CHAPTER – VI

DISCUSSION

Discussion is the process of talking about something in order to reach a decision or to exchange ideas. In the discussion part of the research, the report takes a broad view and puts it in a wider context. This section focuses on the possible explanations for the results arrived in the analysis section. It shows that the results lead clearly to the conclusion. The researcher adopted Swales and Feak (1994) research discussion model in his study. The discussion includes personal profile of the respondents, different levels of the dependent variables, domain and subscale wise analysis, statistical analysis of selected dependent and independent variables which include chi-square, ANOVA, correlation matrices and hypothesis tests analysis of the study.

PERSONAL PROFILE OF THE RESPONDENTS

Age

Above half (50.8 %) of the respondents belonged to the age group of 40-59 years, above one-fourth (28.4 %) of the respondents belonged to the age group of 21- 39 years and one-fifth (20 %) of the respondents belonged to the age group 60 and above years. In Indian traditional family system each and every member of the family is responsible to take care of the elders’ needs. As per the cultural norms the elders prefer to live with their male child and expect care in old age. It is found in the present study that the majority of filial elders’ sons and their life partners are between 40 to 59 years of age (middle age). The above finding is supported by Chan, A. 2005, Huang, C.2006, Devi Prasad and Indira Rani. N. 2007 reviews and Hierarchical Compensatory Model (Cantor, 1991), Kin Independence model (Noelker and Bass, 1989) and Ashramas theory (Manu, 2000AD).
Sex
The vast majority (80.8%) of the respondents are female and nearly one-fifth (19.2%) of the respondents are male. As per the strong cultural norms in India, man is the bread winner of the family and female is to do the domestic and caring work in the family. Men enter in earning profession and hence are not able to care their filial elders. So naturally the female is the predominant caregiver of elders. The above finding is supported by Chadha, N. K. 1997. David, X. Cifu, M.D and William Carne, 2006, Lee, M., Yoon, E and Kropf, N. P. 2007, Lewis, M.L., Hepburn, K., Narayan, S. 2005, Allan Kaufman, V and Jordan Kosberg, I. 2010, Family Systems theory (Bertalanffy, 1968) and Feminist theory (Stroller, 1993).

Community
Nearly half (45.6%) of the respondents are Backward Class (BC), 34.8 percent of the respondents are Scheduled Caste (SC) / Scheduled Tribes (ST), 14 percent of the respondents are Most Backward Class (MBC), remaining 5.6 percent of the respondents are Other Class (OC). Due to industrialization, majority of BC people have migrated from rural to urban areas for employment or business purpose. In Tamil Nadu, all religious minorities and majority of the caste groups are categorized as BC. Hence compared to rural BC population urban BC population is high in Tamil Nadu (Tamil Nadu Statistical Report, 2011). In this study the same trend is observed in the study area.

Religion
The vast majority (88.4%) of the respondents belonged to Hindu religion, 6 percent of the respondents follow Christianity and 5.6 percent of the respondents had belief in Islam. Hindu religion is the predominant religion in India. The above finding associated with Devi Prasad and Indira Rani. N. 2007 studies.
Educational status
Above half (50.8%) of the respondents were illiterate, 19.2 percent of the respondents have completed Middle School (6th to 8th Standards) education, 14.4 percent of them have completed Primary School (upto 5th Standard) and 15.6 percent of them have completed Highs School (9th and 10th Standard) education. Lieberman, M. A., and Fisher, L. (1999), Jamuna, D. (2003), Deimling, G. T., Smerglia, V. L., and Schaefer, M. L. (2001), Kuypers, J., and Bengtson, V. (1983) studies are associated with above finding.

Occupational status
Nearly half (42.8%) of the respondents were home makers, above one-fourth (27.6%) of them were employed as daily wage workers, above one-fifth (20.4%) of them were self-employed, 5.6 percent of the respondents were contract worker and 3.6 percent of the respondents were private employees. Majority of the caregivers were engaged in low income occupation such as daily/contract work and self-employed. Chadha, N. K., (1997), Gonyea, J.G., O’Connor, M., Carruth, A., et al. (2005), Jamuna, D. (2003) studies are supporting the above result.

Monthly income
Less than half (44%) of the respondents earned between ₹2501-5000 per month; 36.8 percent of the respondents were not employed and fully engaged in home maker service; 13.6 percent of the respondents earned up to 2500 per month; the remaining 5.6 percent of them earned 5001 and above per month. The respondents were engaged in low skilled occupations and their earning capacity was very low. In addition to that they abstain from the work to provide service to elders. Chadha, N.K., (1997), Chakraborti, R.D. (2004), Huang, C., Musil, C.M., Zauszniewski, J.A. (2006) and Rashmi Gupta (2005) studies are associated with above finding.
Marital status
Majority (65.6 %) of the respondents were married; above one-fourth (27.6%) of the respondents were widows; 4.8 percent of the respondents were unmarried; and 2 percent of the respondents were divorced. Marriage is an important event in every individual’s life. As per the Indian customs, after marriage the person is permitted to participate in family, cultural, spiritual and public ceremonies. The parents’ prime responsibility is to find and fix suitable life partners to their children. Further married persons will get respect and responsibility in India. In this study majority of the respondents were married and this finding is supported by Jamuna, D (2005) and Kwon and Kim (2005).

