

RESULTS AND DISCUSSIONS

CHAPTER IV

RESULTS AND DISCUSSION

The result of the present study, Effectiveness of Positive Psychology Interventions in Enhancing the Psychological Well-being among College students of Single Parent Family, was conducted in an esteemed Engineering University, Coimbatore. One hundred and five College Students were selected by Purposive Sampling. All the subjects were assessed using the Grit Scale, Resilience Scale, Mindfulness Attention Awareness Scale, and Psychological Well-being Scale. Positive Psychological Interventions were given to them for twenty sessions, and each session was of two hours. After which, the college students from Single Parent Family were reassessed using the Grit Scale, Resilience Scale, Mindfulness Attention Awareness Scale, and Psychological Well-being Scale. Three months gap was given, and the Follow-up phase was carried out by measuring the Grit Scale, Resilience Scale, Mindfulness Attention Awareness Scale, and Psychological Well-being Scale. The results of the study were analyzed, tabulated, and discussed below.

The purpose of the investigation was to determine the influence of Positive Psychology Interventions in Enhancing the Psychological Well-being among College Students of Single Parent Families. The existing Single Parent faces the challenge of providing financial, psychological, and moral support for the entire family. However, efficient the existing parent, the absence of the other parent may not be fulfilled in younger ones' hearts.

Section I: Presents the Percentage analysis of the Demographic data such as Age, Sex, Family Status, and Socioeconomic status of the College Students from Single Parent Family.

Section II: Presents Psychological Well-being, Grit, Resilience, and Mindfulness of the College Students from Single Parent Family.

Section III: In this section, the Repeated Measures Analysis of Variance, Repeated Measures Multivariate Analysis of Variance and Post Hoc Analysis to check the Effectiveness of Positive Psychology Interventions in Enhancing the Psychological Well-being among college students of single parent family who were undergone Positive Psychology Interventions during before, after, and follow-up without a control group.

Section I

This section presents the Percentage analysis of the Demographic data such as Age, Sex, Family Status, And College Students' Socioeconomic status from Single Parent Families.

Table 1
Demographic Details of the College Students from Single Parent Family

N=105

Demographic Variables	Sub Groups	Frequency	Percentage %
Age	17	9	8
	18	47	45
	19	33	32
	20	16	15
Sex	Male	67	64
	Female	38	36
Family Status	One Parent Dead	33	31
	Separated	30	29
	Divorced	42	40
Socioeconomic Status	Upper	17	16
Kuppuswamy S.E.S. Scale (2018 version)	Upper Middle	41	39
	Upper Lower	39	38
	Lower Middle	8	7
	Lower	0	0

** Percentages are rounded off*

College students from single parent families in the age range of 17 to 20 years constituted the study sample. Among the students, 8% were in 17; 45% of 18 years; 32% in

19, and 15% were 20 years old. The college students from single parent family were in the late adolescent's category. Among them, 64% were Male and 36% Female. This study constitutes 31% of college students from single parent families with one parent dead; 29% of them had their parents separated, and 40% of college students from single parent families got their parents legally divorced. So, they were selected for the study. These college students from single parent family social economic status was categorized as 16% of them were from upper class; 39% upper middle; 38% upper lower and 7% from lower middle class and lower class was utterly absent. In this particular population, the prevalence of single parent families is more in males than females. The absence of lower middle- and lower-class socioeconomic statuses shows that a parent's loss had not created financial setbacks in these younger generations.

Section II

This section presents the Grit, Resilience, Mindfulness, and Psychological Well-being of the College Students from Single Parent Families.

Table 2
Level of Psychological Well-Being of the College Students from Single Parent Family
Before, After and Follow-up of Positive Psychology Interventions

		N=105					
Subscales of Levels	Psychological Well-being	Before		After		Follow-up	
		N	%	N	%	N	%
Autonomy	High	23	22	40	39	45	43
	Moderate	81	77	65	61	60	57
	Low	1	1	0	0	0	0
Environmental Mastery	High	7	6	46	44	49	47
	Moderate	78	75	58	55	55	52
	Low	20	19	1	1	1	1
Personal	High	10	9	52	50	61	58

Growth	Moderate	83	80	52	49	44	42
	Low	12	11	1	1	0	0
Positive Relations	High	15	14	71	68	73	70
	Moderate	78	75	30	29	29	28
	Low	12	11	4	3	3	2
Purpose in Life	High	4	3	36	35	43	40
	Moderate	73	70	67	64	62	59
	Low	28	27	2	1	1	1
Self Acceptance	High	5	4	52	49	56	53
	Moderate	86	83	52	50	49	47
	Low	14	13	1	1	0	0

* Percentages are rounded off

Table 2 indicates the level of Psychological Well-being of the College Students from Single Parent Family Before, After, and follow-up of Positive Psychology Interventions. Psychological Well-being encompasses all the good and healthy characters of an individual and how they evaluate their well-being. CarollRyff (2003) has developed the Psychological Well-being theory with six sub scales: Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance. Being in a single-parent family, adolescents have to face more struggles than average teenagers. Like the current research, a longitudinal study was conducted in Sweden on adolescent mental health, well-being, and mortality after parent's divorce. It was found that there were many low-level indicators in well-being, and after being adults, some alcoholism and developed mental illness (Hansagi, Brando and Andreasson, 2000). Positive Psychology Interventions was used to develop the college students' well-being levels from single parent family, and the percentage analysis was made to gain a better understanding of the results.

Autonomy can be referred to as the degree of freedom; a person can act with independence, self-determination, and regulation. Among 105 College Students from Single

Parent Family, 22% has high, 77% moderate and 1% has low Autonomy. College students from single parent families may not have connected the absence of a parent with their personal, professional, and social aspects of life. The Acceptance Commitment Therapy Acceptance techniques might have helped them rethink all the aspects they were experientially avoiding. It is noted that after receiving positive psychology interventions, there were no College students from single parent family with low autonomy, and high (39%) and moderate (61%) scorers have increased. After three months, follow-up was made, and the college students from single parent family showed high (43%), moderate (57%), and there is no low level in autonomy.

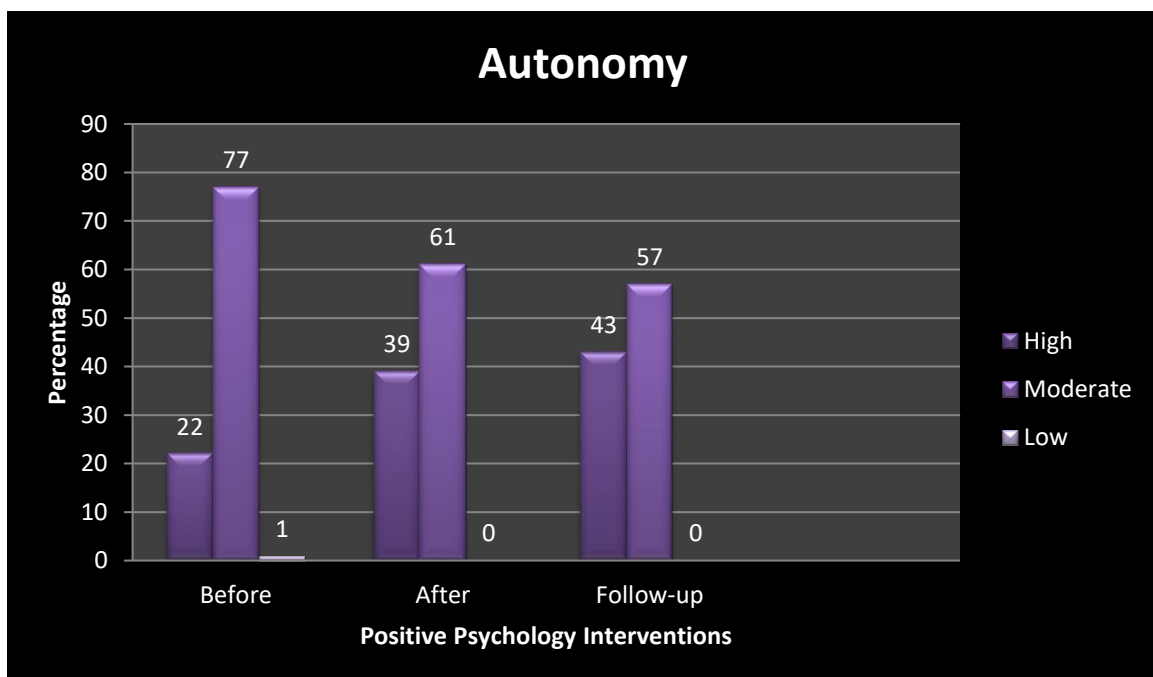


Figure 1 showing the Percentage Analysis of Autonomy of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 1 depicts the increase in the autonomy of personal growth of the college students from single parent family during before, after and follow-up of positive psychology interventions. Thus the Hypothesis H1, “There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After, and Follow-up of Positive Psychology Interventions” is accepted.

Environmental mastery is the capacity and ability to manage the environment and plan, organize, and change the environment favorable to self. In a Single - Parent Family, one parent's absence leads to an overburden of remaining family members' roles. Among the total

college students from single parent families, 6% scored high, 75% were moderate, and 19% showed low in environmental mastery. Positive Psychology Interventions changed their levels into 44% high, 55% moderate, and 1% low. Learning the four pillars of Grit-Interest, Practice, Purpose, and Hope may have influenced them to think about the developmental plans they have to frame, and they would have discussed with their peers and close relations. The group discussions among the other college students from single parent family and individual discussion with the researcher might have clarified and helped them sustain their scores even during the follow-up, and 47% had high; 52% had moderate and 1% low.

