## **Chapter 3 - Results (Quantitative Design)**

**Overview:** The following chapter presents the results of analysis data using statistics such as Pearson product moment correlation, multiple regression, hierarchical regression, independent group t test, One-way ANOVA and Chi square. This helps to understand whether the relationship / difference, mediation effect is statistically significant and is useful in objective interpretation of the data.

The researcher aimed to examine the association between generativity, mindfulness, resilience, physical health parameters and subjective wellbeing among young elderly. Pearson Product moment correlation(r) was used to measure the same. The results were presented with 95% confidence interval and the significant level was set as 5% level.

## 3.1 Relationship between psychological variables and physical health parameters

## Table 4

Sr No	Variables	1	2	3	4	5	6
1	Generativity	-					
2	Mindfulness	.48**	-				
3	Resilience	.40**	.67**	-			
4	Subjective	.45**	.63**	.60**	-		
	wellbeing						
5	Sensory / Systemic	.06	.19**	.35**	.27**	-	
6	Lifestyle habits	04	.06	04	03	.05	-

Product Moment Correlation (r) Among Psychological Variables and Physical Health Parameters

*Note*. Physical health parameters are systemic/sensory parameters & lifestyle habits \*\*p < .01

Table 4 shows significant positive relation among all psychological variables such as generativity, mindfulness, resilience, and subjective wellbeing of young elderly. Sensory/ systemic parameters of physical health are associated with resilience, mindfulness, and subjective wellbeing, but not with generativity of young elderly. However, physical health parameters such as lifestyle habits of young elderly are neither found to be related with sensory / systemic parameters of physical health nor with any psychological variables.

In order to study whether the elderly with or without chronic medical condition, WNR/ONR biomarkers, and with / without physical fitness differ on generativity, mindfulness, resilience and subjective wellbeing, independent group t tests were carried out.

Initially, the presence of chronic medical condition, adequacy of biomarkers and degree of physical fitness were measured through dichotomous scales. The total score of each parameter was found out and the median was calculated. Based on the median, the group was split into two groups i.e., above the median and below the median. The independent sample t test for each parameter was carried out for these two groups and the findings are given in the following Table 5

### Significant difference in the mean scores of physical health parameters

## Table 5

Variables	With	Without		ONR	WNR		Low	High	
	CMC	CMC		BM	BM		PF	PF	
	(< 21.8)	(>21.8)		(< 30.61)	(>30.61)		(<12.04)	(>12.04)	
	n1=267	n2=185		n1=144	n2=308		n1=272	n2=180	
	Mean	Mean	t value	Mean	Mean	t value	Mean	Mean	t value
	(SD)	(SD)	(Sig.)	(SD)	(SD)	(Sig.)	(SD)	(SD)	(Sig.)
Generativity	29.32	31.05	1.27	30.61	29.76	.59	28.34	32.58	3.12**
	(13.90)	(14.75)	(.20)	(12.90)	(14.87)	(.19)	(13.77)	(14.64)	(.00)
Mindfulness	52.06	53.98	2.10*	52.60	53.96	.37	51.52	54.86	3.66**
	(9.55)	(9.68)	(.03)	(7.85)	(10.37)	(.20)	(9.28)	(9.84)	(.00)
Resilience	66.64	70.53	2.20*	66.51	69.04	1.35	65.48	72.38	3.92**
	(18.75)	(18.18)	(.02)	(15.55)	(19.83)	(.06)	(18.25)	(18.39)	(.00)
Subjective	89.35	94.79	3.74**	89.36	92.61	2.10*	88.05	96.91	6.22**
wellbeing	(15.60)	(14.62)	(.00)	(14.07)	(15.93)	(.03)	(14.61)	(15.13)	(.00)

Mean Differences in Generativity, Resilience, Mindfulness and Subjective Wellbeing Among Young Elderly

*Note*: CMC=Chronic Medical Condition, ONR BM=Out of Normal Range Biomarkers, WNR BM=Within Normal Range Biomarkers, PF=Physical Fitness \**p*<.05; \*\**p*<.01

### Chronic medical condition

In the present study, 41% elderly are not suffering from any chronic medical condition. The findings given in Table 5 suggest chronic medical condition makes significant difference in the elderly's resilience, mindfulness, and subjective wellbeing. Elderly without any chronic medical condition are more resilient, mindful, and experience significantly higher wellbeing than the elderly with any chronic medical condition in life. Mean scores of elderly without CMC on generativity are higher, although not statistically significant.

### **Biomarkers**

In the present study, 68% elderly having WNR biomarkers and thus, they perceive wellbeing significantly higher than the elderly who have ONR biomarkers. The values in the Table 5 indicate that for the elderly to be generative, resilient, or mindful, the biomarkers do not play any significant role.

## Physical fitness

Table 5 shows 40% of the total sample score high on physical fitness parameters. Physical fitness proves to be a significant parameter of physical health in the young elderly stage, as it shows higher level of generativity, resilience, mindfulness, and subjective wellbeing among physically fit elderly than their counterparts.

In order to study the effect of generativity, mindfulness, and resilience on physical health parameters i.e., sensory/systemic parameters and lifestyle habits and subjective wellbeing of young elderly, multiple regression analysis was carried out.

## 3.2 Prediction of physical health parameters and subjective wellbeing

## Table 6

Prediction of Physical Health Parameters and Subjective Wellbeing by Generativity, Resilience and Mindfulness Among Young Elderly

		temic/ se		L	ifestyle h	abits	s Subjective wellbein		
	В	Beta	t(Sig.)	В	Beta	t(Sig.)	В	Beta	t(Sig.)
Generativity	01	06	1.05	01	08	1.44	.17	.16	4.03**
			(.29)			(.15)			(.00)
Mindfulness	.01	.06	.89	.04	.18	2.81*	.57	.36	7.39**
			(.37)			(.01)			(.00)
Resilience	.02	.21	3.33**	01	13	2.04*	.25	.30	6.50**
			(.00)			(.04)			(.00)
F		8.43**	<		2.95*			136.81*	*
		(.00)			(.03)			(.00)	
R		.23			.14			.69	
R <sup>2</sup>		.05			.02			.48	
Adjusted R <sup>2</sup>		.05			.01			.48	

\*p<.05, \*\*p<.01

The findings from the Table 6 of multiple regression analysis reveal that the psychological variables such as generativity, mindfulness and resilience significantly predicted physical health parameters and subjective wellbeing of young elderly.

Although the F ratio indicates that systemic/sensory parameters of physical health are significantly predicted by generativity, resilience, and mindfulness together with total 5% variance; resilience independently contributes to the systemic/sensory parameters of the young elderly.

In case of lie style habits, the significant F value indicates generativity, mindfulness and resilience to be the predictors of lifestyle habits of elderly. They altogether contribute 1% variance; however, mindfulness and resilience are the independent predictors of lifestyle habits in the elderly's life.

Table 6 also shows significant F value suggesting generativity, resilience, and mindfulness to be the significant predictors of subjective wellbeing among elderly. Generativity, resilience, and mindfulness together cause 48% variance. None the less, each one of them is an independent predictor of subjective wellbeing among elderly.