Family size
Above half (53.6 %) of the respondents’ family size was up to four members; 39.2 percent of the respondents’ family size between 5-6 members and 7.2 percent of the respondents’ family size was 7 and above members. The government implemented family planning programme from 1965 onwards in India to control the population. The family planning programme was actively implemented and people realized in the southern state of India its importance, so naturally fertility rate as well as their family size was minimized. Jamuna, D. 2004 and Rashmi Gupta (2005) studies agree with the above the finding.

Caregiver’s relationship with care receiver
Less than one-third (32 %) of the respondents are in-laws, 31.6 percent of the respondents are children, 18.8 percent of the respondents are spouse, 14.8 percent of the respondents are grandchildren and 2.8 percent of the respondents are siblings. In this study irrespective of the care givers’ category, the feminine gender enters into care giving service to elders. In addition to that universally the female can only provide best service to needy population. It shows that the

**Family type**

Nearly three-fourths (74.8 %) of the respondents were in joint family and more than one-fourth (25.2 %) of them were in nuclear family. Due to the influence of modernization, the Indian family system has undergone change and nuclear families have emerged. If the elder have frail conditions, for elder caring purpose the younger generations return to traditional joint family system. That is, either the son’s family is sent to the parental home to live with the frail elder, or the frail elder is sent to the son’s home. It shows that still we are having joint family roots in the respondent’s mind and majority of the respondents preferred to reside in joint family for caring purpose. Maruthakutti, R (2010), Jamuna, D (2005), Huang, C. (2006) and Mui (1995) findings are associated with above the study finding.

**Care receiver age**

Majority (67.6 %) of the respondents’ care receivers belonged to the age group of 72 to 85 years; 21.2 percent of the care receivers were up to the age of 71 years and 11.2 percent of the respondents’ care receivers were 86 years and above. The Union ministry of health and family welfare released a statistics (2015) which states that the government should provide better immunization, nutrition, prevention and treatment for infectious diseases. In addition to that general improvement in quality of life had its impact on the increasing life expectancy of Indians. At present the Indian average life expectancy is 69.6 years (The union ministry of health and family welfare, 2015). The present study finding is higher than the national average.
Care receiver sex
More than half (57.2%) of the respondents’ care receivers were female and 42.8 percent of the respondents care receivers were male. In Coimbatore compared to male, female life expectancy is very high (male: 67.46, female: 72.61- Statistical Report, 2009). In general, the behaviour and life style of male affects their longevity whereas without stress the female person’s life expectancy is high. Haley et al. (1996) and Yee, Tennstedt, and Schulz (1999) study findings are supported by the above finding.

Care receiver problems
Less than half (45%) of the respondents’ care receivers were living with diabetes, 18.8 percent of them were in bedridden condition, 11.2 percent of them were facing multiple organ failure, each 7.6 percent of the care receivers were infected with chronic disease and two or more diseases with sugar respectively, 3.6 percent of the care receivers had bone fracture, 3.2 percent of them had heart problems and 2.8 percent of them were handicapped. Indians are more prone to diabetic problem due to food habits and genetic reasons. The elders are facing multiple health ailments along with diabetics. This finding confirms the recent finding that India is the capital of diabetic in the world; 40.9 million people are affected by diabetics (Pushpanarayan, Times of India, 2009).

Years of caring
Nearly three-fourth (73.2%) of the respondents were providing care to their care receivers for 1.1 years to 2.6 years, 17.6 percent of them were providing care for up to one year, the remaining respondents (9.2%) were providing care for 2.7 years and above. The ill health condition or chronic diseases forced the elders to dependent on their family members. Due to aging, the immunity level of elder decreases. Further, there is a chance for hereditary disease.
The elder can get treatment for some curable disease, whereas hereditary disease and internal organ failure need long term treatment which is reflecting in this study. Himabindu (2002) and Rashmi Gupta (2005) studies were supported by the above the finding.

**Number of elders in the informal caregiver’s family**

Three-fifths (60.4 %) of the respondents were living with one elder, 35.6 percent of them were residing with two elders and the remaining (4%) respondents were residing with three or more elders in their family. When the elder person becomes frail, the children and in-laws are taking responsibility to care their frail elder. The children and in-laws are in middle age and grandchildren are in childhood or adolescent age group. In this study majority of the respondents were taking care of a single aged person. Mui (1995), Jensen S, Given B (1993), Cantor (1983), Wolf and Kasper (2006) study findings are associated with the above finding.

**DEPENDENT VARIABLES**

**Perception**

Majority (66.8 %) of the respondents’ caring perception level was moderate. One-fourth (20 percent) of them had low level of caring perception and the remaining (13.2 %) respondents had high level of caring perception. Family members are involved in their day to day activities. In addition to that they have some duties and responsibilities. However, the head of the family or his spouse is responsible to care the frail elder. The caregiver feels that caring is his or her sole responsibility. The present study finding shows that majority of the respondents caring perception level was moderate. The study finding is in conformation with Carriere and Mueller (1997), Chadha, N. K., (1997), Colantonio, and Vernich (2002), Foley et al., (2002), Lewis, M.L., Hepburn, K., Narayan, S., et al (2005), Thomas. M. K. and Razeena Padnam. M.S (1998) and also supported Hierarchical Compensatory Model (Cantor, 1991), Kin Independence model
Strain
Majority (60.4%) of the respondents had moderate level of strain; above one-fifth (21.6%) of them had low level of strain; and 18 percent of the respondents had severe level of strain. The majority of the informal caregivers had moderate level of strain due to continuous cleaning, bathing, feeding, dressing work and also faced difficulty due to lack of medical knowledge. In addition to that, they underwent physical, emotional and financial problems. Amirkhanyan and Wolf (2003), Cantor (1983), Cheung, C., and Chow, E.O (2006), Martire, L. M., Stephens, M. A. P., Druley, J. A., and Wojno, W. C. (2002) study findings are associated with the present study. Also ABC- X Model (McCubbin, 1989), Stress Process Model (Pearlin, Mullan, Semple and Skaff, 1990), Wheel of Wellness Care Model (Waters, 1995), Strain theory (1938), Two-factor theory (Bradburn. N. M, 1969), Family Systems theory (Bertalanffy, 1968), Relative Deprivation theory (Agnew, 1996), Role Strain theory (Goode, 1960), Self-concept Discrepancy theory (Higgins, 1980) and Stress Process theory (Pearlin and colleagues, 1990) are supported by the above finding.