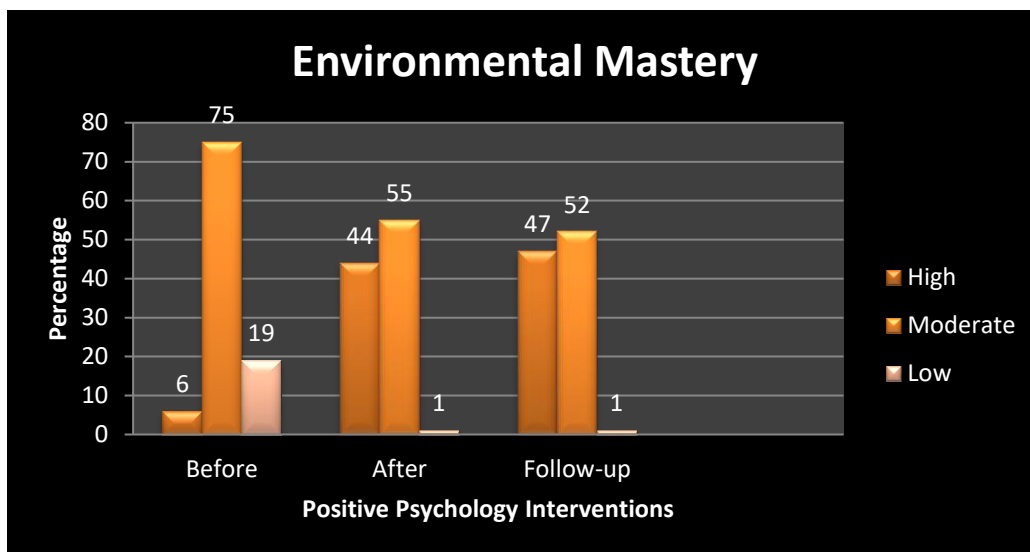


Figure 2 showing the Percentage Analysis of Environmental Mastery of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 2 showed the improvement of the college students' environmental mastery from single parent family during before, after, and follow-up phases of positive psychology interventions. Thus, Hypothesis H1, "There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up of Positive Psychology Interventions", is accepted.

Personal growth is the self-skill to develop oneself into a functioning person. The hardship of adolescents from single parent families demands them to manage their thinking, feelings, and emotions vigorously. Thus only 9% had High scores, 80% got Moderate, and 11% in Low. Being college student from single parent family, they have to perform multiple roles in assisting the parent and making personal growth plans. This stressful task would have

been made easy with the help of Mindfulness meditation techniques like breathing meditation. This technique would have helped them relax, and because of consistent oxygen supply, they might have had a chance to frame fresh ideas. It was reflected in their after-phase scores; 50% of college students from single parent family improved to high score, 49% to moderate, and 1% in low. the follow-up phase percentages were 58% high and 42% moderate.

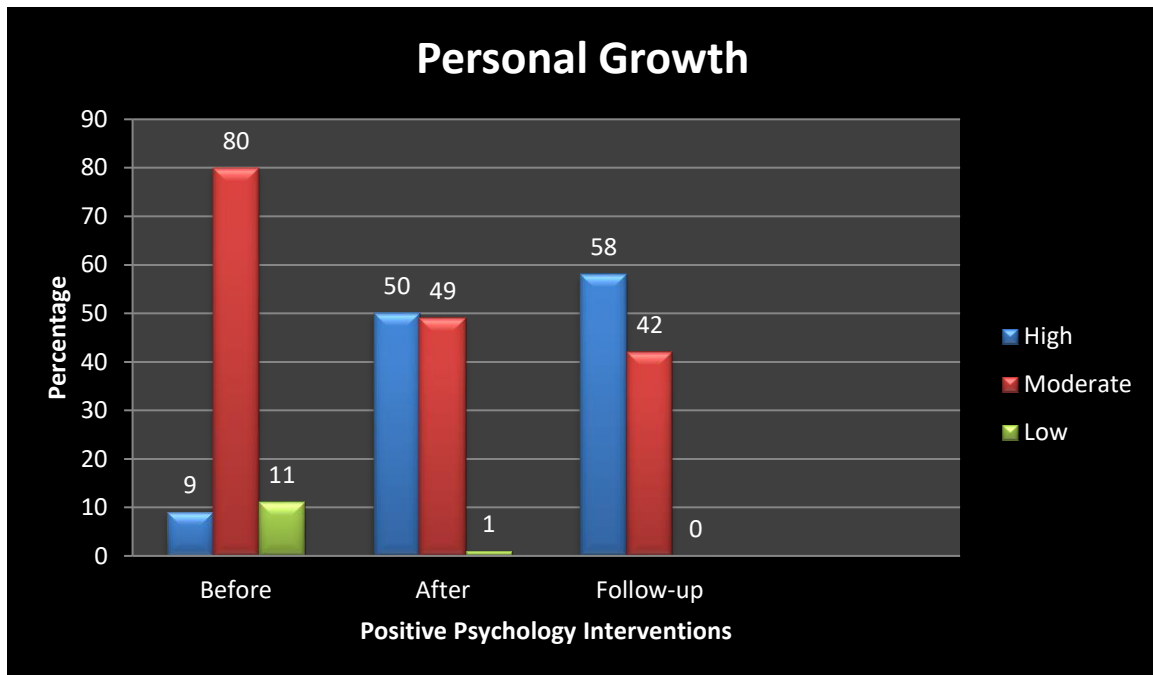


Figure 3 showing the Percentage Analysis of Personal Growth of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 3 illustrates the enhancement of the college student's personal growth from single parent family during before, after, and follow-up phases of positive psychology interventions. Thus, Hypothesis H1, "There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up of Positive Psychology Interventions", is accepted.

Positive relations are the warm, safe, trustful, close relationships felt with other people. In a single parent family, adolescents might be pushed to question their fundamental relationship with the parents themselves. 11% of the college students from single parent family scored low; 75% were in moderate and 14% in high levels of positive relations. The A.B.C. model may have helped them connect how the loss or separation from a parent

impacted their trust in relationships. Understanding the Activating event would have made them question their Beliefs because the effect of the A.B.C. model can be seen in the after-phase scores. 68% developed to High; 29% to Moderate and 3% in Low levels in Positive relations. In the Follow-up phase, 70% got High, 28% sustained Moderate, and 2% in Low.

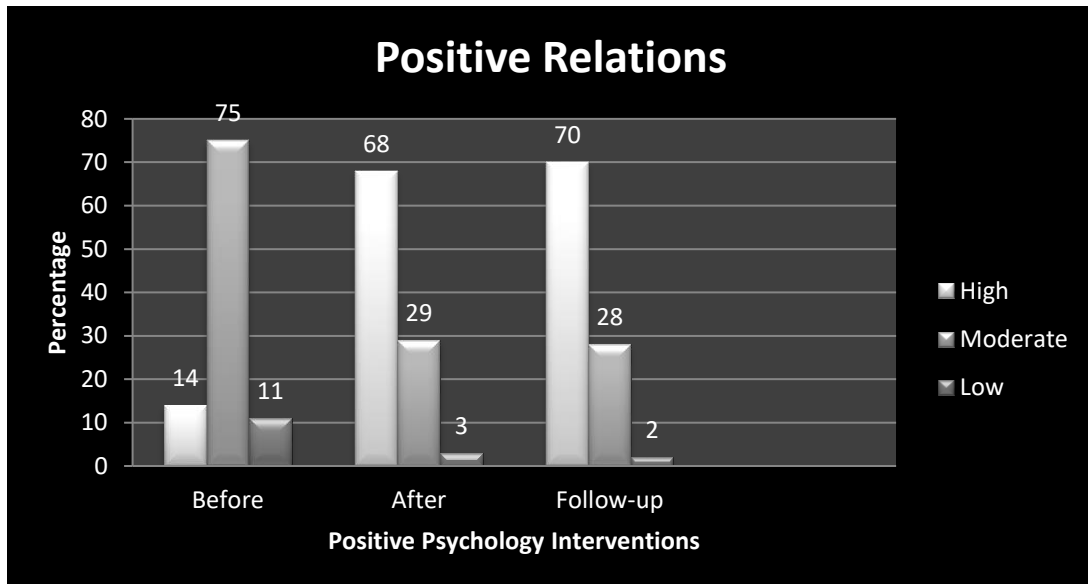


Figure 4 showing the Percentage Analysis of Positive Relations of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 4 represents the development of the College Student's Positive Relations from Single Parent Family during Before, After, and Follow-up phases of Positive Psychology Interventions. Thus, Hypothesis H1, "There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up of Positive Psychology Interventions", is accepted.

Purpose in life is characterized by meaningful aim and a clear understanding of what the individual wants from life. Adolescents from single parent families might get engrossed with the struggles and hardships of their parents' lives, and they might find less time for self-orientation. 3% had High, 70% had moderate, and 20% had a common purpose in life. They underwent 40 sessions of Positive Psychology Interventions and scored 35% High, 64% Moderate, and 1% Low. Among the four pillars of Grit, Purpose was taught using the Hierarchy of Needs in Positive Psychological Interventions. Physiological, Safety and Security, Love and Belongingness, Self-esteem, and Self-actualization needs were understood by the College Students from Single Parent Family. Thus, they might have selected purpose

in life due to their preferred needs, leading to stabilized follow-up scores of 40% High, 59% Moderate, and 1% Low.

