

## **Indices of Well-being of Older Adults: A Study Amongst Institutionalized and Non-institutionalized Elderly<sup>#</sup>**

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The present study was planned to assess and compare the general well-being of institutionalized and non-institutionalized elderly. A battery of general well-being measures was created. The battery included Hindi versions of Beck Depression Scale (Mathur, 1981), Goldberg Health Questionnaire-12 (Mohal, 1991), Self-esteem Inventory (Thomas & Raj, 1984), and Life Satisfaction Scale (Mohal, 1991). A Distressed Sleep Checklist was especially created for the present study. It was administered to 371 elderly (171 institutionalized, and 200 non-institutionalized; 200 women and 171 men) aged above 60 years. Global score of well-being was obtained by adding reciprocals of scores on depression, GHQ-12, and distressed sleep to the sum of scores on self-esteem inventory and life satisfaction scale. Two-way ANOVA was applied to analyze the results for global score as well as for separate scores on each measure. Findings revealed that men scored higher on general well-being as compared to women. The institutionalized aged did not differ from the non-institutionalized on global scores, however, they had less depression and self-esteem than the non-institutionalized.

**Keywords:** Elderly care, well-being, institutionalized care, non-institutionalized care, life satisfaction.

The concept of well-being refers to optimum psychological functioning, and experiences (Ryan & Deci, 2001). Subjective well-being refers to how people evaluate their lives, and includes variables such as life satisfaction, marital satisfaction, lack of depression and anxiety, and positive moods and emotions. Diener, Suh, Lucas, and Smith (1999) have reported that subjective well-being is a broad category of phenomena that includes people's emotional responses, domain satisfaction, and global judgments of life satisfaction. They defined subjective well-being as a general area of scientific interest rather than a single specific construct. The major components of

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subjective well-being as suggested by Diener et al., (1999) are: Pleasant affect (joy, elation, contentment, pride, affection, happiness, etc.), unpleasant affect (guilt and shame, sadness, anxiety, worry, anger, stress, depression, envy, etc.), life satisfaction (satisfaction with current life, satisfaction with past, etc.), and domain satisfactions (work, family, leisure, health, finances, self, etc.). A number of variables such as income (Diener, 1984; Diener & Oishi, 2000), marriage (Diener et al., 1999), gender (Diener, 1984), religion (Myers & Diener, 1995), and age (Diener & Suh, 1998) have been reported to have significant influence on the well-being.

Aging of the global population is one of the greatest challenge facing the world in 21<sup>st</sup> century. It is estimated that by 2020 more than 1000 million people of 60 years and above will be living in the world and more than 700 million of them in the developing countries (Shambharkar, 2004). By 2020, China and India will have 230, and 142 million of the aged respectively and this is perhaps the largest number of aged in any single country. The situation in other (other than India) South East Asian countries will be more or less similar for the increased number of aged. Factors accounting for the increased number of aged, include decreased mortality rate, higher birth rate, and increased life expectancy, which may be because of advancement in medical sciences and improved health care facilities. Even now many developing countries, more so the South Asian countries including, India, Pakistan, Bangladesh, etc. are facing the burden of health and housing problems of the ageing population. Poverty, lack of adequate social security schemes, continuing urbanization, and migration of the youth from rural to urban areas and even to other countries for greener pastures and the aged are left all alone are some of the factors which are adversely affecting the health and well-being of the aged. Moreover the traditional normative patterns where the senior members (aged) of the family were regarded as treasures of knowledge and were respected and cared are also changing. The age old system of joint family is also giving way to nuclear families where the condition of the aged is becoming apathetic (Chadha, 1996; Ryan & Deci, 2001; Shambharkar, 2004).

The problem of housing and care of the aged is worsening day by day, and a new form of living and care (i.e. institutionalization) is taking shape in place of the old system where the old aged person lived with the family (Chadha, 1989). There may be several reasons for it but two of them are very prominent, one in case of the affluent sections of the society, either the children are living in other countries or other cities because of the business or job, or because the son and

daughter-in-laws are interested in living alone (like nuclear families) and thus the aged are left all alone at the mercy of servants/attendants or admitted to some old age home, etc. Second, in case of the non-affluent and poor people, the children are forced to migrate to urban areas for employment and the aged are left all alone with no one to attend to their needs. Because of these and other reasons a new form of care i.e. institutionalization of the aged (institutional care) is emerging swiftly in this subcontinent (South Asia) on pattern of western countries.