To understand whether nutrition shows mediation effect in the relationship between generativity, resilience, mindfulness and sensory/systemic parameters, lifestyle habits and subjective wellbeing, hierarchical multiple regression was carried out. The results are given in the tables below-

## **3.3 Mediation Effect of Nutrition**

## Table 7

Std. Beta t value R<sup>2</sup> change F change F value Model 1 22.63\*\* Generativity -.07 1.43 .13 22.63\*\* (.15) (.00)(.00)Mindfulness -.03 .50 (.62) 6.9\*\* Resilience .40 (.00)Model 2 17.03\*\* Generativity -.07 .00 .33 1.28 (.20)(.56)(.00)Mindfulness -.03 .45 (.65) 6.88\*\* Resilience .41 (.00)Nutrition -.03 .58 (.57)

Mediation Effect of Nutrition on Sensory/Systemic Parameters of Physical Health Among Young Elderly

\*\*p<.01

In the hierarchical regression analysis of Table 7 the values in model 1 indicate generativity, resilience, mindfulness causing 13% variance and the significant F change value shows significant effect on the systemic/sensory parameters of physical health. In model 2 after controlling the effect of above variables, the effect of nutrition was tested. The decline in the values of R<sup>2</sup> change and F value suggests that nutrition does not add any variance in the relationship between generativity, resilience, mindfulness and systemic/sensory parameters of physical health of young elderly.

The Beta values of resilience in model 1(.40) and model 2 (.41) indicate significant correlation between resilience and the systemic/sensory parameters of physical health. Significant t value confirms only the resilience as a significant predictor of the systemic/sensory parameters of physical health of the elderly.

### Table 8

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	09	1.65	.02	3.10*	3.10*
		(.09)		(.03)	(.03)
Mindfulness	.19	2.97*			
		(.00)			
Resilience	09	1.41			
		(.15)			
Model 2					
Generativity	.01	1.34	.00	1.78	2.78*
		(.18)		(.18)	(.03)
Mindfulness	.01	3.06*			
		(.00)			
Resilience	.01	1.23			
		(.22)			
Nutrition	.01	1.33			

Mediation Effect of Nutrition on Lifestyle Habits Among Young Elderly

 Std. Beta	t value	R <sup>2</sup> change	F change	F value
	(.18)			

### \**p*<.05

The findings in the table 8 show that in model1, generativity, mindfulness and resilience together show 2% variance in the lifestyle habits of the elderly. However, mindfulness alone shows the effect independently on the lifestyle habits. As the R<sup>2</sup> and the F values reduce in the model 2, it shows that the nutrition does not have any significant variance in the lifestyle habits of the elderly. In both the models, model 1 and model 2, although the F values are significant, nutrition does not show any mediating effect in the relationship of generativity, mindfulness, resilience and lifestyle habits. Except mindfulness, neither generativity, resilience nor the nutrition are independently predicting the lifestyle habits among the elderly. The beta value of mindfulness (.19) in model 1 and significant t value confirms mindfulness as a significant predictor of lifestyle habits in model 1 and model 2.

#### Table 9

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	.15	3.84**	.47	130.79**	130.79**
		(.00)		(.00)	(.00)
Mindfulness	.37	7.22**			
		(.00)			
Resilience	.29	6.23**			
		(.00)			
Model 2					
Generativity	.11	2.87**	.03	22.45**	108.41**
		(.00)		(.00)	(.00)

Mediation Effect of Nutrition on Subjective Wellbeing Among Young Elderly

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Mindfulness	.36	7.51**			
		(.00)			
Resilience	.26	5.71**			
		(.00)			
Nutrition	.17	4.74 **			
		(.00)			

\*\*p<.01

The R<sup>2</sup> change in the model 1 of Table 9 indicate that generativity, resilience, mindfulness causing 47% variance in the subjective wellbeing, whereas in the model 2, nutrition is adding 3% variance in the subjective wellbeing. The significant F change values in both the models are supporting the observations. The t values signify that all the psychological variables and the mediating variable, i.e. nutrition are independently predicting the subjective wellbeing among young elderly.

To understand whether exercise shows mediation effect in the relationship between generativity, resilience, mindfulness and sensory/systemic parameters, lifestyle habits and subjective wellbeing, hierarchical linear regression was done. The results are given in the tables below-

## **3.4 Mediation Effect of Exercise**

### Table 10

Mediation Effect of Exercise on Sensory/Systemic Parameters of Physical Health Among Young Elderly

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	07	1.43	.13	22.63**	22.63**
		(.15)		(.00)	(.00)
Mindfulness	03	.50			

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
		(.62)			
Resilience	.40	6.88**			
		(.00)			
Model 2					
Generativity	.01	1.70	.00	1.95	17.49**
		(.09)		(.16)	(.00)
Mindfulness	.01	.51			
		(.60)			
Resilience	.01	6.52**			
		(.00)			
Exercise	.02	1.40			
		(.16)			

\*\*p<.01

In the hierarchical regression analysis of Table 10 the values in model 1 indicate generativity, resilience, mindfulness causing 13% variance and the significant F change value shows significant effect on the systemic/sensory parameters. In model 2, after controlling the effect of above psychological variables, the effect of exercise was tested. The decline in the R<sup>2</sup> change to 0% suggests that exercise does not add any variance in the relationship between generativity, resilience, mindfulness, and systemic/sensory parameters of physical health of young elderly. Although the ANOVA table shows significant F value in the model 1 and model 2, only the resilience is significantly predicting the systemic/sensory parameters of physical health among young elderly in the model 1 and model 2.

## Table 11

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					te
Generativity	09	1.65	.02	3.10*	$3.10^{*}$
		(.09)		(.02)	(.02)
Mindfulness	.19	$2.97^{*}$			
		(.00)			
Resilience	09	1.41			
		(.15)			
Model 2					
Generativity	07	1.27	.01	2.52	$2.97^{*}$
		(.20)		(.11)	(.02)
Mindfulness	.19	2.99*			
		(.00)			
Resilience	07	1.10			
		(.26)			
Exercise	08	1.59			
		(.11)			

Mediation Effect of Exercise on Lifestyle Habits Among Young Elderly

\**p*<.05

The findings in Table 11 indicates generativity, resilience, mindfulness together cause 2% variance in the lifestyle habits with the significant F value and exercise as the mediating variable adds 1% variance in the lifestyle habits of the elderly. Although the F values are significant in both the models, only mindfulness is causing the variance independently.

## Table 12

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	.04	3.84**	.47	130.79**	130.79**
		(.00)		(.00)	(.00)
Mindfulness	.08	7.72**			
		(.00)			
Resilience	.04	6.23**			
		(.00)			
Model 2 Generativity	.04	2.90*	.02	18.70**	106.64**
	<u>.</u>	<u>.</u>	0.2	10 =0**	10**
5		(.00)		(.00)	(.00)
Mindfulness	.08	(.00) 7.82 <sup>**</sup>			
		(.00)			
Resilience	.04	5.48**			
		(.00)			
Exercise	.10	4.32**			
		(.00)			

Mediation Effect of Exercise on Subjective Wellbeing Among Young Elderly

\*p<.05; \*\*p<.01

In Table 12,  $R^2$  change value in model 1 indicates that generativity, resilience, mindfulness causes 47% variance in the subjective wellbeing, whereas in model 2, the mediating variable i.e., exercise is adding 2% variance in the subjective wellbeing. The significant F change values in both the

models are supporting the observations. The t values signify that all the psychological variables and the mediating variable, i.e., exercise are independently predicting the subjective wellbeing.