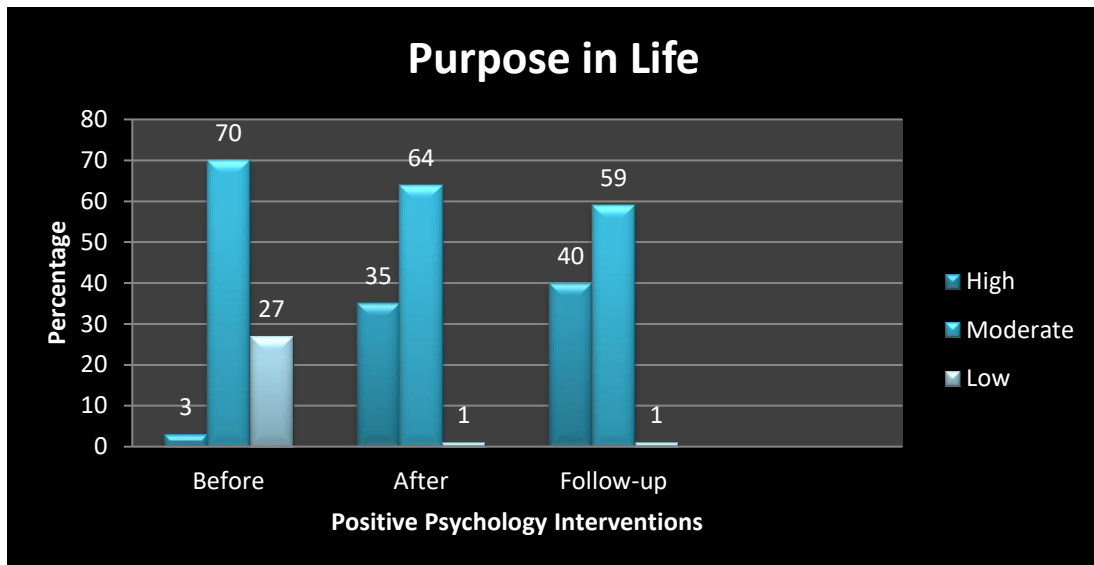


Figure 5 showing the Percentage Analysis of Purpose in Life of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 5 portrays the raise of College Student's Purpose in Life from Single Parent Family during Before, After, and Follow-up phases of Positive Psychology Interventions. Thus, Hypothesis H1, "There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up of Positive Psychology Interventions", is accepted.

Self-acceptance evaluates positive and negative skills, qualities, strengths, and weaknesses in past and present and accepts all as part of the self. For this sub scale, 83% of College Students from Single Parent Family were in Moderate; 13% in High and 4% got Low. Their scores after Positive Psychology Interventions were 49% High, 50% Moderate, and 1% Low. The Acceptance Commitment Therapy's dimension Defusion was taught through a video. The video served as an example of how to defuse a thought like, "I am Stupid" to "I am noticing I have the thought, "I am Stupid." This powerful technique to defuse the fused thoughts would have helped the College Students from Single Parent Family accept themselves. That may cause Follow-up session improvement sustained with 53% High and 47% Moderate scorers. Thus the levels of College Students from Single Parent Family in

Psychological well-being subscales were obtained from Before, After, and Follow-Up of Positive Psychology Interventions and analyzed.

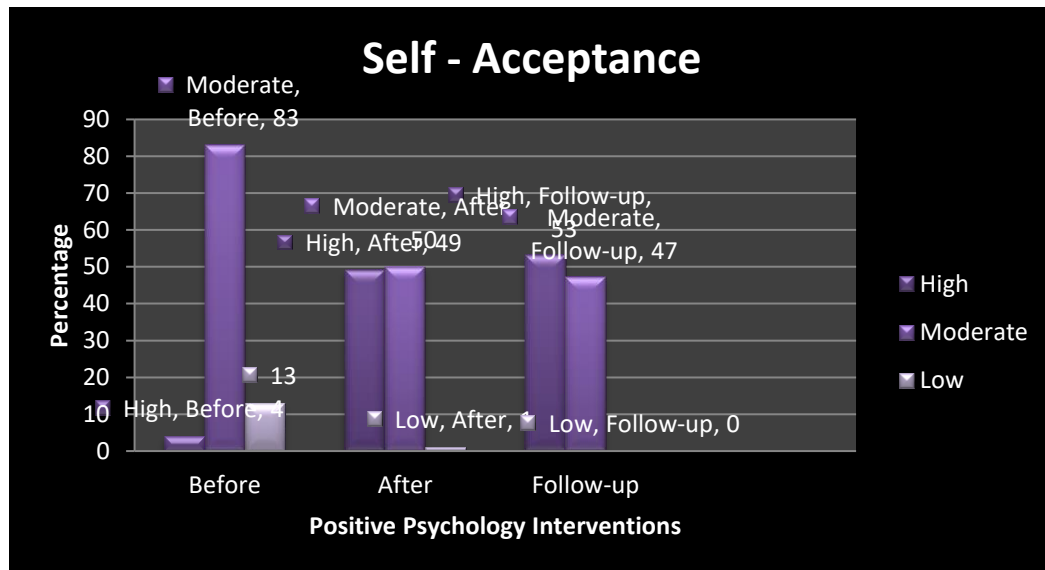


Figure 6 showing the Percentage Analysis of Self-Acceptance of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

The results showed in figure 6 indicated the fulfillment of hypothesis H1, "There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up of Positive Psychology Interventions". During the intervention, the College Students from Single Parent Family got the opportunity to understand and appreciate the importance of physical, psychological health, and interpersonal relationships. This thinking space was not there because of the adversities faced at a young age.

**TABLE 3
Level of Grit of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions**

Levels of Grit	Before Positive Psychology Interventions		After Positive Psychology Interventions		Follow-up Positive Psychology Interventions	
	N	%	N	%	N	%
	High	0	0	0	0	0
Moderate	76	73	100	96	103	99
Low	29	27	5	4	2	1

* Percentages are rounded off

Grit is the passion and perseverance towards long - term goals. Two hundred and twenty-six students participated in a research study to understand the connection between Parenting, Grit, and Academic Success. The results showed that Positive Parenting and Acceptance from parents were directly related to Grit, and Grit got a direct association with academic success (Howard, Nicholson, and Chesnut, 2019). In a single parent family, adolescents will miss the balance and stability produced by two parents. The overburdened single parent might find it challenging to satiate the needs of the adolescents.

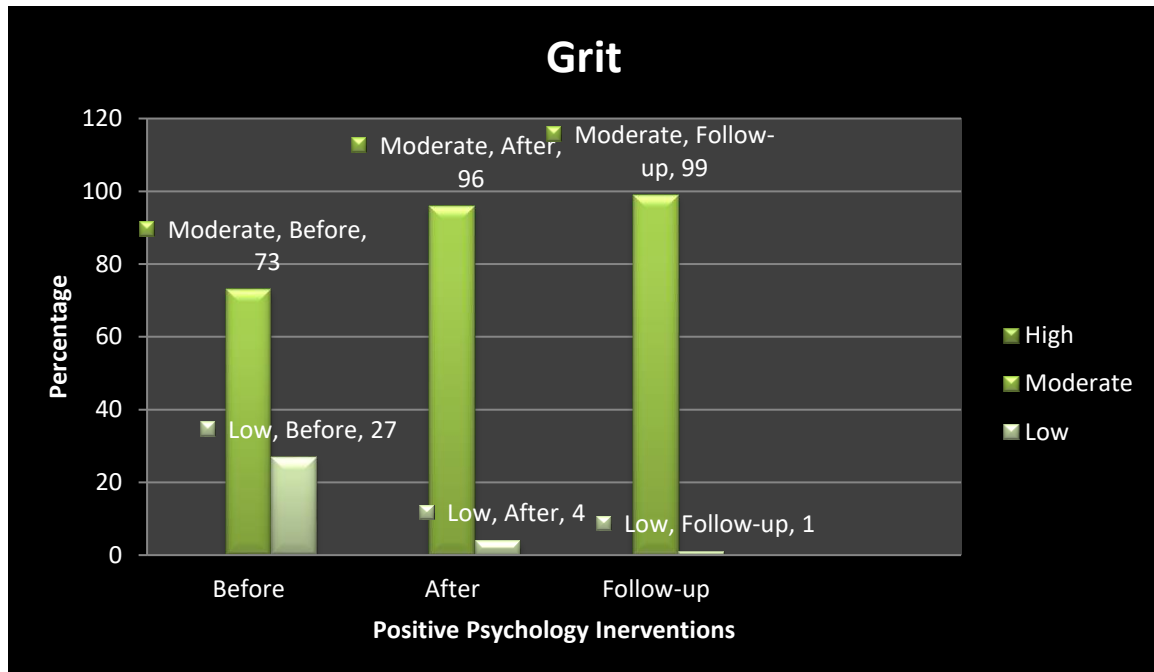


Figure 7 showing the Percentage Analysis of Grit of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 7 implies the change in the level of Grit of the College Students from Single Parent Family. So, the Hypothesis H2, "There will be a significant change in the Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up of Positive Psychology Interventions", is accepted.

73% of College Students from Single Parent Family showed a Moderate level of Grit, and the rest, 27%, had Low Grit. The Grit interviews conducted by the College Students from Single Parent Family would have given them hands-on experience about the four pillars of Grit, namely, Interest, Practice, Purpose, and Hope. During group and individual discussions, they exclaimed how uniformly all the interviewees had experienced these four pillars in life. That direct experience would have lead to the rise in Moderate Grit as 96%, and only 4%

remained in the Low Grit level. Follow-up Grit scores were like 99% College Students from Single Parent Family were in Moderate and 1% in Low. The percentage analysis displayed the improvement in the levels of Grit during after and Follow-up periods. Thus, H2 alternate hypothesis, there will be a significant change in Grit of College Students of Single Parent Family during Before, After and Follow-up through Positive Psychology Interventions.

TABLE 4

Level of Resilience of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Levels of Resilience	Before Psychology Interventions		Positive After Positive Psychology Interventions		Follow-up Psychology Interventions		Positive
	N	%	N	%	N	%	
High	0	0	0	0	1	1	
Moderate	77	73	101	97	104	99	
Low	28	27	4	3	0	0	

** Percentages are rounded off*

Resilience is the bouncing back ability of an individual in an adverse situation of life. In a quasi-experimental study, sixty-four adolescent students got divided into two interventional groups. One group received the nursing intervention, and another gained assertiveness and Positive Psychology Interventional family therapies. The results showed that the intervention group showed Resilience in the Before intervention of drug usage (Ramadhan, Keliat, and Wardani,2019). Thus, resilience skills were taught to college students from single parent family who had to face more adverse conditions than two-parent families. 73% of total college students from single parent family had moderate resilience scores, and 27% possessed low resilience scores. positive psychology interventions elevated college students from single parent family scoring moderate into 97%, and low dropped to 3%. during positive psychological interventions, acceptance commitment therapy was taught through the passengers on the bus metaphor. The passengers on the bus metaphor video were used to connect all the dimensions of the hexaflex model. the video portrayed the problems

relevant to what college students from single parent family were experiencing, and the activities also helped them create insight. thus, this insight might have reflected in the scores of one percent of college students from single parent family who scored high, and 99% got moderate resilience levels in follow-up.