Burden
Majority (60%) of the respondents had moderate level of burden; above one-fifth (20.8%) of them had low level of burden; and 19.2 percent of the respondents had severe level of burden. The respondents were exhausted due to heavy work load, high caring tasks. In addition to that, financial instability made things difficult and the caregivers were not able to concentrate on their

**Coping**
Majority (66.8 %) of the respondents had moderate level of coping; 19.2 percent of them experienced high level of coping; and the remaining of them (14%) had low level of coping. The caregivers of elders have strong belief in culture, faith, spirituality, family bond, and understood about human lifecycle. This facilitated the caregivers of elders to accept the condition and thus had moderate level of coping. Ekwall (2006), Haley (1996), David, X. Cifu, M.D., William Carne (2006) studies and ABC- X Model (McCubbin, 1989), Two-factor theory (Bradburn, N. M, 1969), Family Systems theory (Bertalanffy, 1968), Ambiguous loss theory (Boss, 1999) and Stress Process theory (Pearlin and colleagues, 1990) were supported by the present study finding.

**Well-being**
Above half (54.4 %) of the respondents had moderate level of well-being, 23.6 percent of them had low level of well-being and the remaining (22 %) respondents had high level of well-being. The fulfillment of care receivers’ needs, their expected family member’s responsibility, social support, caregivers coping behavior and general satisfaction in life all lead to positive well-being of informal caregivers. The above the finding is in confirmation with Lewis, M.L., Hepburn, K.,

Outcome

Majority (58%) of the respondents had moderate level of caring outcome; above one-fifth (22.4%) of them had low level of caring outcome; and 19.6% of the respondents had high level of caring outcome. The caregivers’ positive and negative reactions reflected in different aspects of their care giving experience. Caregivers’ coping strategy, belief in cultural values, family members’ physical and psychosocial support and family dynamics lead to moderate level of caring outcome. Andressen (2010) and Braithwaite (1996) study findings and Kin Independence Model (Noelker and Bass, 1989), Quality Health Outcomes Model (Donabedian, 1966), Wheel of Wellness Care Model (Waters, 1995), Hierarchical Compensatory theory (Messeri et al., 1993), Attachment theory (Bowlby, 1982), Behaviour change theory (Meillier, Lund and Kok, 1997), Family Systems theory (Bertalanffy, 1968), Self-efficacy theory (Alberta Bendura, 1977), Transactional Stress theory (Lazarus and Folkman, 1984) are supported by the above finding.

Domains of Coping

Positive reinterpretation

Nearly three-fourth (74.8%) of the respondents’ level of positive reinterpretation was moderate; above one-fifth (20.4%) of them experienced low level positive reinterpretation; and the
remaining (4.8 %) respondents’ level of positive reinterpretation was high. The caregiver’s adaptation to situation, overcoming constrains in life, satisfaction in fulfilling their roles lead to moderate level of positive reinterpretations. Ekwall (2006) study, Two-factor theory (Bradburn, N. M, 1969), ABC- X Model (McCubbin, 1989) and Lifestyle-Exposure theory (Hindelang, Gottfredson and Garofalo, 1978) are associated with the above finding.

**Mental disengagement**

Above half (51.6 %) of the respondents had moderate level of mental disengagement, 34 percent of the respondents had low level of mental disengagement and 14.4 percent of the respondents had high level of mental disengagement. The finding reveals that half of the respondents’ level of mental disengagement was moderate and considerable number of them were in low level. It shows that even though they have a guilt feeling and humility, they are committed to fulfill the needs of the elderly, because the Indians are having strong faith in karma (Prakash, 1997).

**Focus on averting of emotions**

Majority (62.4 %) of the respondents had moderate level of focus on averting of emotions; 20.4 percent of the respondents had low level of focus on averting of emotions; and 17.2 percent of the respondents had high level of focus on averting of emotions. Even though the caregivers faced various psycho-social and financial constrains, their emotional attachment, humanitarian attitude and strong belief in cultural values made them to focus on averting of emotions. Bowlby, (1982) and Meillier, Lund and Kok, (1997) studies are supported by the above finding.

**Use of instrumental social support**

Majority (77.2 %) of the respondents’ level of use of instrumental social support was moderate; 13.6 percent of them were in low level and the remaining 9.2 percent of the respondents’ level of use of instrumental social support was high. The care receiver and caregiver’s family reside
together and take decision in consensus and naturally the caregiver receives all possible help and support from the kith and kin. Chen, F., and Greenberg, J. S. (2004) and Houde, S. C. (1998) studies are consisting the present study findings and Kin Independence Model (Noelker and Bass, 1989), Social control model (Lewis and Rook, 1999) and Task-specific theory (Litwak, 1985) are supported by the above finding.