To understand whether engagement in spiritual practices shows mediation effect in the relationship between generativity, resilience, mindfulness and sensory/systemic parameters, lifestyle habits and subjective wellbeing, hierarchical linear regression was done. The results are given in the tables below-

## 3.5 Mediation Effect of Spiritual Practices

### Table 13

Mediation Effect of Spiritual Practices on Sensory/Systemic Parameters of Physical Health Among Young Elderly

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	07	1.43	.13	22.63**	22.63**
		(.15)		(.00)	(.00)
Mindfulness	03	.50			
		(.62)			
Resilience	.40	6.88**			
		(.00)			
Model 2					
Generativity	07	1.42	.00	0.00	16.93**
		(.15)		(.99)	(.00)
Mindfulness	03	.50			
		(.62)			
Resilience	.40	6.86**			
		(.00)			
Spiritual	.00	.01			
practices		(.99)			

\*\*p<.01

The findings of hierarchical regression in the Table 13 suggest that generativity, resilience, mindfulness together cause 13% variance in the systemic/sensory parameters of physical health. However, addition of the mediating variable i.e., engagement in spiritual practices does not seem to add into the variance. Although the ANOVA shows F value to be significant, only resilience is significant in the prediction of systemic/sensory parameters of physical health in both models.

## Table 14

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	09	1.65	.02	3.10*	3.10**
		(.09)		(.02)	(.02)
Mindfulness	.19	2.97*			
		(.00)			
Resilience	09	1.41			
		(.15)			
Model 2					
Generativity	10	1.88	.01	5.27*	3.67**
		(.06)		(.02)	(.00)
Mindfulness	.19	$2.99^{*}$			
		(.00)			
Resilience	09	1.41			
		(.13)			
Spiritual	11	2.29			
practices		(.02)			

Mediation Effect of Spiritual Practices on Lifestyle Habits Among Young Elderly

\*p<.05; \*\*p<.01

Table 14 of hierarchical regression analysis shows 2% variance in the lifestyle habits among young elderly by generativity, resilience, mindfulness and additional 1% by the mediating variable, i.e., spiritual practices. The F change is significant in both the models. Although the F value is significant in model 1 and model 2 which indicates generativity, resilience, mindfulness, and engagement in spiritual practices together are predicting the lifestyle habits of the elderly, independent contribution is made only by mindfulness and no other variable.

## Table 15

	Std. Beta	t value	R <sup>2</sup> change	F change	F value
Model 1					
Generativity	.15	3.83**	.47	130.79**	130.79**
		(.00)		(.00)	(.00)
Mindfulness	.37	7.72**			
		(.00)			
Resilience	.29	6.23**			
		(.00)			
Model 2					
Generativity	.14	3.62**	.02	3.29	<b>99.4</b> 1 <sup>**</sup>
		(.00)		(.07)	(.00)
Mindfulness	.37	7.74**			
		(.00)			
Resilience	.28	6.19**			
		(.00)			
Spiritual	.06	1.81**			
practices		(.00)			

Mediation Effect of Spiritual Practices on Subjective Wellbeing Among Young Elderly

\*\*p<.01

The figures in the above table 15 show 47% variance in the subjective wellbeing by generativity, resilience, mindfulness; however, the mediating variable, i.e., engagement in spiritual practices does not add into the existing variance. The significant F value in the model 1 and model 2 indicate that generativity, resilience, mindfulness, and an engagement in spiritual practices together as well as independently predicting the subjective wellbeing among young elderly.

In order to study whether pursuance of hobbies makes a difference in the psychological variables and the physical health parameters among young elderly, the independent sample t test was carried out. The findings are given below:

### 3.6 Mean Differences in Psychological Variables and Physical Health Parameters

### Table 16

Variables	Pursuing	g hobbies	Not Pursui	ng hobbies	t value
	(n=325)		(n=	127)	
	Mean	SD	Mean	SD	
Generativity	32.03	14.26	24.98	13.00	4.82**
					(.00)
Mindfulness	54.14	8.93	49.54	10.58	4.67**
					(.00)
Resilience	70.20	17.22	63.18	20.95	3.52**
					(.00)
Systemic/sensory	14.57	1.69	14.32	1.67	1.38
parameters					(.16)
Lifestyle habits	29.16	1.86	26.16	1.97	.01
					(.99)
Chronic medical	1.39	.49	1.46	.50	1.28
condition					(.20)

Mean Differences in Psychological Variables and Physical Health Parameters of Young Elderly Based on Pursuit of Hobbies

Variables	Pursuing hobbies (n=325)		Not Pursui	ing hobbies	t value	
			(n=127)			
	Mean	SD	Mean	SD		
Biomarkers	1.66	.48	1.75	.44	1.90*	
					(.05)	
Physical fitness	1.39	.49	1.42	.50	.52	
					(.60)	
Subjective	93.45	14.57	86.79	16.54	4.20**	
wellbeing					(.00)	

\*p<05\*; \*\*p<.01

The figures in Table 16 show that young elderly pursuing hobbies significantly differ in generativity, mindfulness, resilience, subjective wellbeing and physical health parameters i.e., biomarkers from those who are not pursuing hobbies. However, there was no significant difference seen in other physical health parameters i.e., systemic/sensory parameters, lifestyle habits, chronic medical condition, and physical fitness of the young elderly.

Along with pursuance of hobbies, the researcher wanted to study whether young elderly engaged in social activity differ from their counterparts in the generativity, mindfulness, resilience, physical health parameters i.e., systemic/sensory parameters, lifestyle habits, chronic medical condition, biomarkers and physical fitness and subjective wellbeing. An independent sample t test was used to study the same, the findings are given below:

## Table 17

Mean Differences in Psychological Variables and Physical Health Parameters of Young Elderly Based on Social Engagement

Variables	Engaged in so	ocial activities	Not engage	ed in social	
			activ	vities	
	(n=	(n=322)		30)	
	Mean	SD	Mean	SD	t value
Generativity	32.91	14.15	22.95	12.10	7.04**
					(.00)
Mindfulness	54.01	8.99	49.96	10.55	4.11**
					(.00)
Resilience	71.68	19.20	61.76	20.03	4.90**
					(.00)
Systemic/sensory	14.50	1.72	14.50	1.59	.02
parameters					(.98)
Lifestyle habits	29.16	1.83	29.15	2.05	.04
					(.96)
Chronic medical	1.41	.49	1.41	.49	.04
condition					(.96)
Biomarkers	1.66	.48	1.75	.44	1.88
					(.06)
Physical fitness	1.42	.49	1.34	.48	1.65
					(.10)
Subjective	93.86	14.23	86.38	17.43	4.72**
wellbeing					(.00)

\*p<.05; \*\*p<.01

The results in Table 17 indicate significant difference in the elderly engaged in social activity and those who are not engaged across all psychological variables. High mean scores of generativity,

mindfulness, resilience and subjective wellbeing among socially engaged elderly indicate the importance of engagement in social activity in developing generativity, mindfulness, resilience and experiencing wellbeing in the life of the elderly. However, the t values show no significant difference in any of the physical health parameters i.e., systemic/sensory parameters, lifestyle habits, chronic medical condition, biomarkers, and physical fitness among the young elderly due to engagement in social activities.