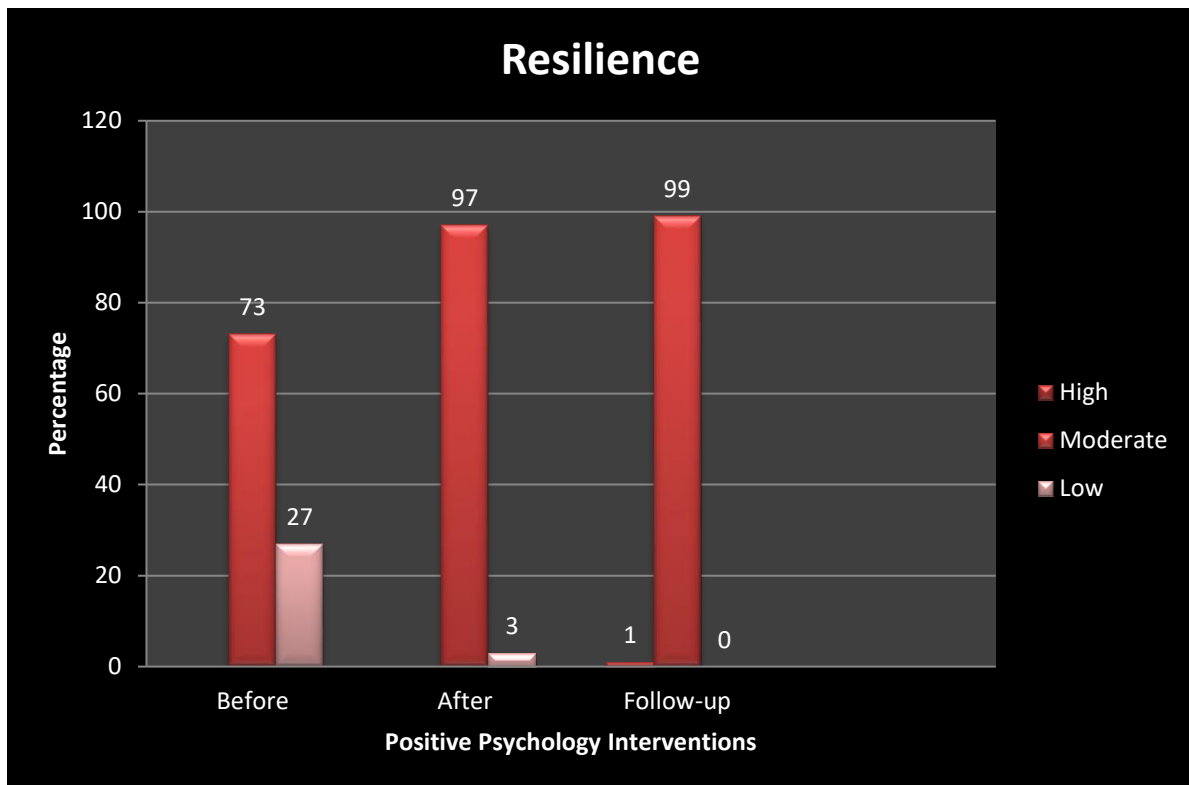


Figure 8 showing the Percentage Analysis of Resilience of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Improvement in the levels of resilience after receiving Positive Psychology Interventions is portrayed in figure 8 and thus, Hypothesis H3, “There will be a significant change in the Resilience of College Students of Single Parent Family during Before, After and Follow-up through Positive Psychology Interventions” is accepted.

TABLE 5**Level of Mindfulness of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions****N=105**

Levels of Mindfulness	Before Psychology Interventions		Positive After Positive Psychology Interventions		Follow-up Psychology Interventions		Positive
	N	%	N	%	N	%	
High	0	0	0	0	0	0	0
Moderate	43	41	62	59	75	71	
Low	62	59	43	41	30	29	

* Percentages are rounded off

Mindfulness is the awareness of the present moment of life. The past events related to parents and the worry about the future might pull the adolescents from single parent family to forego the future. Mindfulness intervention itself can remedy physical symptoms, anxiety, depression, and quality of life. A study was done by Hesse, Holmes, Kennedy-Overfelt, Kerr, and Giles (2015) on twenty adolescents girls having repeated headaches who were given mindfulness training and showed statistically significant changes in anxiety and depression levels. They were able to gain control over their pain, and their quality of life also developed. This study supports the present findings.

Thus, college students from single parent family were treated with mindfulness techniques in the positive psychology interventions. Before positive psychology interventions, 41% of college students from single parent family had moderate, and 59% had low mindfulness scores. After positive psychology interventions, the low scorer's percentage reduced to 41%, and moderate scorers were 59%. Mountain meditation taught in the positive psychology intervention would have helped them to create confidence and relaxation. The grounded feeling experienced while hearing and imagining one as a mountain might have healed past unresolved conflicts. Thus, 71% of college students from single parent family gained moderate mindfulness, and low mindfulness got reduced to 29% during the follow-up phase were noted.

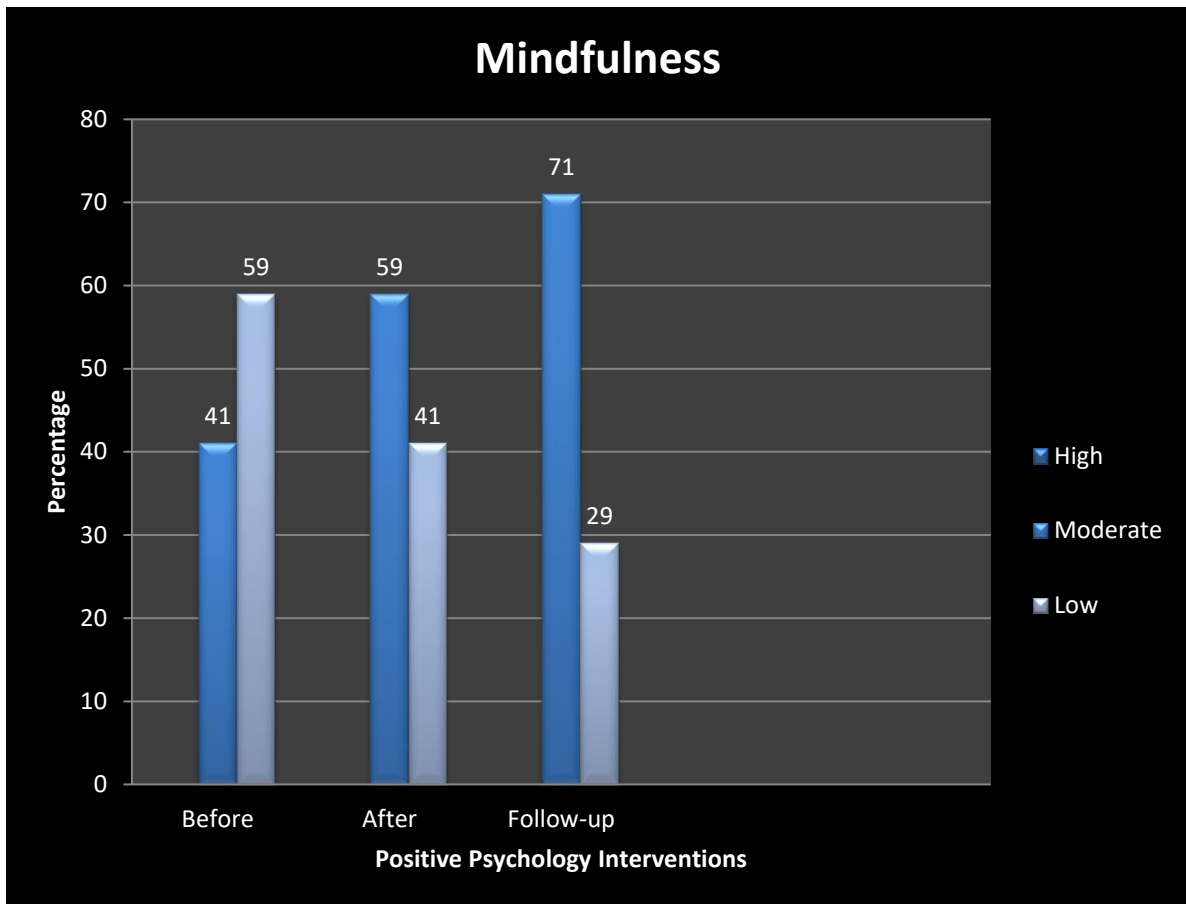


Figure 9 showing the Percentage Analysis of Mindfulness of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Hypothesis H4 was fulfilled by having a significant change in the mindfulness of college students of single parent family during before, after, and follow-up through positive psychology interventions and that is clearly shown in figure 9.

Section III

TABLE 6
Descriptive Statistics across Autonomy of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	29.85	3.59
After	31.29	3.94
Follow-up	31.67	3.92

Table 6 describes the mean scores and standard deviation of the autonomy of the college students from single parent family during before, after, and follow-up of positive psychology interventions. It shows a significant increase in the autonomy scores of the college students from single parent family. College students are supposed to be active in creating their roles and identity in the society. College students from single parent family have to bear multiple responsibilities due to the absence of one parent's support. Positive psychology interventions might have created space to understand autonomy as a capacity to create motives, goals, and skills that will eventually lead to independence would have made them ponder about their lives. Thus, the positive psychology interventions helped improve the autonomy of the college students from single parent family.