**Active coping**
Majority (68.4 %) of the respondents’ active coping level was moderate, 23.6 percent of the respondents had low level of active coping and 8.0 percent of the respondents had high level of active coping. The respondents’ social and mental satisfaction, family members’ support and care receivers’ cooperation strengthen the coping ability of the respondents. The above findings are associated with David X. Cifu.M.D., and William Carne (2006) and Selwyn Stanley and Sheeba Selwyn (2007) studies and ABC- X Model (McCubbin, 1989), Two-factor theory (Bradburn. N. M, 1969), Family Systems theory (Bertalanffy, 1968) and Stress Process theory (Pearlin and colleagues, 1990).

**Denial**
Majority (63.6%) of the respondents’ level of denial was moderate, 22 percent of them had low level of denial and 14.4 percent of the respondents had high level of denial. The care receivers had earlier devoted their labor, love, and savings to their own family members. In reciprocity the care receivers’ needs and wishes are fulfilled by the family caregivers. The Cumulative Advantage/Disadvantage theory (Derek Price and Robert Merton, 1960) is supported by the above finding.
Religious coping
Almost all (99.6%) of the respondents had moderate level of religious coping. The caregivers had a strong spiritual belief in rebirth and heaven (Moksha). This finding is associated with Colantonio and Vernich (2002), Leisa. R. E., Mary Ellen Quinn (2003), Hebert, R. S., Weinstein, E., Martire, M and Schulz, R. (2006), Carriere and Mueller (1997) studies and Family Spiritual Interdependence Model (Kim, 2007), Wheel of Wellness Care Model (Waters, 1995), Theory of Ashramas, Karma theory (Prakash, 1997) and Human Caring theory (Watson, 1988).

Humor
Above one third (37.6%) of the respondents had moderate level of humor, 36.4 percent of them had low level of humor and 26 percent of the respondents’ humor level was high. One fourth of the respondents expressed their humor sense and little more than one third of the respondents’ humor level was moderate and considerable number of them did not express their humor. It shows that the respondents are highly sensitive and add their reservation in expressing as well as enjoying humor.

Behaviour disengagement
Above half (54.8%) of the respondents had moderate level of behaviour disengagement; 28.4 percent of the respondents had low level of behaviour disengagement; and 16.8 percent of the respondents’ level of behaviour disengagement was high. The respondents’ belief in cultural value system, their relationship bonds with care receivers and social support extended by their family members lead to disengagement in covert and overt behaviour. Preacher and Hayes, (2004), Skaff, Pearlin and Mullan, (1996) and Quality Health Outcomes Model (Donabedian, 1966) are associated with the above finding.
Restraint
Majority (64%) of the respondents had moderate level of restraint; above one fifth (22.8%) of the respondents had low level of restraint; and 13.2 percent of the respondents had high level of restraint. The respondents and his family members were responsible and have the duty to provide care and service to ailing elders. However, to some extent they are restrained by others to do the caring service (Velkoff and Lawson, 1998; Hoffmann and Rodriguies, 2010).

Emotional support
Majority (69.6%) of the respondents had moderate level of emotional support; 16.4 percent of the respondents had low level of use of emotional support and 14 percent of the respondents had high level of use of emotional support. The caregivers were getting support from the family members in taking care of elder, but the proximity level and care receivers’ bias and mild mental illness work negatively against the caregiver. This finding confirms Katz-Saltzman, Biegel and Townsend (2008), Gaugler, J. E., Mendiondo, M., Smith, C. D., and Schmitt, F. A. (2003), Katz-Saltzman, Biegel and Townsend (2008) and Kin Independence Model (Noelker and Bass, 1989).

Substance use
Three-fourths (74.8%) of the respondents had moderate level of substance use; above one-fourth (25.2%) of the respondents had high level of substance use. In this study majority of the female respondents were accustomed to use tea, coffee and pan regularly. Occasionally the male caregivers used tobacco and alcohol. In general the respondents’ level of substance use was moderate (Himabindu, 2002, Jamuna, 2003, Jamuna and Ramamurti, 2000).

Acceptance
Majority (68%) of the respondents had high level of acceptance and 32 percent of the respondents had moderate level of acceptance. The respondents accepted the traditional cultural norms and family roles and responsibilities. In this study the respondents realized the same and
came forward to provide service to the elderly persons. Andressen (2010), Chan, A. (2005) and ABC-X Model (McCubbin, 1989), Share-functioning or Kinship model (Johnson, 1983), Supplementation or Complementary Model (Edelman, 1986), Family Centered Intervention Approach (Weihs et al., 2002), Family Resilience Approach (Walsh, 1996), Karma theory, Theory of Ashramasand Behaviour change theory (Meillier, Lund and Kok, 1997) are supported by the above finding.

**Suppression of competing activities**

Nearly two-thirds (65.2%) of the respondents had moderate level of suppression of competing activities; 18 percent of the respondents had high level of suppression of competing activities; and 16.8 percent of the respondents had low level of suppression of competing activities. The informal caring of elder is assigned to a specific person in the family and he or she will be branded as caregiver. In this study the respondents expressed that no other person came forward to take the responsibility of caring service.