There are two important questions: (1) Is institutional care a viable substitute to home based care? (2) Is the western model of institutionalized care suited to people of the subcontinent i.e. South Asian countries? The answer to the first question is in the negative, and there are studies reporting higher levels of depression and low levels of life satisfaction in institutionalized aged (Chadha, 1989; Lee, Lin, & Chang, 1995; Tannock & Katona, 1995). Every country has its own cultural and normative pattern which needs to be considered while planning for its people. Moreover, relocating a person to an entirely new setting which is away from his/her place, with unknown individuals may also adversely effect the health and well-being of the inmates. Thus, there is a need to examine the applicability of the western model to conditions in South Asia.

As far as gender differences are concerned, it has been reported that women report more negative affect, but at the same time they experience greater joy (Braun, 1977). Almost always, some differences found between the genders (Andrews & Withey, 1976). Interaction of age and gender on well-being has also been reported whereby the younger women are reported to be happier than younger men and older women were less happy than men (Diener, 1984, Diener et al., 1999; Spreitzer & Snyder, 1974). There are chances that aged men and women may react differently to ageing and their relocation and thus may have differential impact on their health and well-being.

The present study was planned to assess and compare the well-being of institutionalized and non-institutionalized elderly. The specific objective of the study was to examine the main as well as interactive effect of care (institution and non-institutionalized), and gender (men and women) on the well-being of the elderly participants.



## METHOD

### Design

A 2 (care: institutionalized vs. non-institutionalized) x 2 (gender: men vs. women) factorial design was used to achieve the objectives of the study.

### Sample

A sample of 371 subjects (men = 171 and women = 200), was selected for the present study on the basis of non-random, purposive sampling procedure. Literate and illiterate participants of both genders were included in the sample. The age of the participants included in the sample ranged from 60-100 years with a mean age of 71.12 ( $SD = 9.41$ ) years.

#### *Institutionalized Subjects*

There were 171 institutionalized participants (100 women and 71 men). Though, it was intended to include equal number of men and women participants but due to non-availability only 71 men participants against 100 women participants were taken up. The subjects were selected from eight old age homes located in Northern Indian states. Their age ranged from 60-100 years ( $M = 74.73$  years;  $SD = 9.77$  years). Destitutes were not included in the sample.

#### *Non-institutionalized Subjects*

200 non-institutionalized subjects (men=100 and women = 100) were included in the study. Both rural and urban subjects (one half of the men and one half of the women) were included in the sample. The subjects were selected from Delhi, Chandigarh, Faridabad, Rohtak cities, and villages adjoining them. The average age of non-institutionalized subjects was 68.30 ( $SD = 7.90$ ) years. The age range of the total sample was 60-100 years with a mean of 71.12 ( $SD = 9.41$ ) years.

### Instruments

For measuring general well-being, a battery of following measures was used:

#### *Beck Depression Scale*

Hindi version of Beck depression scale (Beck, Ward, Mandelson, Mock, & Erbaugh, 1961) by Mathur (1981) was used to measure depression. It is a self-report scale having 21 items to measure the

behavioral manifestation of depression irrespective of clinical diagnosis. The split-half reliability coefficient of the scale with Spearman-Brown correction was .93. Scores of 50 subjects on both Hindi and the original English version of the scale were correlated and the coefficient of correlation was found to be  $r = .97$  (Mathur, 1981). Re-test reliability (with 15 days gap) was reported to be .73 (Yadav, 2001). Items are scored as 0, 1, 2, and 3. Thus scores on the scale may range from 0-63, with high a score indicating greater depression.

### ***Goldberg Health Questionnaire - 12***

Hindi version of Goldberg Health questionnaire-12 (GHQ-12; Goldberg & Hillier, 1979) by Mohal (1991) was used to measure general health and well-being. It is a widely used 12 items self-administered screening device designed to assess the general health and well-being. The 12 statements are to be rated on a four point scale with a scoring weight ranging from 0 to 3. Thus the total score may range from 0 to 36. A high score indicate increased level of psychological distress and poor general health. The reliability and validity of the original questionnaire are well established (Banks et al., 1980; Goldberg & Hillier, 1979). Mohal (1991) has reported high reliability and validity of the Hindi version.