TABLE 7

Repeated Measures of ANOVA for the Autonomy of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source		Type III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	11.467	2	5.734	104.542
	Greenhouse-Geisser	11.467	1.150	9.974	104.542
	Huynh-Feldt	11.467	1.154	9.935	104.542
	Lower-bound	11.467	1.000	11.467	104.542
	Sphericity Assumed	11.408	208	.055	
Phases X Intervention	Greenhouse-Geisser	11.408	119.566	.095	
	Huynh-Feldt	11.408	120.043	.095	
	Lower-bound	11.408	104.000	.110	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2)=98.05, p=0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V = 0.48, F(2,103) = 47.76, p=0.00$. The Greenhouse-Geisser corrected results showed that the autonomy of the college students of the single parent family has improved, $F(1.15,119.56) = 104.54, p=0.00$.

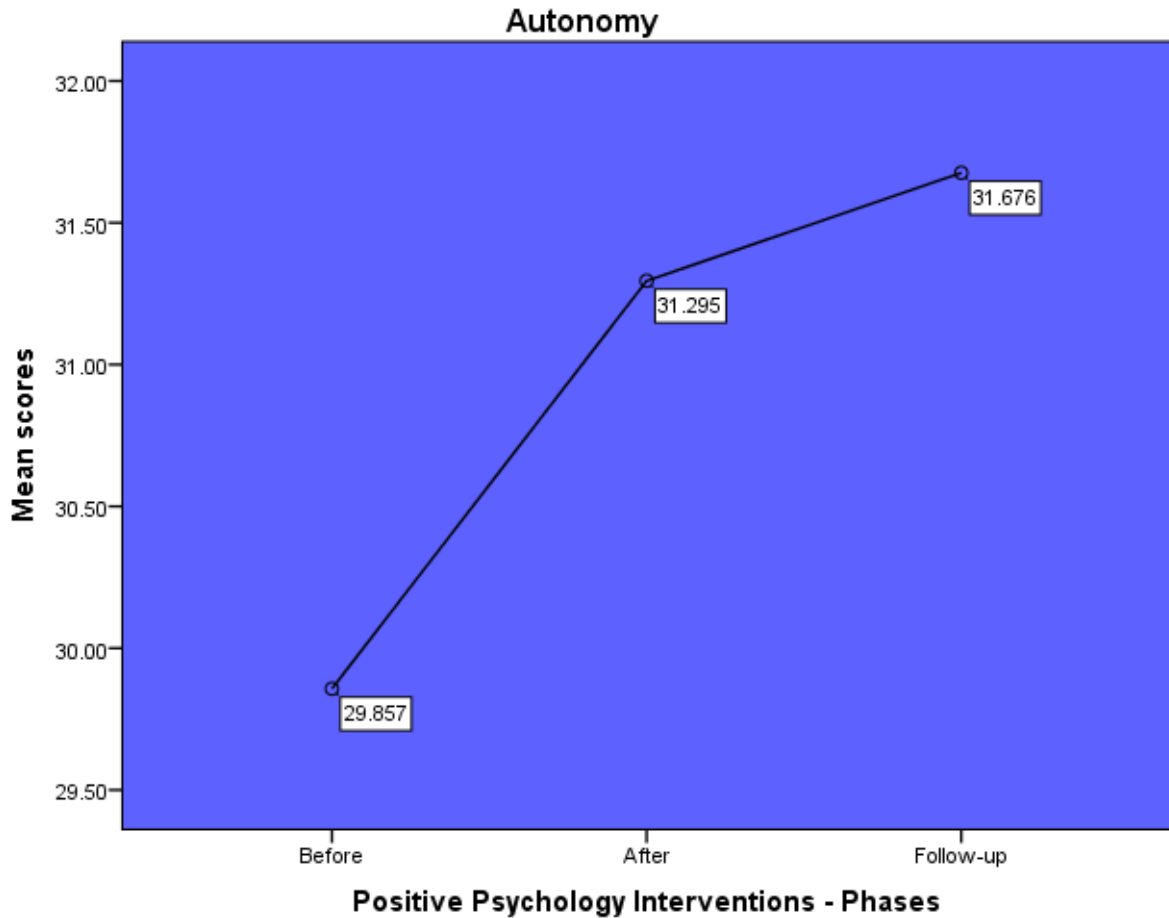


Figure 10 depicting Plot representation of Autonomy of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 10 represents the change in the college students' autonomy from single parent family during before, after, and follow-up of positive psychology interventions. Thus, Hypothesis H5, "Positive Psychology Interventions will enhance Grit, Resilience, Mindfulness and Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up phases", is accepted.

TABLE 8
Post hoc Comparisons for the Positive Psychology Interventions in Autonomy of the College Students from Single Parent Family

Variables			Mean Difference (I-J)	Std.Error	Sig
Autonomy	Before	After	-1.43*	0.52	0.020
		Follow-up	-1.81*	0.52	0.002

After	Before	1.43*	0.52	0.020
	Follow-up	-0.38	0.52	1.000
Follow up	Before	1.81*	0.52	0.002
	After	0.38	0.52	1.000

The autonomy mean scores of the college students from single parent family improved during before and after experimental phases with a statistically significant difference, $1.43 \pm 0.52, p = 0.02$. The before and follow-up phases of autonomy were also statistically significant with $1.81 \pm 0.52, p = 0.00$. There were no significant differences between the after and follow-up phases $0.38 \pm 0.52, p = 1.00$. This analysis shows that autonomy has improved because of positive psychology interventions.

TABLE 9

Descriptive Statistics across Environmental Mastery of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	25.37	4.36
After	31.39	3.88
Follow-up	31.80	3.69

Table 9 shows the environmental mastery mean scores and standard deviation of the college students from single parent family during before, after, and follow-up of positive psychology interventions. The environment seems like an essential factor in deciding the well-being of the individual. Act hexaflex's dimension; acceptance, would have made the college students from single parent family think differently about the environment and enhance the environmental mastery. Thus, positive psychology interventions proved to be significant in enhancing the environmental mastery of college students from single parent family.

TABLE 10
Repeated Measures of ANOVA for the Environmental Mastery of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source		Type III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	2724.87	2	1362.43	222.47
	Greenhouse- Geisser	2724.87	1.07	2546.27	222.47
	Huynh - Feldt	2724.87	1.07	2541.30	222.47
	Lower - bound	2724.87	1.00	2724.87	222.47
Phases X Intervention	Sphericity Assumed	1273.79	208	6.12	
	Greenhouse- Geisser	1273.79	111.29	11.44	
	Huynh - Feldt	1273.79	111.51	11.42	
	Lower - bound	1273.79	104.00	12.24	

Mauchly's Sphericity test indicated that the sphericity assumption was violated, $\chi^2(2) = 209.28, p = 0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V = 0.72, F(2, 103) = 134.10, p = 0.00$. The Greenhouse-Geisser corrected results showed that the environmental mastery of the college students of the single parent family has improved, $f(1.07, 119.29) = 222.47, p = 0.00$.

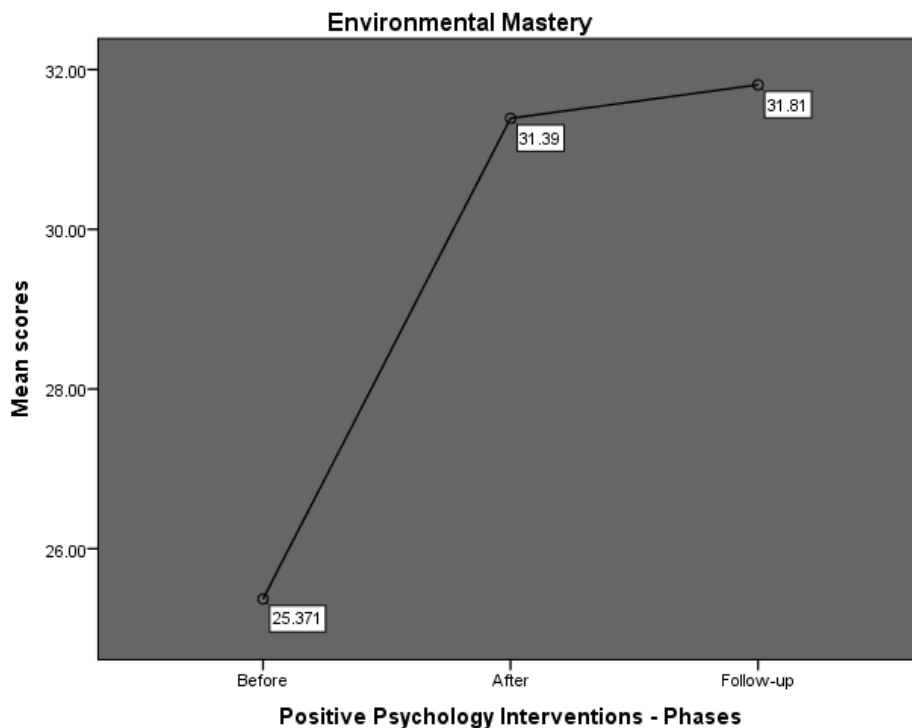


Figure 11 depicting Plot representation of Environmental Mastery of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 11 outlines the college students' environmental mastery from single parent family during before, after, and follow-up phases because of positive psychology interventions. Thus, Hypothesis H5, "Positive Psychology Interventions will enhance Grit, Resilience, Mindfulness and Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up phases", is accepted.

TABLE 11

Post hoc Comparisons for the Positive Psychology Interventions in Environmental Mastery of the College Students from Single Parent Family

Variables			Mean	Std.Error	Sig
			Difference (I-J)		
Environmental Mastery	Before	After	-6.01*	0.55	0.000
		Follow-up	-6.43*	0.55	0.000
	After	Before	6.01*	0.55	0.000
		Follow-up	-0.41	0.55	1.000
	Follow up	Before	6.43*	0.55	0.000
		After	0.41	0.55	1.000

Environmental mastery mean scores of the before and after phases ($6.01 \pm 0.55, p = 0.00$) and before and follow-up phases ($6.43 \pm 0.55, p = 0.00$) of the positive psychology intervention are statistically significant. However, there was an increase in the mean score of after and follow-up phases of the positive psychology intervention, and the bonferroni calculation reveals that the results ($0.41 \pm 0.55, p = 1.00$) were not statistically significant. Thus, it was concluded that the positive psychology intervention effectively improves environmental mastery before and after and before and follow-up phases.