**Planning**

Two-thirds (66.8%) of the respondents had moderate level of planning; 19.2 percent of the respondents had high level of planning; and 14 percent of the respondents had low level of planning. The respondents’ general economic status was low, but they had high belief in the cultural and belief systems. Further they don’t have any specific idea in planning but managing it in a trial and error manner. The government came forward to financially assist the elders through OAP Scheme. So in general the respondents’ level of planning was moderate without any scientific data. The Rashmi Gupta, (2005) study finding is supported by the present study.
WELL – BEING SUBSCALES

Daily activities
Majority (70 %) of the respondents had moderate level of fulfillment of their daily activities; 19.2 percent of the respondents had low level of daily activity; and 10.8 percent of them had high level of daily activity. The respondents’ family members came forward to share their role and responsibilities, so the caregivers got relief from stress and strain and could fulfill their day to day tasks to some extent. This finding is associated with Maruthakutti. R (2010), Van Exel, Koopmanschap, Van Den Berg, Brouwer and Van Den Bos, (2005) study findings and Kin Independence Model (Noelker and Bass, 1989).

Daily needs
Three-fourths (75.6 %) of the respondents had low level of fulfillment of daily needs and 24.4 percent of them had moderate level of fulfillment of daily needs. The respondents and their family members were facing financial constraints and inadequate space in residence. In addition to that, the work burden and stress lead to depression and lack of sleep affects their quality of life. So they are unable to fulfill the needs of the family members as well as their own personal needs. Jamuna, D. (2005), Springer and Brubaker (1984) and Maruthakutti, R (2010) are supported by the above finding.

CHI-SQUARE TEST ANALYSIS AND INTERPRETATION

Personal variables and caregiver perception
There is an association between respondents’ caring perception and personal variables. The study findings show that the majority of the respondents were middle aged (63%), female (61.4%), BC (59.6%), Hindu (68.3%), illiterates (60.6%), moderate income (73.6%), in-laws (66.2%), affected one disease with diabetics elder (69.9%) and the respondents had moderate
level of caring perception. The chi-square test revealed that there was significant association of
caregiver perception with respondent’s age ($x^2= 17.411$, $p = 0.002$), sex ($x^2= 13.904$, $p = 0.001$),
community ($x^2= 18.582$, $p = 0.005$), religion ($x^2= 15.874$, $p = 0.003$), education ($x^2= 16.533$, $p =
0.011$), income ($x^2= 13.869$, $p = 0.031$), relationship with elders ($x^2= 26.147$, $p = 0.001$), elders’
health problems ($x^2= 41.139$, $p = 0.000$). The findings of the present study concur with the
findings of Devi Prasad and Indira Rani, N (2007), Whitty (2003), Chadha, N. K (1997),

**Personal variables and caregiver strain**
There is an association between respondents’ level of strain and personal variables. The study
finding revealed that majority of the respondents were female (57.4%), BC (57.9%), Hindu
(60.6%), moderate level of income (67.3%), married (59.1%), small family (67.9%), in-laws
(66.2%), middle old age care receivers (55.6%), female elders (66.4%), affected one disease
with diabetics (59.3%), living one elder in a family (55.6%) and moderate level of respondents
strain. The chi-square test revealed that there was significant association of caregiver strain with
sex ($x^2= 10.220$, $p = .006$), community ($x^2= 18.990$, $p = .004$), religion ($x^2= 11.300$, $p = .023$),
income ($x^2= 13.928$, $p = .030$), marital status ($X^2=20.130$, $p = .003$), family size ($x^2= 18.065$, $p
= .001$), relationship ($x^2= 59.864$, $p = .000$), elder age ($x^2= 9.682$, $p = .046$), elder sex ($x^2=
7.511$, $p = .023$), elders’ health problems ($x^2= 36.975$, $p = .001$), and one elder in caregiver
family ($x^2= 10.564$, $p = .032$). The findings of the present study concur with the findings of
(2004).
Personal variables and caregiver burden

There is an association between respondents’ level of burden and personal variables. The study findings show that majority of the respondents were middle age (51.2%), female (55.0%), illiterate (55.1%), married (59.8%), small family (62.7%), in-laws (52.5%) and middle old care receiver (53.8%) and caregiver had moderate level of burden. The chi-square test revealed that there was significant association of caregiver burden with age ($x^2=23.190$, $p = .000$), sex ($x^2=14.024$, $p = .001$), education ($x^2=28.854$, $p = .000$), marital status ($x^2=20.163$, $p = .003$), family size ($x^2=13.988$, $p = .007$), elder relationship ($x^2=36.712$, $p = .000$), and elder’s age ($x^2=13.253$, $p = .010$). The findings of the present study findings concur with the findings of Kwon and Kim (2005), Rashmi Gupta (2005), Maruthakutti, R (2010) and Kim, J. S. (2001).