Further analysis was carried out to understand whether the place of stay makes significant difference in psychological and physical health parameters. Thus, whether the institutionalized elderly differ from non-institutionalized young elderly across generativity, resilience and mindfulness, physical health parameters i.e., systemic/sensory parameters, lifestyle habits, chronic medical condition, biomarkers and physical fitness and subjective wellbeing among young elderly, the independent sample t test was used. The findings are given in the following table-

### Table 18

Mean Differences in Psychological Variables and Physical Health Parameters of Young Elderly

Variables	Institutiona	lized elderly	Non- Institutio	onalized elderly	
	(n=103)		(n=:	349)	
	Mean	SD	Mean	SD	t value
Generativity	23.31	13.39	32.01	13.92	5.62** (.00)
Mindfulness	50.86	12.23	53.43	8.66	2.38* (.01)
Resilience	64.10	21.89	69.45	17.36	2.58* (.01)
Systemic/sensory parameters	14.56	1.53	14.48	1.73	0.45 (.65)
Life style habits	29.71	.95	28.99	2.06	3.40**

## Based on Place of Stay

Variables	Institutional	lized elderly	Non- Institutio	Non- Institutionalized elderly		
	(n=	103)	(n=	349)		
	Mean	SD	Mean	SD	t value	
					(.00)	
Chronic medical	1.40	.49	1.41	.49	.26	
condition					(.79)	
Biomarkers	1.84	.37	1.64	.48	3.86**	
					(.00)	
Physical fitness	1.44	.50	1.39	.49	.91	
Subjective	84.40	19.44	93.69	13.34	5.55**	
wellbeing					(.00)	

\*p<.05; \*\*p<.01

The findings in Table 18 reveal that place of stay makes significant difference in the elderly's generativity, mindfulness, resilience, subjective wellbeing, and the physical health parameters such as lifestyle habits and the biomarkers of the young elderly. However, the institutionalized and non-institutionalized elderly do not differ in their other parameters of physical health such as chronic medical condition, systemic/sensory parameters, and physical fitness. Further, the results show the mean scores of lifestyle habits and biomarkers of the institutionalised elderly higher than the non-institutionalised elderly. On the other hand, the non-institutionalised elderly are found to be significantly more generative, mindful, resilient and experience more subjective wellbeing than their counterparts.

The researcher wanted to find out whether there are gender differences in generativity, resilience, mindfulness, physical health parameters and subjective wellbeing of young elderly. With the help of independent sample t test, the differences were revealed. The findings are given in Table 19.

## Table 19

Mean Differences in Psychological Variables and Physical Health Parameters of Young Elderly

Variables	М	ale	Fer	nale	
	(n=	201)	(n=	251)	
	Mean	SD	Mean	SD	t value
Generativity	29.81	14.13	30.21	14.38	.33
					(.74)
Mindfulness	53.55	9.98	52.29	9.33	1.38
					(.16)
Resilience	71.35	18.55	65.73	18.28	3.20**
					(.00)
Systemic/sensory	14.58	1.60	14.43	1.75	.89
parameters					(.37)
Lifestyle habits	28.66	2.30	29.56	1.35	5.15**
					(.00)
Chronic medical	1.43	.49	1.40	.49	.53
condition					(.60)
Biomarkers	1.74	.44	1.63	.48	2.46*
					(.01)
Physical fitness	1.43	.50	1.37	.49	1.35
					(.18)
Subjective	93.42	16.36	90.10	14.50	2.29*
wellbeing					(.02)

Based on Gender

\*p<.05; \*\*p<.01

The figures in Table 19 show 55% of the sample are female elderly, who significantly differ from the male elderly in resilience, lifestyle habits, biomarkers, and subjective wellbeing. The mean scores of resilience, biomarkers as physical health parameters and subjective wellbeing show that

male elderly tend to perceive more wellbeing in life; against which the mean scores of female elderly are higher in the lifestyle habits than their counterparts. However, the mean scores of generativity, mindfulness and chronic medical condition, physical fitness and systemic/sensory parameters of physical health do not show significant gender difference.

To understand whether the type of family the young elderly lives, makes difference in psychological and physical health parameters, an independent sample t test was carried out. The findings are given below:

## Table 20

Mean Differences in Psychological Variables and Physical Health Parameters of Young Elderly Based on Type of Family

Variables	Nuclea	r family	Joint	family	
	(n=169)		(n=		
	Mean	SD	Mean	SD	t value
Generativity	30.57	14.57	33.37	13.17	1.82
					(.06)
Mindfulness	53.44	7.78	53.42	9.43	.023
					(.98)
Resilience	70.32	15.23	68.63	19.15	.43
					(.66)
Systemic/sensory	14.55	1.51	14.42	1.92	.69
parameters					(.49)
Lifestyle habits	29.12	1.75	28.88	2.32	1.12
					(.26)
Chronic medical	1.40	.49	1.43	.50	.59
condition					(.55)
Biomarkers	1.65	.48	1.62	.49	.56
					(.58)
Physical fitness	1.35	.48	1.42	.50	1.4

					(.16)
Subjective	95.52	12.27	91.98	14.09	2.76*
wellbeing					(.01)

\*p<.05

The results of independent sample t test in Table 20 show significant difference only in the subjective wellbeing and not on generativity, mindfulness, resilience, or physical health parameters of the young elderly as a result of type of family. Elderly living in nuclear families, perceive greater wellbeing than those living in joint families.

In order to understand the differences among various socio-demographic groups such as, educational status, socio-economic status, and working status across the psychological variables and physical health parameters i.e., systemic/sensory parameters, lifestyle habits, One-way ANOVA was carried out.

### 3.7 Mean Differences in Psychological Variables and Physical Health Parameters-

**One- way ANOVA** 

### Table 21

*Effect of Educational Status on Generativity, Resilience, Mindfulness, Physical Health Parameters i.e., Systemic/Sensory Parameters, Lifestyle Habits, and Subjective Wellbeing of Young Elderly* 

Variables	SSC/HSc	Graduation	Post-Graduation	Any Other	F value
	(N=207)	(N=158)	(N=75)	(N=12)	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	
Generativity	26.88	31.62	34.77	33.66	7.34**
	(12.77)	(14.993)	(14.52)	(17.15)	(.00)
Mindfulness	50.16 <sup>a</sup>	54.51 <sup>ab</sup>	56.60 <sup>b</sup>	53.66 <sup>ab</sup>	11.47**
	(9.79)	(8.83)	(8.40)	(12.33)	(.00)
Resilience	63.33	71.70	74.15	70.08	9.72**

Variables	SSC/HSc	Graduation	Post-Graduation	Any Other	F value	
	(N=207)	(N=158)	(N=75)	(N=12)		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
	(23.28)	(14.89)	(15.46)	(20.42)	(.00)	
Systemic/	14.43	14.55	14.69	13.75	1.29	
sensory	(1.79)	(1.58)	(1.44)	(2.45)	(.27)	
parameters						
Lifestyle	29.37	29.10	28.71	29.08	2.39	
habits	(1.63)	(2.22)	(182)	(1.31)	(.07)	
Subjective	86.03 <sup>a</sup>	95.01 <sup>bc</sup>	100.29 <sup>c</sup>	87.41 <sup>ab</sup>	22.69**	
wellbeing	(16.15)	(13.16)	(10.32)	(19.92)	(.00)	

#### \*\*p<.01

The findings of One-way ANOVA in Table 21 show the significant difference in generativity, mindfulness, resilience, and subjective wellbeing, except physical health parameters of young elderly across the educational levels. Greater mean scores are found on all the psychological and physical health parameters except lifestyle habits among the young elderly with the Post-Graduation degree.