TABLE 12**Descriptive Statistics across Personal Growth of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions****N=105**

Stage	Mean	Standard Deviation
Before	26.50	4.52
After	32.26	3.50
Follow-up	32.91	3.12

Table 12 displays the changes in the personal growth of the college students from single parent family after to the positive psychology interventions during before, after, and follow-up experimental phases. growth mindset activities might have helped them understand the fixed mindset thoughts they possessed, and that clarity would have helped them create workable goals. Thus, the improvement of personal growth due to positive psychology intervention is noted.

TABLE 13**Repeated Measures of ANOVA for the Personal Growth of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions**

Source		Type III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	2614.53	2	1307.26	160.56
	Greenhouse- Geisser	2614.53	1.06	2452.67	160.56
	Huynh - Feldt	2614.53	1.06	2448.16	160.56
	Lower - bound	2614.53	1.00	2614.53	160.56
Phases X Intervention	Sphericity Assumed	1693.47	208	8.14	
	Greenhouse- Geisser	1693.47	110.86	15.27	
	Huynh - Feldt	1693.47	111.06	15.24	
	Lower - bound	1693.47	104.00	16.28	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2) = 215.16, p=0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V = 0.71, F(2,103) = 129.68, p=0.00$. The Greenhouse-Geisser corrected results showed that the personal growth of the college students of the single parent family has improved, $f(1.06,110.86) = 160.56, p=0.00$.

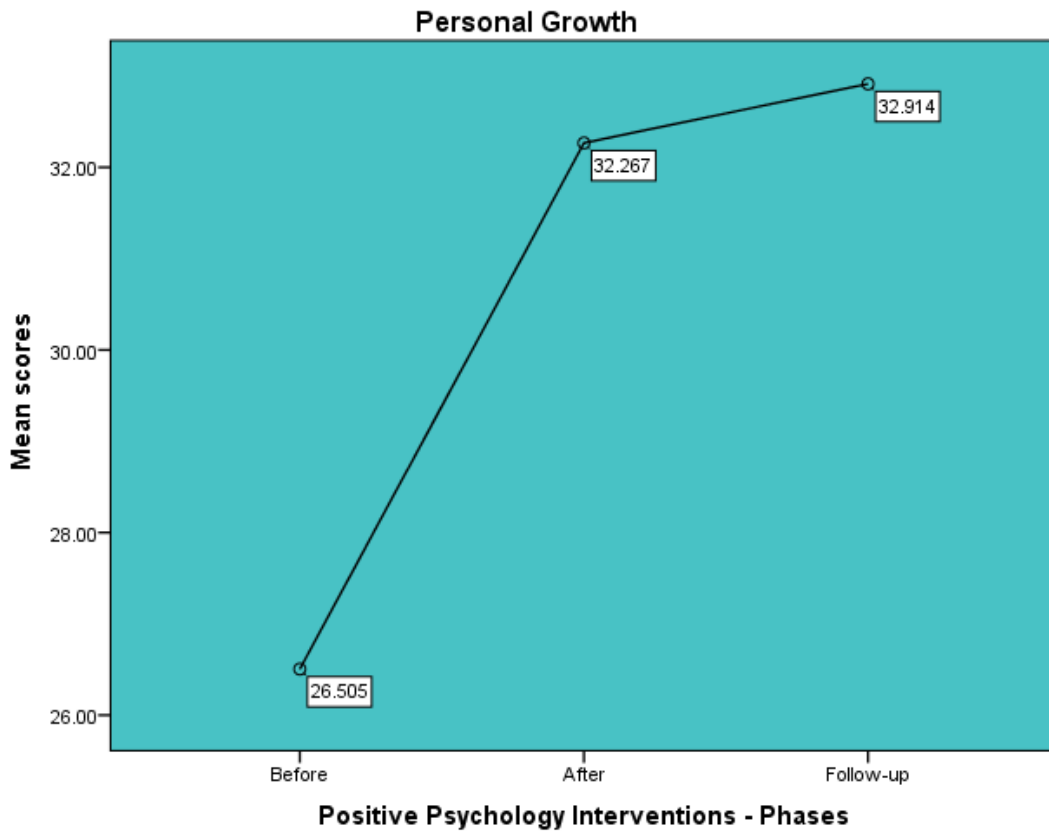


Figure 12 depicting Plot representation of Personal Growth of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 12 sketches represents the college students' personal growth from single parent family during before, after, and follow-up phases due to the positive psychology interventions. Thus, hypothesis h5, "positive psychology interventions will enhance grit, resilience, mindfulness and psychological well-being among college students of single parent family before, after and follow-up phases", is accepted.

TABLE 14**Post hoc Comparisons for the Positive Psychology Interventions in Personal Growth of the College Students from Single Parent Family**

Variables			Mean		
			Difference (I-J)	Std.Error	Sig
Personal Growth	Before	After	-5.76*	0.51	0.000
		Follow-up	-6.41*	0.51	0.000
	After	Before	5.76*	0.51	0.000
		Follow-up	-0.64	0.51	0.640
	Follow up	Before	6.41*	0.51	0.000
		After	0.64	0.51	0.640

Personal growth level during before-intervention and after-intervention ($6.01 \pm 0.55, p = 0.00$), and between before-intervention and follow-up ($6.43 \pm 0.55, p = 0.00$) are statistically significant. Despite the mean difference, the after-intervention and follow-up scores ($0.41 \pm 0.55, p = 1.00$) were not statistically significant. So, the Bonferroni comparison revealed that the positive psychology interventions effectively enhanced personal growth on before and after phases but was not sustaining it on the follow-up phase.

TABLE 15**Descriptive Statistics across Positive Relations of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions****N=105**

Stage	Mean	Standard Deviation
Before	27.63	4.25
After	32.71	4.68
Follow-up	33.14	4.08

Table 15 illustrates the positive psychology interventions creating enhancement in the positive relations of the college students of single parent family. The connection of the healthy interaction with people and psychological well-being was put forth in the resilience activities, which may be the eliciting factor in enhancing the positive relations of the college students of single parent family. Hence, positive psychology interventions enhanced positive relations.

TABLE 16

Repeated Measures of ANOVA for the Positive Relations of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source		Type III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	1968.88	2	984.44	187.66
	Greenhouse- Geisser	1968.88	1.09	1797.66	187.66
	Huynh - Feldt	1968.88	1.09	1793.00	187.66
	Lower - bound	1968.88	1.00	1968.88	187.66
Phases X	Sphericity Assumed	1091.18	208	5.24	
Intervention	Greenhouse- Geisser	1091.18	113.90	9.57	
	Huynh - Feldt	1091.18	114.20	9.55	
	Lower - bound	1091.18	104.00	10.49	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2) = 180.18$, $p = 0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V = 0.72$, $F(2, 103) = 136.40$, $p = 0.00$. The Greenhouse-Geisser corrected results showed that the positive relations of the college students of the single parent family have improved, $f(1.09, 113.90) = 187.66$, $p = 0.00$.

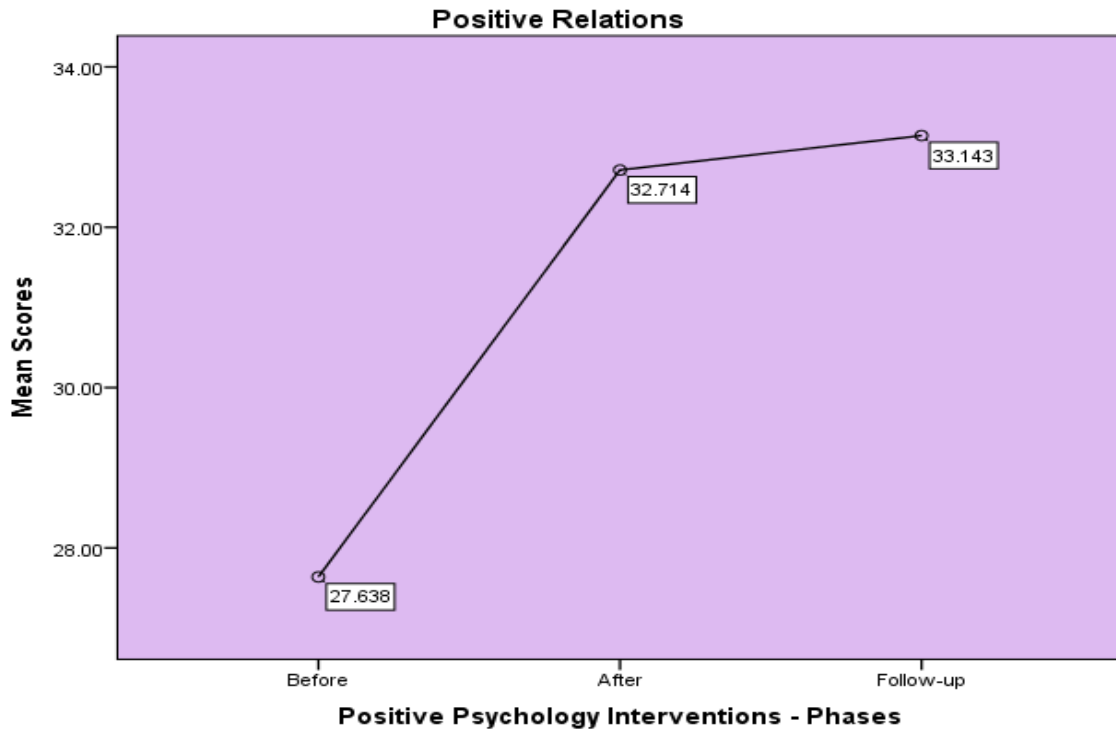


Figure 13 depicting Plot representation of Positive Relations of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 13 summarizes the enhancement of the positive relations of college students from single parent family during before, after, and follow-up phases of positive psychology interventions. Thus, hypothesis h5, "Positive psychology interventions will enhance grit, resilience, mindfulness and psychological well-being among college students of single parent family before, after and follow-up phases", is accepted.