Personal variables and caregiver coping

There is an association between the respondents’ level of coping and personal variables. The findings revealed that majority of the respondents were BC (52.6%), homemakers (55.1%), moderate income (54.5%), in-law caregivers (35.0%), joint family (50.8%), middle old elder (53.3%), 1.1 to 2.6 years of caring (52.5%) with moderate level of coping. The chi-square test revealed that there was significant association of caregiver coping with respondents community ($x^2=19.204$, $p = .004$), employment ($x^2=25.711$, $p = .001$), income ($x^2=18.537$, $p = .005$), relationship of care receiver ($x^2=29.841$, $p = .000$), family type ($x^2=7.003$, $p = .030$), elder age ($x^2=9.712$, $p = .046$), and years of caring ($x^2=14.691$, $p = .005$). The findings of the present study concur with the findings of Ekwall et al., (2006), Haley et al. (1996), David X. Cifu, M.D., and William Carne (2006), Chadha, N.K., (1997), Ravishankar, A.K (2010) and Himabindu (2002).
**Personal variables and caregiver well-being**

There is an association between respondents' level of well-being and personal variables. The study finding indicates that majority of the respondents were middle age (53.5%), female (50.0%), illiterate (48.8%), homemakers (55.1%), in-laws (35.0%), middle old (53.3%), female (49.7%), one disease with diabetics (45.1%), below the mean average family members (52.5%) with respondents well-being level. The chi-square test indicated that there was significant association of caregiver well-being with caregiver age ($\chi^2 = 22.235$, $p = .000$), sex ($\chi^2 = 11.358$, $p = .003$), education ($\chi^2 = 13.682$, $p = .033$), employment ($\chi^2 = 24.184$, $p = .002$), relationship of care receiver ($\chi^2 = 59.070$, $p = .000$), elder age ($\chi^2 = 20.654$, $p = .000$), elder sex ($\chi^2 = 6.258$, $p = .044$), elders’ health problems ($\chi^2 = 28.012$, $p = .014$), and number of elders in the family ($\chi^2 = 24.087$, $p = .000$). The findings of the present study concur with the findings of Lewis, M.L., Hepburn, K., Narayan, S., et al. (2005) and Maruthakutti. R (2010).

**Personal variables and caregiver outcome**

There is an association between respondents’ level of outcome and personal variables. The study findings show that caregiver outcome is associated with the respondents’ middle age (59.8%), female (57.9%), BC (57.0%), illiterate (63.8%), married (50.0%), family size (67.9%), in-law (63.8%), and joint family (52.9%). The chi-square test indicates that there was significant association of caregiver outcome with caregiver age ($\chi^2 = 31.196$, $p = .000$), sex ($\chi^2 = 10.965$, $p = .004$), community ($\chi^2 = 25.026$, $p = .000$), education ($\chi^2 = 19.563$, $p = .003$), marital status ($\chi^2 = 19.546$, $p = .003$), family size ($\chi^2 = 16.842$, $p = .002$), relationship of care receiver ($\chi^2 = 64.054$, $p = .000$), and family type ($\chi^2 = 9.543$, $p = .008$). The findings of the present study concur with the findings of Noelker and Bass (1989), Braithwaite (1996) and Bowlby (1982).
ANOVA TEST ANALYSIS AND INTERPRETATION

Age
The ANOVA test indicated that there was no significant difference in the level of coping (F-value = 1.376, Level of significance = .255, p > 0.05) with respect to the age of the respondents. There was significant difference in perception, strain, burden, well-being and outcome with respect to respondents’ age.

Sex
There was no significant difference in the level of perception (F-value = .401, Level of significance = .527, p > 0.05), Burden (F-value = 2.510, Level of significance = .114, p > 0.05), and well-being (F-value = 3.433, Level of significance = .065, p > 0.05) with respect to the sex of the respondents. There was significant difference in strain, coping and outcome in relation to the respondents’ sex.

Community
There was no significant difference in the level of perception (F-value = 1.206, Level of significance = .308, p > 0.05), Burden (F-value = 1.453, Level of significance = .228, p > 0.05), Caring outcome (F-value = .281, Level of significance = .839, p > 0.05) with respect to the community of the respondents. There was significant difference in strain, coping and outcome in relation to the community of the respondents.

Religion
There was no significant difference in the level of strain (F-value = .749, Level of significance = .474, p > 0.05), coping (F-value = .194, Level of significance = .824, p > 0.05), well-being (F-value = 2.452, Level of significance = .088, p > 0.05) and caring outcome (F-value = .685, Level of significance = .505, p > 0.05) with respect to the religion of the respondents. There was
significant difference in perception and burden of the respondents with respect to the respondents’ religion.

**Educational status**
There was no significant difference in the level of perception (F-value = 2.006, Level of significance = .114, p > 0.05), strain (F-value = .854, Level of significance = .466, p > 0.05), burden (F-value = 1.475, Level of significance = .222, p > 0.05), coping (F-value = 1.887, Level of significance = .132, p > 0.05), well-being (F-value = 2.466, Level of significance = .063, p > 0.05) with respect to educational status of the respondents. There was significant difference in caring outcome of the respondents in relation to educational status of the respondents.

**Present occupation**
There was no significant difference in the level of perception (F-value = 1.096, Level of significance = .359, p > 0.05), strain (F-value = 1.329, Level of significance = .260, p > 0.05), burden (F-value = .909, Level of significance = .459, p > 0.05) and outcome (F-value = .715, Level of significance = .582, p > 0.05) with respect to the present occupation of the respondents. There was significant difference in coping and well-being in relation to the respondents’ present occupation.

**Monthly income**
There was no significant difference in the level of perception (F-value = 2.471, Level of significance = .062, p > 0.05), strain (F-value = 2.933, Level of significance = .34, p > 0.05), burden, (F-value = .765, Level of significance = .515, p > 0.05), strain (F-value = 2.933, Level of significance = .515, p > 0.05), burden (F-value = .765, Level of significance = .515, p > 0.05), well-being, (F-value = 1.038, Level of significance = .475, p > 0.05), with respect to the present
income of the respondents. There was significant difference in the coping of the respondents with respect to the monthly income of the respondents.