### ***Self-esteem Inventory***

Hindi version of Self-esteem Inventory (Backman, O'Malley, & Johnston, 1978) by Thomas and Raj (1984) was used to assess self-esteem. It is a 20 item self-report measure of global self-esteem of the subjects. There are 10 positive and 10 negative statements which are to be rated on a five point scale (Strongly agree to strongly disagree). A weight of 5, 4, 3, 2, and 1 is given for the positive statements and 1, 2, 3, 4, and 5 to the negative statements. Total score may range from 20 to 100. The reliability and validity of the original inventory are well established (Backman et al., 1978). Thomas and Raj (1984), and Mohal (1991) have reported high reliability and validity of the Hindi version. The product moment correlation coefficient between the scores on the original scale and scores on the Hindi version of the scale was .91, which is indicative of validity. Re-test reliability coefficient of Hindi version was .83 (Mohal, 1991).

### ***Life Satisfaction Scale***

Hindi version of Life Satisfaction Scale (Warr, Cook, & Wall, 1979) by Mohal (1991) was used to measure life satisfaction of the participants. It is a 10 item scale designed to measure salient features

of daily life and activity of the respondents. Responses are to be rated on seven point scale i.e. extremely dissatisfied (1) to extremely satisfied (7). The total score ranged from 10-70, with a high score indicating higher life satisfaction. The technical properties of the original scale are well-established (Warr et al., 1979). Re-test reliability (with 30 days gap) of the Hindi version was ( $r = .87$ ) high and the score on Hindi version correlated strongly ( $r = .91$ ) with scores on the English version (Mohal, 1991).

### ***Distressed Sleep Checklist***

A nine item checklist was especially prepared for assessing distressed sleep in elderly. The items were related to the time of going to bed, getting up in the morning, number of time the person gets up in the night, difficulty in going to sleep, etc. The score ranged from 1 to 8 with high score indicating distressed sleep.

Scores of all the 371 participants on all the five measures were correlated. The scores on Beck depression scale correlated significantly with distressed sleep ( $r = .41, p < .01$ ), and negatively with self-esteem ( $r = -.45, p < .01$ ) and life satisfaction ( $r = -.61, p < .01$ ). Self-esteem correlated significantly and positively with life satisfaction ( $r = .45, p < .01$ ) and negatively with GHQ-12 ( $r = -.60, p < .01$ ), and distressed sleep ( $r = -.52, p < .01$ ). Life satisfaction correlated negatively with GHQ-12 ( $r = -.71$ ) and distressed sleep ( $r = -.29, p < .01$ ). Scores on GHQ-12 and distressed sleep correlated significantly and positively ( $r = .39, p < .01$ ). Thus the correlations were in expected directions and were indicative of validity of the measures.

### **Procedure**

All the measures were administered individually to all the respondents under uniform conditions in two sessions, with a break of about 30 minutes in between the sessions. Those, whose eyesight was good and were able to read were given the tests/scales with prescribed instructions to read each item carefully and mark the response. However for those who were not able to read, the second author read the questions and marked their responses. Analysis suitable for 2 x 2 factorial design was carried out for scores on each measure.

## **RESULTS**

The means and standard deviations on each of the measure are given in Table 1. The  $F$  values for 2 (care: institutionalized vs. non-institutionalized) x 2 (gender: men vs. women) analysis of variance on each case are reported in the text.