Although the F values indicate significant difference in generativity, mindfulness, resilience, and subjective wellbeing as a result of educational status, the Post hoc analysis shows that in mindfulness the elderly with Post Graduation degree differ significantly from elderly with SSC/HSC qualification. At the same time elderly passed with SSC/HSC significantly differ from other levels of education. Subjective wellbeing revealed 4 sub-sets, which showed that each group with different level of educational qualification differs from rest of the groups. However, multiple comparison of means test carried out by using Student-Newman-Keuls does not show any significant difference in subsets of generativity and resilience.

Based on the socio-economic status, whether the demographic groups of elderly differed on generativity, resilience, mindfulness, physical health parameters i.e., systemic/sensory parameters,

lifestyle habits and subjective wellbeing, was investigated by using One-way ANOVA. The findings are mentioned in the table below.

### Table 22

Effect of Socio-Economic Status on Generativity, Resilience, Mindfulness, Physical Health Parameters i.e., Systemic/Sensory Parameters, Lifestyle Habits, and Subjective Wellbeing of Young Elderly

Variables	<10,000	10,000-20,000	20,001-50,000	>50,001	F value
	(N=157)	(N=101)	(N=124)	(N=70)	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	
Generativity	24.87 <sup>a</sup>	31.66 <sup>b</sup>	34.13 <sup>b</sup>	31.97 <sup>b</sup>	11.98**
	(13.53)	(13.49)	(14.57)	(13.20)	(.00)
Mindfulness	49.58 <sup>a</sup>	53.40 <sup>b</sup>	55.21 <sup>b</sup>	55.17 <sup>b</sup>	10.63**
	(10.48)	(9.69)	(7.99)	(8.24)	(.00)
Resilience	61.81 <sup>a</sup>	77.88 <sup>b</sup>	70.70 <sup>b</sup>	74.62 <sup>b</sup>	10.90**
	(20.37	(19.08)	(15.54)	(14.48)	(.00)
Systemic/	14.33	14.70	14.53	14.51	1.03
sensory	(1.84)	(1.68)	(1.58)	(1.49)	(.37)
parameters					
Lifestyle	29.31 <sup>b</sup>	29.14 <sup>b</sup>	29.37 <sup>b</sup>	28.47 <sup>a</sup>	4.04*
habits	(1.84)	(1.83)	(1.18)	(2.78)	(.01)
Subjective	83.45 <sup>a</sup>	92.42 <sup>b</sup>	97.11 <sup>c</sup>	98.77 <sup>c</sup>	30.73**
wellbeing	(16.42)	(15.33)	(11.62)	(10.28)	(.00)

\*\*p<.01

The F values in the Table 22 show significant effect of socio-economic status on generativity, resilience, mindfulness, subjective wellbeing, and lifestyle habits; but not on systemic/sensory parameters of physical health of young elderly.

The multiple comparison of means test carried out by using Tukey B shows that elderly in the income group of less than Rs.10,000 per month significantly differ from the elderly in the rest of the income groups in generativity, mindfulness and resilience. However, subjective wellbeing revealed 3 subsets -elderly in the income group of less than Rs.10,000 per month significantly differ from the rest of the income groups; elderly with Rs.10,000-20,000 differ significantly from the rest of the income groups and the elderly with income of Rs.20,001-50,000 and > Rs.50,000 belong to one group. In the lifestyle habits across the socio-economic status, the elderly in the income group 50,000 and above significantly differ from the other three income groups.

Along with the educational and socioeconomic status, whether the elderly differ on generativity, mindfulness, resilience, physical health parameters i.e., systemic/sensory parameters, lifestyle habits and subjective wellbeing as a result of their working status was studied with the help of One-way ANOVA. The results are given below:

#### Table 23

Effect of Working Status on Generativity, Mindfulness, Resilience, Physical Health Parameters i.e., Systemic/Sensory Parameters, Lifestyle Habits And Subjective Wellbeing of Young Elderly

Variables	Home- maker	Working in continuity	Retired	Retired & working	Honourary work	F value
	(N=139)	(N=71)	(N=169)	(N=48)	(N=25)	
	Mean	Mean	Mean	Mean	Mean	
	(SD)	(SD)	(SD)	(SD)	(SD)	
Generativity	29.25 <sup>ab</sup>	32.23 <sup>abc</sup>	27.24 <sup>a</sup>	36.31 <sup>c</sup>	34.80 <sup>bc</sup>	5.39**
	(13.53)	(14.62)	(13.30)	(14.57)	(17.79)	(.00)
Mindfulness	51.15 <sup>a</sup>	54.08 <sup>a</sup>	52.93 <sup>a</sup>	52.60 <sup>a</sup>	58.64 <sup>b</sup>	3.73*
	(9.16)	(10.99)	(9.89)	(8.30)	(5.79)	(.01)
Resilience	62.73 <sup>a</sup>	73.96 <sup>b</sup>	69.98 <sup>ab</sup>	67.69 <sup>ab</sup>	71.76 <sup>ab</sup>	5.54**
	(19.17)	(18.00)	(18.57)	(17.18)	(11.75)	(.00)

Variables	Home-	Working in	Retired	Retired &	Honourary	F value
	maker	continuity		working	work	
	(N=139)	(N=71)	(N=169)	(N=48)	(N=25)	
	Mean	Mean	Mean	Mean	Mean	
	(SD)	(SD)	(SD)	(SD)	(SD)	
Systemic/	14.13	14.82	14.73	14.19	14.64	3.66*
sensory	(1.97)	(1.52)	(1.50)	(1.67)	(1.15)	(.01)
parameters Lifestyle	29.66 °	27.99 <sup>a</sup>	29.33 <sup>bc</sup>	28.56 <sup>ab</sup>	29.68 <sup>c</sup>	**
habits	(1.07)	(3.43)	(1.26)	(1.98)	(.75)	12.49 (.00)
Subjective	87.44 <sup>a</sup>	93.71 <sup>abc</sup>	91.24 <sup>ab</sup>	97.19 <sup>bc</sup>	99.96 <sup>c</sup>	6.61**
wellbeing	(14.34)	(15.67)	(16.52)	(12.77)	(9.56)	(.00)

\*p<.05; \*\*p<.01

The figures in Table 23 of One-way ANOVA indicate that the working status of young elderly brings significant difference in generativity, mindfulness, resilience, subjective wellbeing and physical health parameters i.e., systemic/sensory parameters and lifestyle habits of young elderly. The F values are significant for all psychological and physical parameters of the young elderly. The mean scores of generativity are maximum for the elderly who are retired and working again, followed by the elderly who are working on an honourary basis and those who have continued working.