**Marital status**
There was no significant difference in the level of perception (F-value = .666, Level of significance = .573, p > 0.05), well-being (F-value = .095, Level of significance = .963, p > 0.05), and outcome (F-value = 1.973, Level of significance = .119, p > 0.05) with respect to the marital status of the respondents. There was significant difference in strain, burden and coping of the respondents with respect to the respondents’ marital status.

**Family size**
There was no significant difference in the level of perception (F-value = 1.634, Level of significance = .197, p > 0.05), burden (F-value = 2.627, Level of significance = .074, p > 0.05), coping (F-value = 1.286, Level of significance = .278, p > 0.05), well-being (F-value = .191, Level of significance = .826, p > 0.05), and outcome (F-value = 1.984, Level of significance = .140, p > 0.05) with respect to the family size of the respondents. There was significant difference in strain in relation to the respondents’ family size.

**Care receivers relationship**
There was significant difference of all dependent variables in relation to the caregiver - care receiver relationship.

**Family type**
There was no significant difference in the level of perception (F-value = .033, Level of significance = .856, p > 0.05), strain (F-value = 1.200, Level of significance = .274, p > 0.05), burden (F-value = 3.410, Level of significance = .066, p > 0.05), well-being (F-value = .047, Level of significance = .829, p > 0.05), and outcome (F-value = 1.384, Level of significance =
.240, p > 0.05) with respect to the family type of the respondents. There was significant difference in the coping of the respondents with respect to family type.

**Elder age**

There was no significant difference in the level of strain (F-value = 2.273, Level of significance = .105, p > 0.05), burden (F-value = 1.127, Level of significance = .326, p > 0.05), outcome (F-value = 2.616, Level of significance = .075, p > 0.05) with respect to the age of the care receiver.

There was significant difference in perception, coping and well-being of the respondents in relation to the age of the care receiver.

**Elder sex**

There was no significant difference in the level of perception (F-value = .909, Level of significance = .341, p > 0.05), strain (F-value = 1.943, Level of significance = .165, p > 0.05), burden (F-value = 1.330, Level of significance = .250, p > 0.05), coping (F-value = .292, Level of significance = .589, p > 0.05), well-being (F-value = 3.400, Level of significance = .066, p > 0.05), and outcome (F-value = .038, Level of significance = .845, p > 0.05) with respect to the sex of the care receiver.

**Elder health problems**

There was no significant difference in the level of coping (F-value = .917, Level of significance = .494, p > 0.05), well-being (F-value = .826, Level of significance = .566, p > 0.05), and outcome (F-value = 1.308, Level of significance = .247, p > 0.05), with respect to the elder’s health problems. There was significant difference in perception, strain and burden of the respondents in relation to the health problems of the elders.

**Years of elder caring**

There was no significant difference in the level of perception (F-value = 2.338, Level of significance = .099, p > 0.05), strain (F-value = 1.535, Level of significance = .218, p > 0.05),
burden (F-value = .472, Level of significance = .624, p > 0.05) and well-being (F-value = 1.406, Level of significance = .247, p > 0.05) with respect to the family size of the respondents. There was significant difference in coping, and caring outcome of the respondents in relation to the respondents’ years of elder caring.

**Number of elders in the family**

There was no significant difference in the level of strain (F-value = 2.878, Level of significance = .058, p > 0.05), burden (F-value = 3.397, Level of significance = .35, p > 0.05), coping (F-value = .999, Level of significance = .370, p > 0.05) and outcome (F-value = 2.471, Level of significance = .087, p > 0.05) with respect to the number of elder members in the respondent’s family. There was significant difference in perception and well-being of the respondents with respect to the number of elder members in the respondents’ family.

**CORRELATION MATRIX**

The correlations matrix for the selected independent and dependent variables are given below.

**Age**

The study reveals that age has significant positive correlation with income (.148*); it has significant negative correlation with education (-.484**), years of caring, (-.166**), well-being (-.231**) and caring outcome (-.271**); it has no correlation with care receiver age (.024), perception (.105), burden (.085), coping (.008) and strain (-.040).

**Education**

The study observed that education has significant positive correlation with outcome (.168**) and respondents well-being (.133*). It has negative significant correlation with age (-.484**) and burden (-.130*) of the respondents. It has no correlation with care receiver age (-.084), perception (-.085), coping (-.009), income (.053), years of caring (.087) and strain (.012) of the respondents.
**Income**
The study indicates that respondents’ income has significant positive correlation with coping (.231**), age (.148*) and years of caring (.151*) of the respondents. It has significant negative correlation with C. R. Age (-.132*). It has no correlation with strain (-.031), well-being (-.006), education (.053), perception (.103), burden (.059) and caring outcome (.009) of the respondents.

**Care receiver age**
Analysis shows that care receiver age has significant positive correlation with strain (.126*). It has significant negative correlation with well-being (-.226**) and income (-.132*). It has no correlation with education (-.084), caring years (-.113), perception (-.046), coping (-.034), outcome (-.030), age (.024) and burden (.086) of the respondents.