Table 1

*Means and Standard deviation's of Institutionalized and Non-institutionalized Aged on Well-being Measures (N = 371)*

	Institutionalized						Non-Institutionalized					
	Men (n=71)		Women (n=100)		Total (n=171)		Men (n=100)		Women (n=100)		Total (n=200)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
D	11.97	9.26	13.15	8.84	12.66	9.01	13.59	10.05	19.67	10.13	16.63	10.51
SE	64.96	11.74	63.90	12.33	64.34	12.07	70.83	12.09	66.13	11.90	68.48	12.20
GH	14.14	6.69	15.36	5.76	14.85	6.17	12.02	5.45	16.24	5.29	14.13	5.76
LS	50.49	9.76	49.91	8.44	50.15	8.99	52.17	9.37	45.97	8.89	49.07	9.63
DS	12.89	1.86	13.40	2.13	13.19	2.03	12.46	2.12	13.16	2.14	12.81	2.16

*Note:* D = Depression; SE = Self-esteem; GH = General Well-being; LS = Life Satisfaction; DS = Distressed Sleep.

## Gender and Depression

As expected, women scored higher ( $M = 16.41$ ,  $SD = 9.49$ ) than men ( $M = 12.78$ ,  $SD = 9.66$ ) on depression (see Table 1) and these means differed significantly [ $F(1,367) = 12.96$ ,  $p < .01$ ]. The institutionalized aged had significantly [ $F(1,367) = 16.29$ ,  $p < .01$ ] lower mean score ( $M = 12.66$ ,  $SD = 9.01$ ) than the non-institutionalized ( $M = 16.63$ ,  $SD = 10.51$ ) aged. Non-institutionalized men and women scored higher on depression. Amongst the non-institutionalized group women had highest scores on depression (see Figure 1).

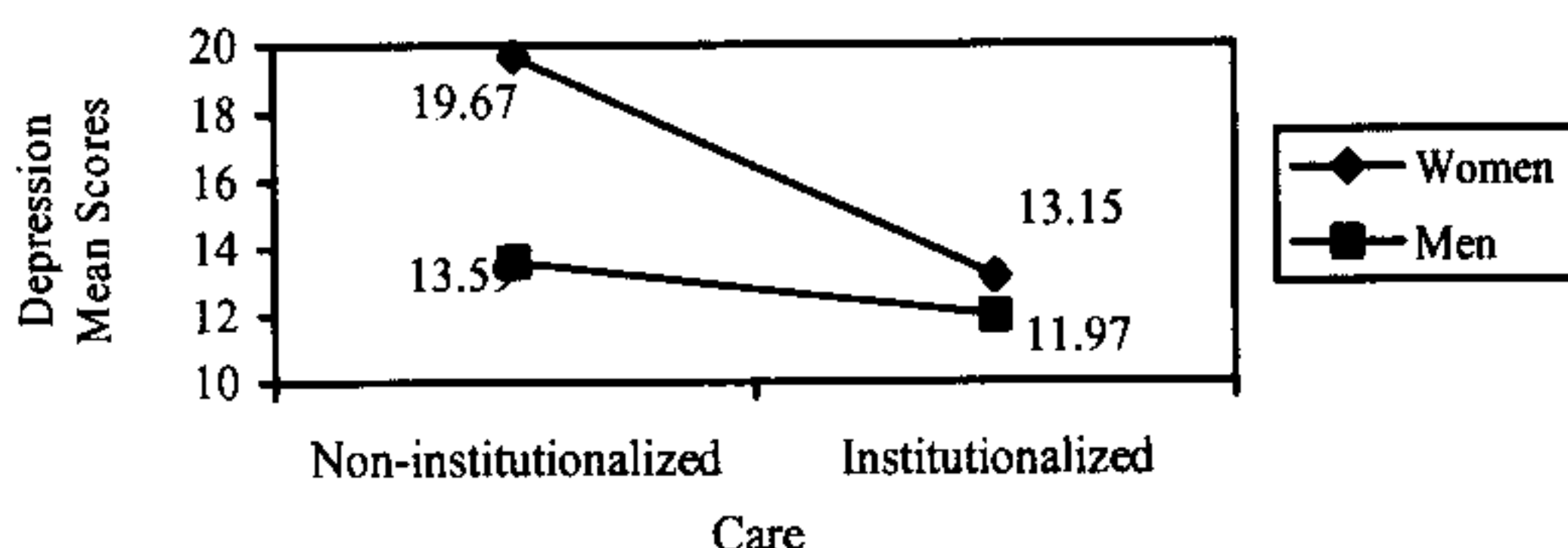


Figure 1: Interactive effect of care and gender on depression in aged

## Gender and Self-esteem

Self-esteem of participants differed significantly [ $F(1, 367) = 5.20$ ,  $p < .05$ ] on their scores on self-esteem inventory. Men had higher ( $M = 67.89$ ,  $SD = 11.92$ ) self-esteem than women ( $M = 65.02$ ,  $SD = 12.12$ ). The non-institutionalized aged scored significantly higher on self-esteem than their institutionalized counterparts [ $F(1,367) = 10.28$ ,  $p < .01$ ].