Further, the Post Hoc analysis carried out by using Tukey test shows in generativity, home makers, working in continuity and retired elderly significantly differ from the rest of the two categories of working status. Home makers and elderly working in continuity and working on honourary basis differ from those who are retired as well as retired and working again. Elderly working in continuity, who are retired and working again and those working on an honourary basis differ from the rest of the two categories of working status.

In mindfulness, elderly who are working post-retirement on honourary basis significantly differ from the rest of the category of working status.

In resilience, elderly continued working differ from other categories of working status. Homemakers differ from the elderly belong to rest of the categories. And the retired elderly, elderly who are retired and working again and who are working on an honourary basis differ from homemakers and those elderly working in continuity.

In subjective wellbeing the home makers, elderly working in continuity and retired elderly significantly differ from those who are retired and working again and who are working on an honourary basis; the elderly who are working in continuity, retired elderly, elderly who are retired and working again differ from home makers and post retirement who are working on an honourary basis. The elderly working in continuity, elderly who are retired and working again and the elderly who are working on an honourary basis significantly differ from the rest of the categories.

Whether educational status, socio economic status and working status show effect on chronic medical condition, biomarkers and physical fitness of young elderly, Chi-square test was carried out. The results are given below -

# **3.8 Mean Differences in Psychological Variables and Physical Health Parameters- Chi**square test

### Table 24

Mean Differences in Chronic Medical Condition, Biomarkers and Physical Fitness of Young Elderly Across the Educational Status

Educational	Chronic medical		$X^2$	Biomarkers		$X^2$	Physical fitness		<b>X</b> <sup>2</sup>
status	cond	lition							
	<21.18	>21.18		<30.61	>30.61		<12.04	>12.04	
			-						-
SSC/HSC	28.1%	17.7%		12.8%	33%		27.9%	17.9%	
Graduation	21%	13.9%		12.2%	22.8%		20.1%	14.8%	
Post-	8.6%	8%		5.8%	10.8%		10.2%	6.4%	
Graduation									
Any other	1.3%	1.3%		1.1%	1.5%		2%	0.7%	
			2.48			2.84			1.62
			(.47)			(.41)			(.65)

The figures in Table 24 indicate that educational status across the levels do not make any significant difference in chronic medical condition, biomarkers, and physical fitness of young elderly

## Table 25

Mean Differences in Chronic Medical Condition, Biomarkers, and Physical Fitness of Young Elderly Across the Socioeconomic Status

Socio-	Chronic	medical	$X^2$	Biom	arkers	$X^2$	Physica	l fitness	$X^2$
economic	cond	lition							
status									
	<21.18	>21.18		<30.61	>30.61		<12.04	>12.04	
< 10,000	23%	11.7%		9.3%	25.4%		21.7%	13.1%	
10,000-20,000	11.3%	11.1%		7.1%	15.3%		13.1%	9.3%	
20,001-50,000	16.6%	10.8%		10%	17.5%		15.9%	11.5%	
>50,000	8.2%	7.3%		5.5%	10%		9.5%	6%	
			7.63*			3.49			0.74
			(.05)			(.32)			(.86)

The figures in Table 25 indicate that socioeconomic status across the levels do not make any significant difference in the biomarkers and physical fitness of young elderly. However, chronic medical condition is influenced by the socioeconomic status of the elderly. As the income level increases, there is an increase in the percentage of the elderly suffering from chronic medical condition. No such trend is observed in case of biomarkers and physical fitness parameters.

## Table 26

Mean Differences In Chronic Medical Condition, Biomarkers, And Physical Fitness of Young

Working	Chronic medical		$X^2$	Biom	arkers	$X^2$	Physica	Physical fitness	
status	conc	lition							
	<21.18	>21.18		<30.61	>30.61		<12.04	>12.04	
Homemaker	19%	11.7%		12.6%	18.1%		21%	9.7%	
Working in continuation	8.8%	6.9%		2.7%	13.1%		8.6%	7.1%	
Retired	22.3%	15%		10%	27.4%		21%	16.4%	
Working Again	6%	4.6%		4.4%	6.2%		6%	4.6%	
Working on honorary	2.9%	2.7%		2.2%	3.3%		3.5%	2%	
basis									
			1.38			17.7**			6.26
			(.85)			(.00)			(.18)

Elderly Across the Working Status

\*\*p<.01

Table 26 shows that working status does not make any difference in the chronic medical condition and physical fitness of young elderly. However, biomarkers are affected by the working status of the elderly. Retired elderly are found to have WNR biomarkers, followed by the Homemakers, and the elderly working in continuation. Based on the Explanatory sequential mixed methods design, Table 27 depicts how the qualitative description of physical health and psychological variables help to explain quantitative results.

## **3.9 Integration of Quantitative & Qualitative data**

## Table 27

Hypothesis	Findings (Quantitative)
H1	1.Significant positive correlation among generativity, mindfulness, resilience, and subjective wellbeing
	2.Sensory/systemic parameters of physical health are significantly related to mindfulness, resilience and subjective wellbeing, not with generativity
	Description (Qualitative)
	<ul> <li>1.The respondents in the Phase II have reported experience of happiness and satisfaction by being helpful to others, specifically to the next generation. Perspective of 'overcoming the challenges' in life makes the elderly more courageous and prepares to accept the life as it comes. With a composed mind, older adults have expressed enhanced capacity to take decisions independently in life, which leads to happiness.</li> <li>2.The respondents have reported that in the absence of even minor ailments, they feel healthy and active.</li> </ul>
H2	Findings (Quantitative)         1.Presence of any chronic medical condition in the elderly significantly         influences resilience, mindfulness and subjective wellbeing but not         generativity.
	2. Elderly with no biomarkers significantly differ in subjective wellbeing and but not in generativity, resilience, and mindfulness.
	3. Physically fit elderly are significantly more generative, resilient, mindful and experiencegreater subjective wellbeing.

	Description (Qualitative)						
	1. When the elderly suffer from any major illness, it affects their physical activity, social engagement and overall feeling of happiness is reported by the respondents of Phase II of the research.						
	2. The respondents in Phase II realise the presence of certain biomarkers such as hypothyroidism makes them feel sluggish and reduced activity leads to inertia.						
	3. Despite the place of stay, elderly following routine physical activity to maintain fitness promotes energy and enthusiasm, enjoying stay in the institution with lot of positive outlook						
H3	Findings (Quantitative)						
	Generativity, resilience, and mindfulness together are significantly predicting physical health parameters i.esensory/systemic parameters and lifestyle habits and perceived wellbeing						
	Description (Qualitative)						
	With induced introspection from the researcher, the Institutionalised elderlyexpressed usefulness of meditation in accepting oneself and other people andability to think from a different perspective.It helps to resolve conflicts and misunderstandings and lead to happiness.						
	Helping the younger generation give older adults a feeling of contentment and fulfilling life.						
	They tend to show a realisation of happiness to be a relative concept and hence, one should learn to look at the life with that lens to feel happy.						
H7	Findings (Quantitative)						
	Pursuing hobbies make the elderly more generative, mindful and resilient;tend to feel happy and satisfied than their counterparts. They do not show anybiomarkers, indicating better physical health.						

