorder” and “psychological disturbance”, nor between blood pressure and health related traits (biological). Pulse rate is however positively associated with the presence of problems in respect of health related traits, like presence of chronic problem, “serious disorder” in women and negatively associated with “psychological disturbance” in men.

Concluding remarks

The results obtained from the present study show that the nature and prevalence of many of the biological, psychological and socioeconomic traits change with age, as expected. While the frequency of socioeconomic and biological traits/problems increase in the higher age groups, the trend is the reverse in case of psychological traits in the present study population. Gender difference is seen in the nature and prevalence of many of these traits; while the frequencies of economic and biological
traits/ problems are higher in women, no consistent gender difference is seen regarding the psychological traits. It also appears even from the few traits studied under each dimension that there are strong relationships between traits belonging to the same dimension, as well as between traits belonging to different dimensions (e.g. biological and economic, biological and psychological, etc.). Further age is correlated with a number of traits belonging to these three dimensions.

The vastness and complexity of the phenomenon of aging and some of its important characteristics are highlighted in the present study, though it makes no claim of having shown the complete picture of the biological, psychological and social concomitants of old age in a middle class population in Calcutta. Based on the experience gained from conducting the present study, necessarily limited in many ways (e.g. carried out single-handedly within a specified time frame and in an urban setting), the following suggestions for further research may be offered:

1. The study of the ≥70 years age group are few in India, basically because of the lower life expectancy until recently. With India aging, and life expectancy increasing, it seems that study of the nature and prevalence of health problems in the “old old” (as compared to the “young old”) population assumes increasing importance. Due attention should be paid to this phenomenon.

2. Some more elaborate and rigorous design and analyses should be employed, to the extent feasible under the prevailing circumstances.

3. Many more variables under each dimensions should be studied to provide further insight into the phenomenon of aging.

4. Some more socioeconomically, ethnically, regionally/ecologically distinguished groups (like working - non-working, teaching - non-teaching, Bengali speaking - Non-Bengali speaking, rural-urban, etc.) should be studied to identify the common features of the phenomenon of aging.
5. Institutionalization of the elderly, though relatively rare in Calcutta (at least in the Bengali-speaking community), is gaining ground because of the fast-changing social scenario, particularly nuclearization of families. Studies of the institutionalized elderly individuals should provide information having considerable social relevance in the near future.

Investigation relating to the above suggestions may lead eventually to some broad, academically important and socially useful generalization about the complex phenomenon of aging.