## Gender and General Health and Well-being

GHQ-12 is a measure of general well-being. The effect of gender was significant [ $F(1,367) = 28.38$ ,  $p < .01$ ]. However, non significant differences were found for well-being amongst the institutionalized and non-institutionalized individuals. Gender differences were found to be significant with respect to institutionalization [ $F(1,367) = 6.20$ ,  $p < .01$ ]. The interactive means are depicted geometrically in Figure 2.

Results revealed that institutionalization had differential impact on the well-being of the aged. Women had poor well-being as compared to men. Institutionalized women and non-institutionalized



men were found to have better well-being than institutionalized men and non-institutionalized women.

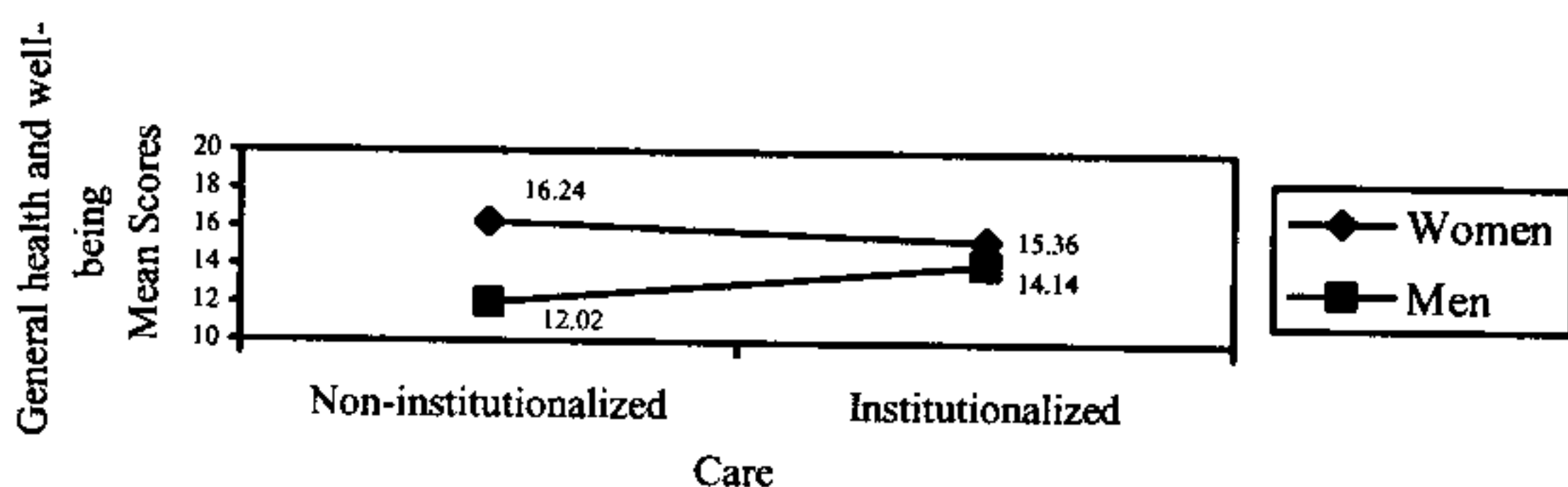


Figure 2: Interactive effect of care and gender on general health and well-being in aged.

### Gender and Life Satisfaction

As far as satisfaction from life is concerned, old aged men ( $M = 51.33$ ,  $SD = 9.57$ ) reported significantly higher satisfaction from their lives than women ( $M = 47.94$ ,  $SD = 8.66$ ); [ $F(1,367) = 12.68$ ,  $p < .01$ ; see Table 1]. The interaction of gender and care was also significant [ $F(1,367) = 8.71$ ,  $p < .01$ ], revealing that the men participants reported more satisfaction from life. Non-institutionalized men and institutionalized women were found to have more satisfaction from their lives (see Figure 3) than institutionalized men and non-institutionalized women.