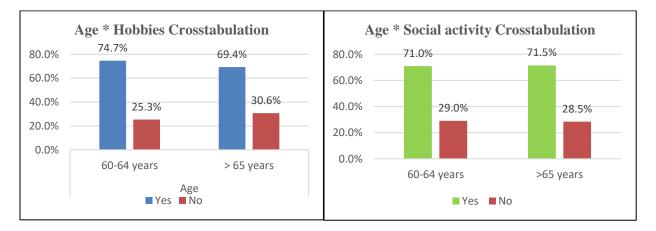
	Description (Qualitative)
	Although more than 70% elderly from both the groups pursue hobbies, few of
	them reported that they consciously pursue to distract their mind from
	ruminating negative thoughts.
	Such activities not only give them pleasure and but promote positivity, develop
	courage to face the reality, no matter how difficult it is.
	Engagement in any creative art gives an experience of happiness and
	satisfaction.
110	
H8	Findings (Quantitative)
	Elderly engaged into any formal / informal social activity are more generative,
	mindful, resilient and find happiness and satisfaction in life.
	Description (Qualitative)
	More than 70% older adults are socially engaged. Being socially active help
	the elderly to feel nice, enhancing their self-esteem and socially connected.
	Others' presence in the life a gives even the institutionalised elderly sense of
	support and confidence to fight against odds in daily life.
	It allows them to be helpful towards others and a learning experience to
	develop multi-dimensional perspective to look at the life.
H9	Findings (Quantitative)
	1.Non-institutionalised elderly are more generative, mindful, resilient and
	thus perceive significantly higher wellbeing in life. However,
	2. Institutionalised elderly are found to have significantly better physical
	health in terms of WNR of biomarkers or such lifestyle habits, which would
	affect their health and wellbeing
	Description (Qualitative)

In the quantitative data of Phase I, the place of stay of the elderly is found to be significant in generativity, resilience, mindfulness and wellbeing. However, there are individual differences among the institutionalised elderly who try to be helpful to younger generation in a given situation, are resilient and happy with one's life.

To get an insight about how pursuance of hobbies and engagement in social activity differs across various socio-demographic groups of elderly such as age, gender, marital status, educational status, socio-economic status, working status and the type of family, the Cross tabulations are carried out. The following are the graphical presentations of the cross tabulations with pursuing hobbies.

# **3.10** Cross Tabulations of Pursuance of Hobbies and Engagement in Social Activities across Sociodemographic Variables

## Figure 44 (A & B)



Cross Tabulations of Age And Pursuance of Hobbies(A) And Engagement in Social Activity(B)

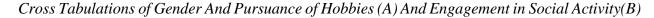
The non-institutionalised young elderly participants in the study belonged to two age groups, 60-64 years and 65-70 years, whereas the institutionalised young elderly participants belonged to two age groups, 60-64 years and 65-75 years. The cross tabulation of pursuing hobbies with age given in Figure 44 (A) suggests that there are 217 elderly in the age group of 60-64 years and 235 elderly belong to 65 years and above. The above graph shows 74.7% of the elderly in 60-64 years age

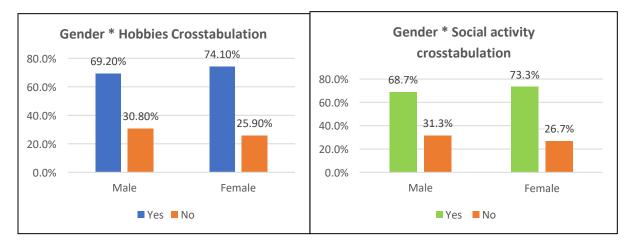
group pursue hobbies in life; 69.4% elderly between 65years and above elderly pursue hobbies which indicates reduction in pursuance of hobbies as the age progresses.

Figure 44 (B) shows approximately equal percentage of elderly (71%) who belong to both age groups are engaged in social activity. The figures show 154(60-64 years) and 168(65-70/75 years) elderly are socially engaged.

The chi square values do not show any significant difference for the pursuance of hobbies (1.56) and engagement in social activity (.02).

### Figure 45 (A & B)



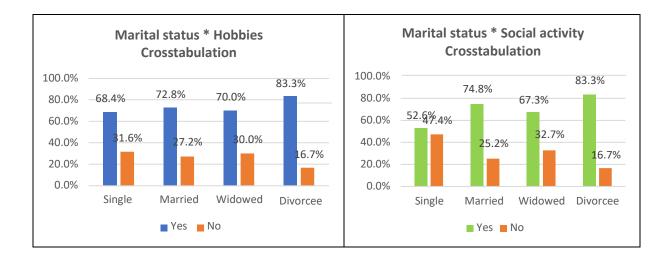


The cross tabulations values show that 325 male and female elderly pursue hobbies. Out of them, the Figure 45 (A) shows that more percentage of female elderly (74.10%) to be involved in hobbies than the males (69.20%). The above figure 45 (B) indicates more females (73.3%) engaged in social activity than 68.7% male elderly.

The chi square values for the pursuance of hobbies and engagement in social activity based on gender (.24 and 1.18) respectively, which do not show any significant difference.

## Figure 46 (A & B)

Cross Tabulations of Marital Status And Pursuance of Hobbies (A) And Engagement in Social Activity(B)

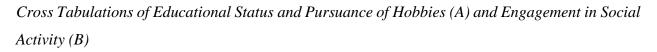


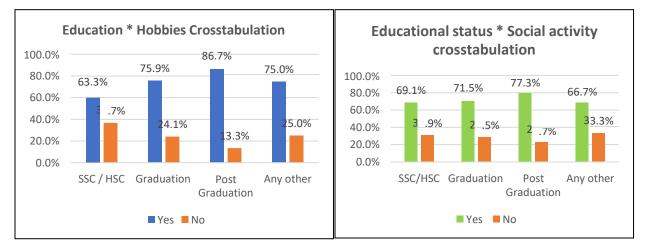
The crosstabulation values show that although majority of the sample in the study are married (298), followed by widowed (110), single (38) and 6 elderly are the divorcee. The Figure 46 (A) shows that 68.4% single elderly, 72.8% married elderly, 70% widowed and 83.3% divorcee are pursuing hobbies.

The values in the Cross tabulation of social engagement and marital status shows 83.3% of the divorcee, followed by 74.8% married, 67.3% widowed and 52.6% elderly who are single are socially engaged. The chi square value (9.57<sup>\*</sup>) support the cross tabulations.

However, the chi square value for pursuance of hobbies (.82) and marital status does not show any significant difference.