**Table 17
Post hoc Comparisons for the Positive Psychology Interventions in Positive Relations of the College Students from Single Parent Family**

Variables		Mean Difference (I-J)	Std.Error	Sig
Before	After	-5.07*	0.60	0.000
	Follow-up	-5.50*	0.60	0.000
After	Before	5.07*	0.60	0.000

Positive Relations	Follow-up	-0.42	0.60	1.000
	Follow up	Before	5.50*	0.60
		After	0.42	0.60
			1.000	

Post hoc tests using the Bonferroni correction revealed that positive psychology interventions elicited a slight increase in positive relations from after and follow-up phases ($0.42 \pm 0.60, p = 1.00$), which was not statistically significant. However, the before and after experimental phases of the intervention ($5.07 \pm 0.60, p = 0.00$), before and follow-up ($5.50 \pm 0.60, p = 0.00$) phases of the intervention were statistically significant. The positive psychology interventions received by college students from single parent family effectively created statistically significant change in purpose in life during before and after phases and not on follow-up phase.

TABLE 18
Descriptive Statistics across Purpose in life of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	24.38	4.05
After	30.92	3.86
Follow-up	31.65	3.23

Table 18 portrayed the increase in the purpose in life of college students of single parent family because of the positive psychology interventions. Activities like identifying goals based on values, short term, and long term, would have made them enhance their views on the purpose of life. So, purpose in life increased in the college students of single parent family.

TABLE 19**Repeated Measures of ANOVA for the Purpose in life of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions**

Source		Type Sum Squares	III of df	Mean Square	F
Phases	Sphericity Assumed	3370.14	2	1685.07	274.56
	Greenhouse- Geisser	3370.14	1.14	2936.66	274.56
	Huynh - Feldt	3370.14	1.15	2925.15	274.56
	Lower - bound	3370.14	1.00	3370.14	274.56
Phases X Intervention	Sphericity Assumed	1276.53	208	6.14	
	Greenhouse- Geisser	1276.53	119.35	10.69	
	Huynh - Feldt	1276.53	119.82	10.65	
	Lower - bound	1276.53	104.00	12.27	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2) = 139.84$, $p = 0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, pillai trace $\eta^2 = 0.80$, $f(2, 103) = 218.61$, $p = 0.00$. The Greenhouse-Geisser corrected results showed that the purpose in life of the college students of the single parent family has improved, $f(1.14, 119.35) = 274.56$, $p = 0.00$.

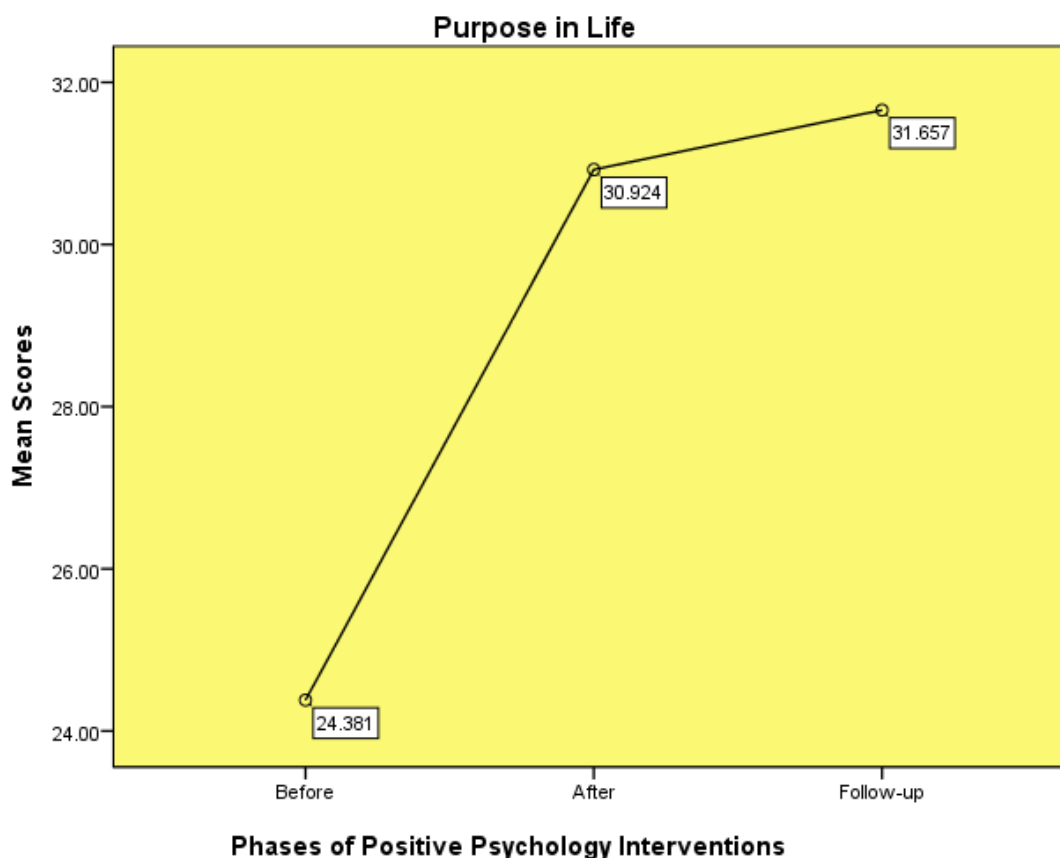


Figure 14 depicting Plot representation of Purpose in life of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 14 illustrates the rise in the purpose in life of college students from single parent family due to positive psychology interventions. Thus, hypothesis h5, "Positive psychology interventions will enhance grit, resilience, mindfulness and psychological well-being among college students of single parent family before, after and follow-up phases", is accepted.

Table 20

Post hoc Comparisons for the Positive Psychology Interventions in Purpose in life of the College Students from Single Parent Family

Variables		Mean Difference (I-J)	Std.Error	Sig
	Before			
	After	-6.54*	0.51	0.000
	Follow-up	-7.27*	0.51	0.000

	After	Before	6.54*	0.51	0.000
Purpose in life		Follow-up	-0.73	0.51	0.467
	Follow up	Before	7.27*	0.51	0.000
		After	0.73	0.51	0.467

Purpose in life variable was increased between before and after experimental phases ($6.54 \pm 0.51, p = 0.000$), and the increase was seen in before and follow-up ($7.27 \pm 0.51, p = 0.000$) phase also but no significant differences between after and follow-up ($0.73 \pm 0.51, p = 0.467$) phases. Positive Psychology Interventions administered to college students from single parent family showed a statistically significant change in purpose in life during before and after phases and not during the follow-up phase.

TABLE 21

Descriptive Statistics across Self - Acceptance of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	25.91	4.34
After	31.71	4.05
Follow-up	31.98	3.85

Table 21 revealed the improvement of self-acceptance of college students of single parent family helped by positive psychology interventions. Activities related to acceptance would have made them realize the importance and benefits of accepting self and letting go of the single parent's loss. Positive psychology interventions improved self-acceptance of college students of single parent family helped by positive psychology interventions.

TABLE 22**Repeated Measures of ANOVA for the Self - Acceptance of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions**

Source	Type	III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	2468.04	2	1234.02	200.22
	Greenhouse- Geisser	2468.04	1.03	2379.59	200.22
	Huynh - Feldt	2468.04	1.03	2377.08	200.22
	Lower - bound	2468.04	1.00	2468.04	200.22
Phases X Intervention	Sphericity Assumed	1281.95	208	6.16	
	Greenhouse- Geisser	1281.95	107.86	11.88	
	Huynh - Feldt	1281.95	107.98	11.87	
	Lower - bound	1281.95	104.00	12.32	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2)=271.46$, $p=0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V =0.72$, $F(2,103) = 133.19$, $p=0.00$. The Greenhouse-Geisser corrected results showed that the self - acceptance of the college students of the single parent family has improved, $F(1.03, 107.86) =200.22$, $p=0.00$.

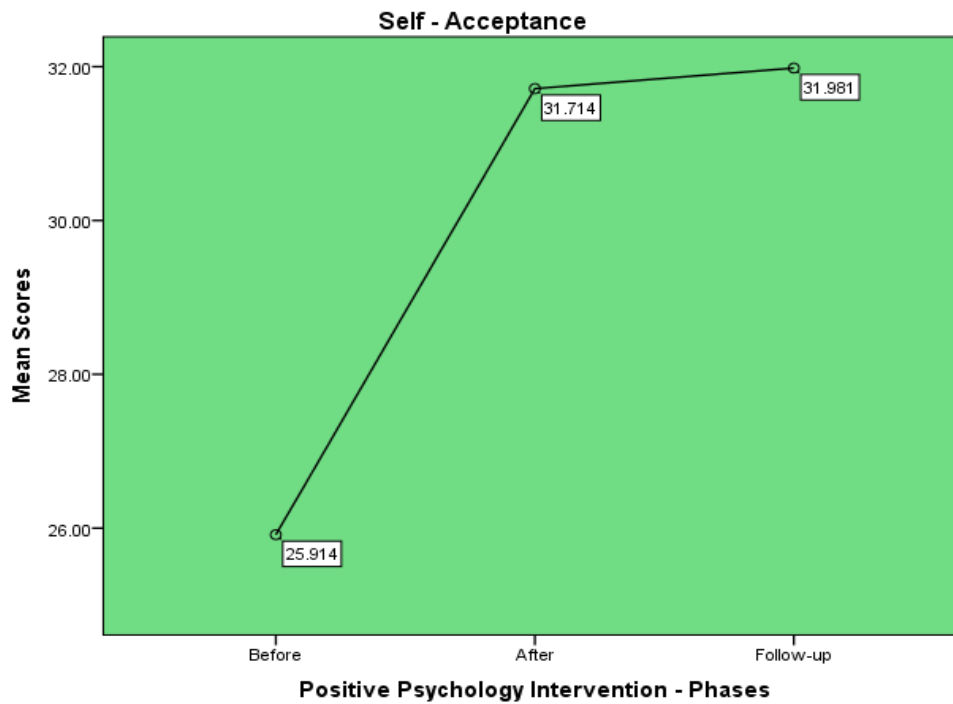


Figure 15 depicting Plot representation of Self - Acceptance of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 15 shows the self-acceptance of college students from single parent family during the experimental phases of Positive Psychology Interventions. Thus, Hypothesis H5, "Positive Psychology Interventions will enhance Grit, Resilience, Mindfulness and Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up phases", is accepted.