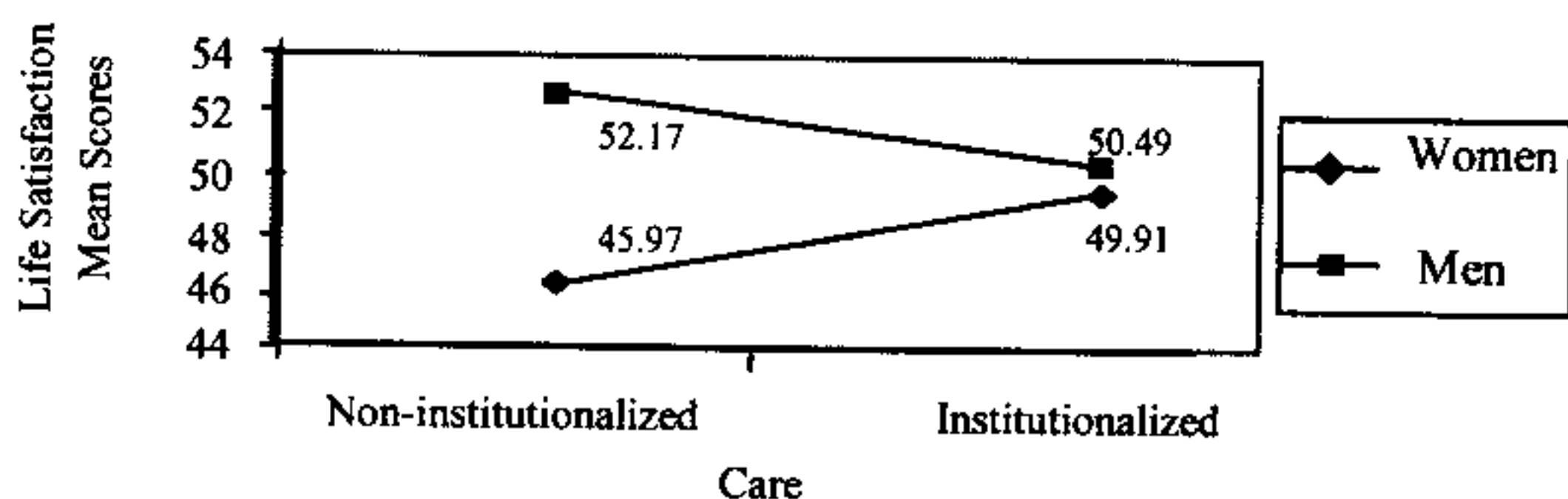


Figure 3: Interactive effect of care and gender on life satisfaction in aged.

### Gender and Sleep

Sound sleep is reported to be a good indicator of health and well-being of an individual and distressed sleep on the contrary is an indicator of poor health and ill-being. Women reported more sleep

disturbance ( $M = 13.28$ ,  $SD = 2.12$ ) than men ( $M = 12.67$ ,  $SD = 1.99$ ) and the mean scores differed significantly [ $F(1, 367) = 7.66$ ,  $p < .01$ ]. There was no difference in sleep patterns of institutionalized and non-institutionalized aged, however, the interaction of gender and care was significant [ $F(1, 367) = 10.24$ ,  $p < .01$ ]. The interactive means are depicted geometrically in Figure 4.