## Figure 47 (A & B)





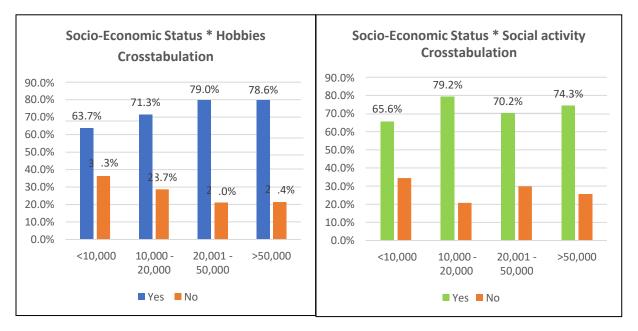
The cross tabulation of pursuing hobbies and educational status indicates maximum number of elderly with Post-Graduation degree (86.7%) pursue hobbies of their interest. Equal percentage of graduate and elderly with any other qualification (75.9%) and 63% elderly with SSC/HSC qualification are pursuing hobbies in their life.

The Figure 47 (B) shows that 69% of elderly with SSC/HSC qualification, are socially engaged. They are followed by 71.5% and 77.3% elderly who are qualified with Graduation and Post-Graduation degree respectively and 66.7% with any other qualification are socially engaged.

The chi square value for educational status and pursuance of hobbies  $(17.04^*)$  is significant; however, for educational status and engagement in social activity the chi square value (1.96) is not significant.

### Figure 48 (A & B)

*Cross Tabulations of Socio-Economic Status and Pursuance of Hobbies (A) and Engagement in Social Activity(B)* 



Based on the socio-economic status and hobbies cross tabulation, Figure 48 (A) shows equal number, i.e., 79% elderly from income group between Rs.20,000 -50,000 and > 50,000,71% from

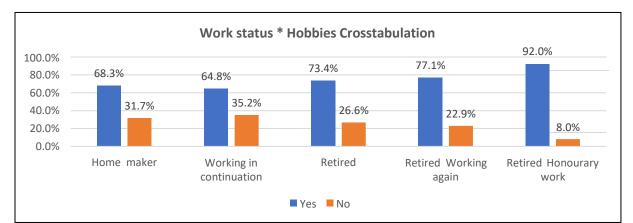
the income between Rs.10,000 -20,000 and 63.7% elderly with less than Rs.10,000 income per month are pursuing hobby,

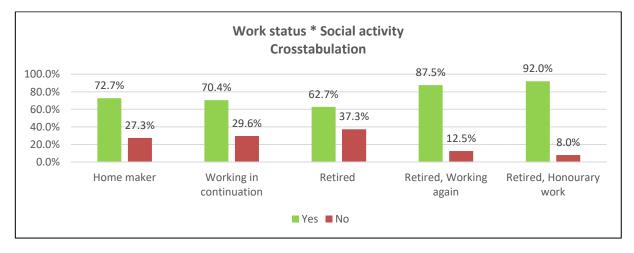
The Figure 48 (B) shows that 79.2% of the sample belong to the income level between Rs.10,000 -20,000 per month are highly socially engaged as compared to other categories of income groups. However, 74.3% with income of >50,000, followed by 70.2% with income between 20,001-50,000 and 65.6% with income less than Rs.10,000 show engagement in social activity of their choice.

The chi square value for socio-economic status and pursuance of hobbies (9.92<sup>\*</sup>)is significant; however, for socio-economic status and engagement in social activity the chi square value (5.95) is not significant.

## Figure 49 (A & B)

Cross Tabulations of Working Status and Pursuance of Hobbies (A) and Engagement in Social Activity(B)





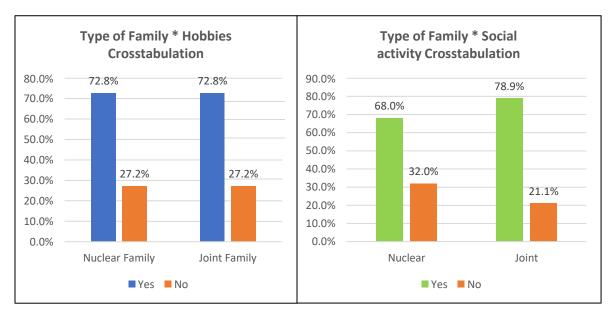
The working status of young elderly shows 37% of the total sample belong to 'retired' working status and 31% are the home makers. The Figure 49 (A) of Cross tabulation of Pursuing hobbies and Working status shows 92% of elderly pursue hobbies who are retired but working honourarily, followed by retired and working again (77.1%), retired (73.4%), home makers (68.3%) and 64.8% elderly working in continuity.

The values in the cross-tabulation Figure 49 (B) indicate maximum number of the sample are retired elderly (169), followed by 139 home makers. However, 92% elderly working on honorary basis and 87.5% elderly who are retired but working again are involved in social activity, followed by homemakers (72.7%), working in continuation (70.4%) and retired (62.7%).

The chi square value for working status and pursuance of hobby (8.47) is not significant; however, for working status and engagement in social activity the chi square value  $(17.60^{**})$  is significant.

## Figure 50 (A & B)

Cross Tabulations of Type of Family and Pursuance of Hobbies (A) and Engagement in Social Activity(B)



The Figure 50 (A) of Cross tabulation of Pursuing hobbies and type of family shows 123 elderly from nuclear family (72.8%) and 131 elderly living in a joint family (72.8%) are involved in a hobbies of their interest, which indicates that type of family does not have effect on the pursuance of hobby among the elderly.

In the Cross-tabulation Figure 50 (B), based on the type of family with social engagement, 142 elderly living in a joint family (78.9%) and 115 living in a nuclear family (68%) are engaged in social activity.

The chi square value for the type of family and pursuance of hobbies is not significant; however, for the engagement in social activity the chi square value  $(5.28^*)$  is significant.

The following Chapter finds analysis of the qualitative data collected through the semi-structured interview of 30 non-institutionalised and institutionalised young elderly.

## **Chapter 4 - Results (Qualitative Analysis)**

**Overview:** The following chapter elaborates beliefs and perceptions, with verbatim of elderly who were interviewed in Phase II of the research. Further, it also represents, sub-themes and global themes which emerged from the verbatim.

In Phase I of the research, during data collection of the quantitative survey, the researcher identified approximately 38 participants (20 non-institutionalised and 18 institutionalised) who were cooperative and displayed more openness. The respective respondents were observed to be high / low scorers on the psychological attributes by the researcher. Finally, 30 participants (17non-institutionalised and 13 institutionalised young elderly) were interviewed. Out of 30 elderly, eight elderly from theinstitutions and three elderly living in a family were interviewed in person before the beginning of the Pandemic; and the remaining 19 were telephonically interviewed during Pandemic situation. The verbatim was transcribed.

The Thematic Analysis method by (Braun and Clarke,2006) was used to analyze the data. Accordingly, the occurrence of similar/identical ideas or words were coded from which the common sub-themes emerged for each question. Frequency and percentage analysis was carried out on the sub-themes. The verbatims were revisited and rechecked again and again to validate the appropriateness of the sub themes. Global themes were derived after insightful analysis of the subthemes and verbatims. So, the global themes are more generic and include number of subthemes. The global themes suggest the young elderly's understanding, perception and lived experiences related to each issue. The following are the beliefs and perceptions of physical health among elderly

### 4.1 Beliefs and Perceptions with Verbatim

The following are beliefs and perceptions of the elderly, about physical health, happiness, generativity, resilience and present preparedness revealed through semi-structured interviews.

### 4.1.1 Perception of Physical Health