**Years of caring**
The study shows that duration of caring of the respondents has significant positive correlation with outcome (174**) and income (.151*) of the respondents. It has significant negative correlation with age (-.166**). It has no correlation with care receiver age (-.113), perception (-.115), strain (-.084), burden (-.054), coping (-.053), well-being (.031), and education level (.087) of the respondents.

**Perception**
The study reveals that respondents’ caring perception has significant positive correlation with strain (.427**) and burden (.616**). It has significant negative correlation with well-being (-.324**) and outcome (-.383**). It has no correlation with education (-.085), care receiver age (-.046), coping (-.099), caring years (-.115) and age (.105) and income (.103) of the respondents.

**Strain**
The study shows that the respondents’ level of strain has significant positive correlation with perception (.427**), burden (.673**) and care receiver age (.126*). It has significant negative
correlation with coping (-.183**), well-being (-.445**) and outcome (-.494**). It has no correlation with age (-.040), income (-.031), caring years (-.084) and education (.012).

**Burden**
The study indicates that respondents’ level of burden has significant positive correlation with perception (.616**) and strain (.673**). It has significant negative correlation with coping (-.185**), well-being (-.497**), outcome (-.548**) and education (-.130*). It has no correlation with caring years (-.054), age (.085), income (.059) and care receiver age (.086).

**Coping**
The study indicates that respondents’ level of coping has significant positive correlation with income (.231**), well-being (.229**) and outcome (.208**). It has significant negative correlation with strain (-.183**) and burden (-.185*). It has no correlation with care receiver age (-.034), education (-.009), caring years (-.053), perception (-.099) and age (.008).

**Well-being**
The study indicates that respondents’ level of well-being has significant positive correlation with coping (.229**), outcome (.447**) and education (.133*). It has significant negative correlation with age (-.231**), perception (-.324**), strain (-.445**), burden (-.497**) and care receiver age (-.226**). It has no correlation with income (-.006) and caring years (.031).

**Outcome**
The study shows that the respondents’ level of caring outcome has significant positive correlation with education (.168**), coping (.208**), well-being (.447**) and caring years (.174**). It has significant negative correlation with age (-.217**), perception (-.383**), strain (-.494**) and burden (-.548**). It has no correlation with care receiver age (-.030) and income (.009).
HYPOTHESIS ANALYSIS

There is no significant relationship between age, sex, income, relationship, years of caring and the level of caregiver caring perception.

The calculated chi-square values for age ($x^2 = 17.411$), sex ($x^2 = 13.904$), income ($x^2 = 13.869$), relationship ($x^2 = 26.147$) are greater than the table value. It is concluded that there is a significant relationship between caregiver age, sex, income, relationship and their level of caring perception. The calculated chi-square value of years of caring is less than the table value. It is concluded that there is no significant relationship between caregiver years of caring and their level of perception.

There is no significant relationship between age, sex, income, relationship, years of caring and their level of caregiver caring strain.

The calculated chi-square values for sex ($x^2 = 10.220$), income ($x^2 = 13.928$) and relationship ($x^2 = 59.864$) are greater than the table value. It is concluded that there is a significant relationship between caregiver sex, income, relationship and their level of caring strain. The calculated chi-square values for age ($x^2 = 10.888$) and years of caring ($x^2 = 6.304$), are less than the table value. It is concluded that there is no significant relationship between caregivers’ years of caring and respondents level of strain.

There is no significant relationship between age, sex, income, relationship, years of caring and their level of caregiver caring burden.

The calculated chi-square values for age ($x^2 = 23.190$), sex ($x^2 = 14.024$) and caregiver relationship ($x^2 = 36.712$) are greater than the table value. It is concluded that there is a significant relationship between caregiver age, sex, relationship and their level of burden. The calculated chi-square values for income ($x^2 = 8.295$) and years of caring ($x^2 = 7.738$) are less than
the table value. It is concluded that there is no significant relationship between caregiver income and their level of burden.

**There is no significant relationship between age, sex, income, relationship, years of caring and their level of caregiver coping.**
The chi-square values for income ($x^2 = 18.537$), relationship ($x^2 = 29.841$) and years of caring ($x^2 = 14.691$), are greater than the table value. It is concluded that there is a significant relationship between caregiver income, relationship, years of caring and their level of coping. The chi-square values for age ($x^2 = 3.311$) and sex ($x^2 = 5.666$) are less than the table value. It is concluded that there is no significant relationship between caregiver age, sex and their coping.

**There is no significant relationship between age, sex, income, relationship, years of caring and their level of caregiver well-being.**
The chi-square values for age ($x^2 = 22.235$), sex ($x^2 = 11.358$) and relationship ($x^2 = 59.070$) are greater than the table value. It is concluded that there is a significant relationship between caregiver age and their level of well-being. The chi-square values for income ($x^2 = 4.887$) and years of caring ($x^2 = 3.960$), are less than the table value. It is concluded that there is no significant relationship between caregiver incomes, years of caring and their level of well-being.

**There is no significant relationship between age, sex, income, relationship, years of caring and their level of caregiver outcome.**
The calculated chi-square values for age ($x^2 = 31.196$), sex ($x^2 = 10.965$), and relationship ($x^2 = 64.054$) are greater than the table value. It is concluded that there is a significant relationship between caregiver age, sex, relationship and their level of caring outcome. The chi-square values for income ($X^2 = 6.193$) and years of caring ($x^2 = 9.424$), are less than the table value. It is concluded that there is no significant relationship between caregiver income and their level of caring outcome.