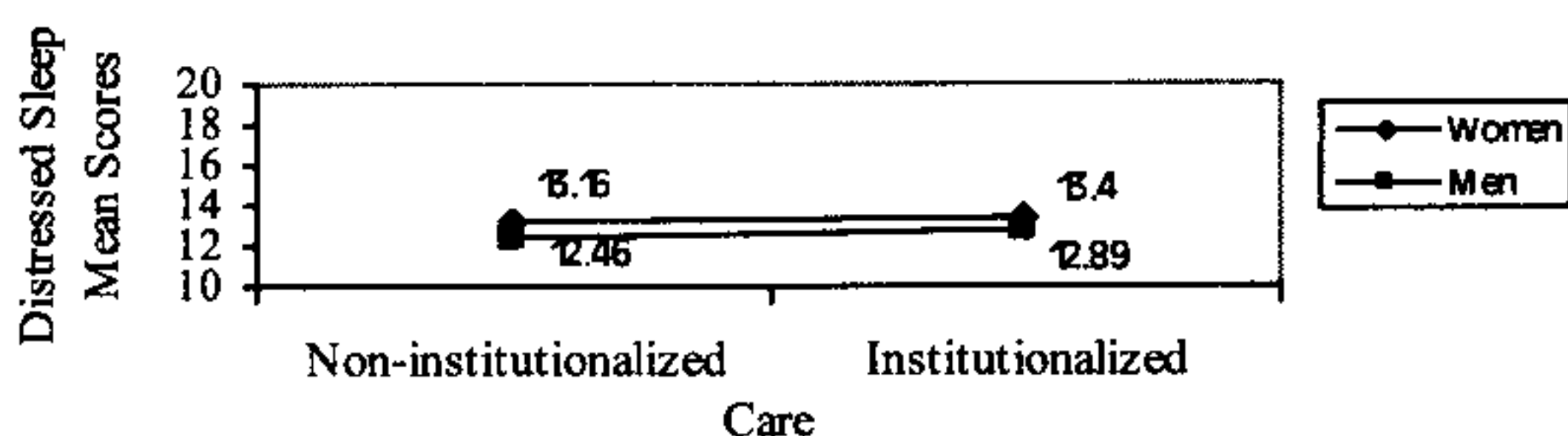


Figure 4: Interactive effect of care and gender on distressed sleep in aged

## DISCUSSION

Life satisfaction has been reported (Diener et al., 1999) as an important indicator/component of well-being. Higher level of life satisfaction as revealed in the present findings is inconsistent with several studies (Braun, 1977; Cameron, 1975; Gurin, Veroff, & Feld, 1960; Spreitzer & Snyder, 1974) reporting either lack of or very little difference in life satisfaction among men and women. However the higher level of satisfaction in men found in the present study can be explained in terms of the gender roles prescribed for a traditional Indian men and the realization of expectations. Ghusu, Hyde, Stevens, and Hyde (1966) reported that realization of expectations matters the most for the life satisfaction in later life. As men have more opportunities than women to realize their expectations and consequently they may have felt more satisfied. In case of women it is not so. The institutionalized women might have involved in religious performance more than non-institutionalized ones and thus religious performance and practice might have influenced their life satisfaction.

Men and women aged participants differed significantly on their scores on self-esteem inventory. Men had higher ( $M = 67.89$ ,  $SD = 11.92$ ) self-esteem than women ( $M = 65.02$ ,  $SD = 12.12$ ). The non-institutionalized aged scored significantly higher on self-esteem

than their institutionalized counter parts. However, the interaction of gender and care was non-significant. These findings are not in line with earlier studies (Hattile, 1992; Marsh, 1989; Wylie, 1979) reporting either lack of or inconsistency in the findings over gender differences in self-esteem. However the higher self-esteem as revealed in the present study may be explained in terms of the gender roles and normative pattern in traditional Indian society where men have a dominating position. This also results in greater sense of fulfilling their expectations.

GHQ-12 is a measure of general well-being and here again the effect of gender was significant. However, the effect of care (institutionalization vs non-institutionalization) was non-significant. The interaction of sex and care was found to be significant. Findings of the study are in agreement with studies (Chadha, 1996; French, Gekoski, & Knosx, 1995; Gurin et al., 1960; Haring, Stock, & Okun, 1984; Jaslow, 1976; Penning & Storain, 1994) reporting that men have better general well-being than women. But there are several studies (Geetha & Parvati, 1996; Mercier, Peladeau, & Tempier, 1998), reporting lack of difference in the well-being of men and women elderly subjects and the present finding are not in line with these studies. Several factors may account for the poor general well-being of women than men. These may be explained in terms of the socially prescribed gender roles (Wood, Rhodes, & Whelan, 1989) where by women's gender roles include, greater care giving responsibilities, which may encourage more emotional responsiveness in women than in men. Indian society is predominantly male dominated and women are dependent on their parents in their childhood and after marriage they are dependent on their husbands and hence they may become more vulnerable to negative affects and depression. Moreover, in our society religiosity and conventions are consciously inculcated more in women than in men in the process of socialization. A woman is trained to suppress her emotions and to display a pleasing behavior all the time. Her social roles demand much patience, politeness and moral strength. Higher level of depression is consistent with earlier studies (Comer, 1992) that women are twice as depressed as men. Demographic variables such as age, gender, education, ethnicity often have weak relation with well-being (Diener & Suh, 1997). Women in general report more negative affect but at the same time they seem to experience greater joy (Braun, 1977; Cameron, 1975; Gurin et al., 1960), so that there is little difference in global happiness and well-being but here in present case the women in addition to having

greater/higher depression, have experienced equal level of satisfaction from their lives.

The institutionalized and non-institutionalized aged did not differ on general health and well-being scores (GHQ-12), distressed sleep and life satisfaction, however, non-institutionalized men had higher self-esteem than institutionalized ones. Surprisingly, the non-institutionalized aged were more depressed than institutionalized ones. Present findings do not provide support to earlier studies (Chadha, 1989; Lee et al., 1995; Pinto & Parkash, 1991; Shyam & Yadav, 2002; Tannock & Katona, 1995) reporting higher depression in institutionalized aged.

Analysis of scores on different measures of well-being yielded significant interactive effect of sex and institutional care on general health and well-being (GHQ-12), depression, life satisfaction and distressed sleep. Depression was more in women and this confirms the findings in this area reporting higher depression in women than men. The most striking finding was that the institutionalized aged had lower level of depression than the non-institutionalized aged. The non-institutionalized women reported the highest level of depression. This is contrary to the findings (Chadha, 1989; Chadha, Easwaramorthy, & Kanwara, 1993; Tannock & Katona, 1995) reporting higher depression in institutionalized aged. Higher depression in non-institutionalized aged particularly in men can perhaps be explained in terms of the expectations people hold from their wards while living with them. At one time they were at the helm of affairs, deciding everything for themselves and their family but now their children have taken over and aged may feel neglected and sidelined. Moreover they may have higher expectations which their wards may not be able to meet. Those who were living in the institutions might have less or no expectations from them as they have either been forced to leave or have voluntarily decided to leave their home and have shifted to these institutions. In case of women, the situation is entirely different, they had lived a dependent life (especially of this age group), in their childhood they were dependent on their father, in youth on their husbands and in the old age on their wards and thus they might have been less affected by their relocation. In addition, religiosity and religious performance might have also affected their well-being, here in old age homes they were performing *puja* (praying) and involved in prayers and *bhajans* (A mode of worship in Hinduism and Sikhism; devotional songs expressing emotions of love for the Divine) at least twice a day (in the morning and evening). Several studies (e.g., Pinto & Prakash, 1991; Ryan &



Deci, 2001; Zorn & Johnson, 1997) have emphasized the role of religious beliefs in influencing well-being and life satisfaction of the elderly and have further stated that religiosity and religious performance become increasingly important with age.

Social support plays an important role in one's well-being and satisfaction or dissatisfaction from life as reported in studies (Greenglass, Fikrenbaun, & Burke, 1996) that those who have large supportive networks have better well-being than those who have less. They may achieve a sense of satisfaction which may lead to higher self-esteem, sense of satisfaction and those with fewer networks may be more vulnerable to negative events and stress which may consequently effect their well-being. Besides mere availability of more number of persons may not be sufficient, rather the satisfaction one derives from the available support is more important. Shyam and Yadav (2002) in a study found that satisfaction from available support was a strong predictor of well-being than mere availability of more number of persons for support. Though, non-institutionalized aged might have had more social support available yet the satisfaction they derive from that may be less and therefore may have higher depression, the institutionalized on the contrary have less support but what ever support they are getting is meaningful and they might have been satisfied with that. Thus, the policy planners and care givers need to consider the specific local factors while planning for the caring of its treasure of wisdom and knowledge i.e. the aged who have contributed immensely for their society. Moreover, the role of religiosity, social support, and personality factors in the well-being of the aged need to be examined in multivariate studies.

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