**Table 23
Post hoc Comparisons for the Positive Psychology Interventions in Self - Acceptance of the College Students from Single Parent Family**

Variables			Mean Difference (I-J)	Std.Error	Sig
Self - Acceptance	Before	After	-5.80*	0.56	0.000
		Follow-up	-6.06*	0.56	0.000
	After	Before	5.80*	0.56	0.000
		Follow-up	-0.26	0.56	1.000
	Follow up	Before	6.06*	0.56	0.000
		After	0.26	0.56	1.000

Self-acceptance scores were significant during before and after (5.80 ± 0.56 , $p = 0.000$) and between before and follow-up (6.06 ± 0.56 , $p = 0.000$), but no significant difference was noted between after and follow-up (0.26 ± 0.56 , $p = 1.000$). Therefore, it is reported that positive psychology interventions elicit a significant change in self- acceptance during before, after experimental phases and not on follow-up phase.

In all the psychological well-being sub scales, though there was a mean difference between after and follow-up phases, the improvement was not statistically significant during the follow-up phase. Using randomized control trial on one form of mindfulness training, i.e., integrative body-mind training, the researchers proved that mindfulness training was an effective tool in improving psychological well-being (tang, tang, and gross, 2019). Six sub scales of psychological well-being had shown an increase in their mean values and statistically significant change during after and follow-up periods of positive psychology interventions. The alternate hypothesis h5, to find out the efficacy of positive psychology interventions among single parent adolescents, was done by analyzing the sub scales of the psychological well-being variable. There was a statistically significant change in the sub scales of psychological well-being variables during after and follow-up periods of positive psychology interventions.

TABLE 24
Descriptive Statistics across Grit of the College Students from Single Parent Family
Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	3.20	0.52
After	3.55	0.35
Follow-up	3.65	0.31

Table 24 shows the descriptive statistics across grit of the college students from single parent family before, after, and follow-up of positive psychology interventions. The mean

score of the college students from single parent family was 3.20, 3.55 and 3.65 respectively on grit before, after and follow-up.

TABLE 25

Repeated Measures of ANOVA for the Grit of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source	Type	III	df	Mean	F
	Sum	of		Square	
	Squares				
Phases	Sphericity Assumed	11.47	2	5.73	104.54
	Greenhouse- Geisser	11.47	1.15	9.97	104.54
	Huynh - Feldt	11.47	1.15	9.93	104.54
	Lower - bound	11.47	1.00	11.46	104.54
Phases X	Sphericity Assumed	11.41	208	0.05	
Intervention	Greenhouse- Geisser	11.41	119.56	0.09	
	Huynh - Feldt	11.41	120.04	0.09	
	Lower - bound	11.41	104.00	0.11	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2)=96.04, p=0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V = 0.67, F(2,103)=107.76, p=0.00$. The Greenhouse-Geisser corrected results showed that the Grit of the College Students of the Single Parent Family has improved, $F(1.15, 119.56) =104.54, p=0.00$ because of the positive psychology interventions.

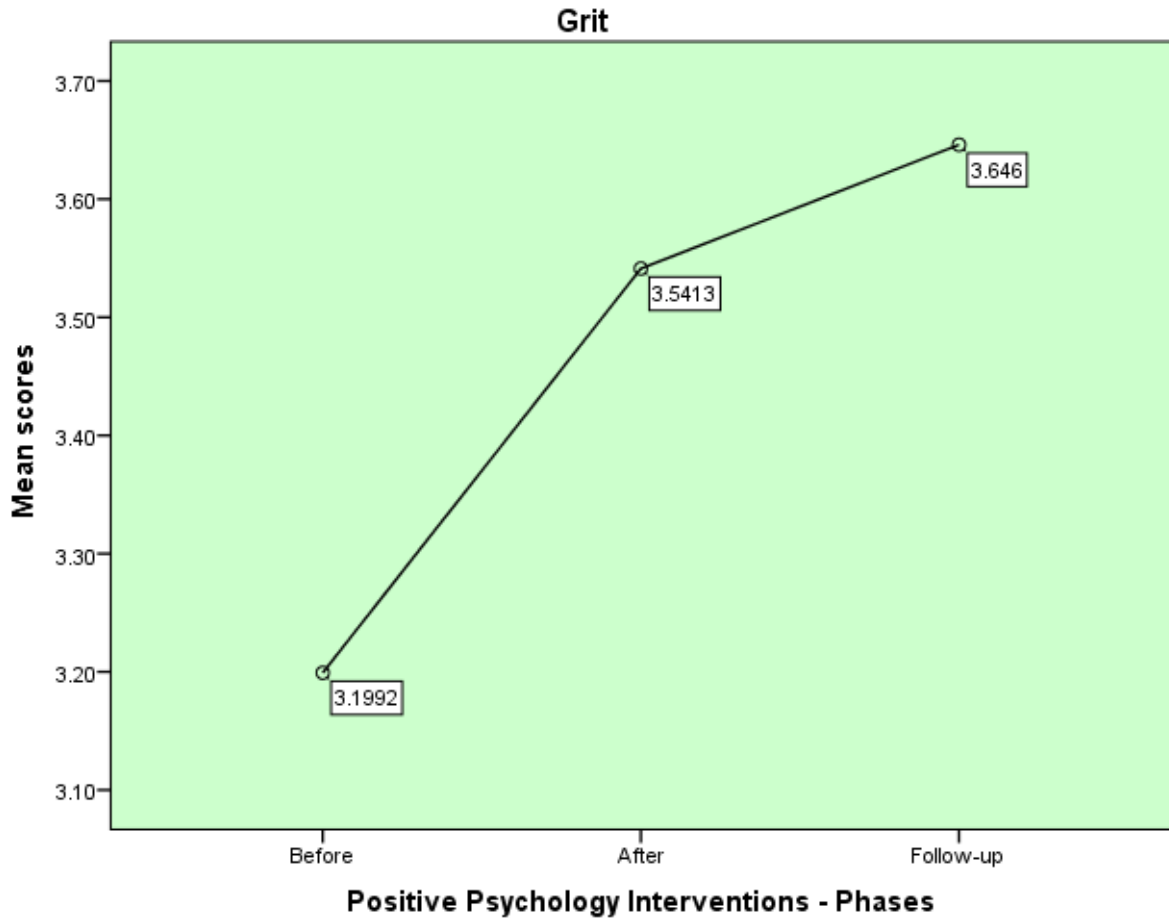


Figure 16 depicting Plot representation of Grit of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 16 represents the Grit of college students from single parent family increased because of positive psychology interventions during before, after, and follow-up experimental phases. Thus, Hypothesis H5, "Positive Psychology Interventions will enhance Grit, Resilience, Mindfulness and Psychological Well-being among College Students of Single Parent Family Before, After and Follow-up phases", is accepted.

Table 26

Post hoc Comparisons for the Positive Psychology Interventions in Grit of the College Students from Single Parent Family

Variables			Mean	Std.Error	Sig
			Difference (I-J)		
Grit	Before	After	-0.34*	0.05	0.000
		Follow-up	-0.44*	0.05	0.000
	After	Before	0.34*	0.05	0.000
		Follow-up	-0.10	0.05	0.188
	Follow up	Before	0.44*	0.05	0.000
		After	0.10	0.05	0.188

Post Hoc Test, Bonferroni Test was done on the college students from single parent family grit score, and the results were tabulated in table 10. Three hundred adolescents participated in an online survey conducted in eighteen countries, and the results showed that Grit was an essential factor in deciding the well-being level of adolescents (Machell, 2016). The results of the After Hoc Tests show that there was a significant difference in grit between before-training and after-training (0.34 ± 0.05 , $p = 0.000$), and between before-training and follow-up (0.44 ± 0.05 , $p = 0.000$); but no significant differences between after-training and follow-up (0.10 ± 0.05 , $p = 0.188$).

Positive psychology interventions' impact was maintained in the after experimental phase and not significant in the follow-up phase. However, the before-training and follow-up grit levels were significant. So, we can conclude that college students from single parent family grit level improved because of the positive psychology interventions. Thus, the alternate hypothesis h5 finding out the efficacy of positive psychology interventions among college students from single parent family was achieved. In the case of grit, the college

students from single parent family had statistically significant improvement in after and follow-up of positive psychology interventions.

TABLE 27
Descriptive Statistics across Resilience of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	3.23	0.54
After	3.59	0.37
Follow-up	3.76	0.35

The means scores and standard deviation of the resilience of the college students from single parent family impacted by the positive psychology interventions are displayed in table 27. ACT hexaplex's activities related to its six dimensions like acceptance, commitment, present, self as context, defusion and values would have helped them improve the resilience during before, after and follow-up experimental phases of the positive psychology interventions.

TABLE 28
Repeated Measures of ANOVA for the Resilience of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source		Type III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	15.09	2	7.55	138.34
	Greenhouse- Geisser	15.09	1.24	12.13	138.34
	Huynh - Feldt	15.09	1.25	12.05	138.34
	Lower - bound	15.09	1.00	15.09	138.34
Phases X Intervention	Sphericity Assumed	11.34	208	0.05	
	Greenhouse- Geisser	11.34	129.48	0.08	
	Huynh - Feldt	11.34	130.28	0.08	
	Lower - bound	11.34	104.00	0.01	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2) = 96.04$, $p = 0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai trace $\nu = 0.63$, $f(2,103) = 101.27$, $p = 0.00$. The Greenhouse-Geisser corrected results showed that the resilience of the college students of the single parent family has improved, $f(1.24,129.48) = 138.34$, $p = 0.00$.

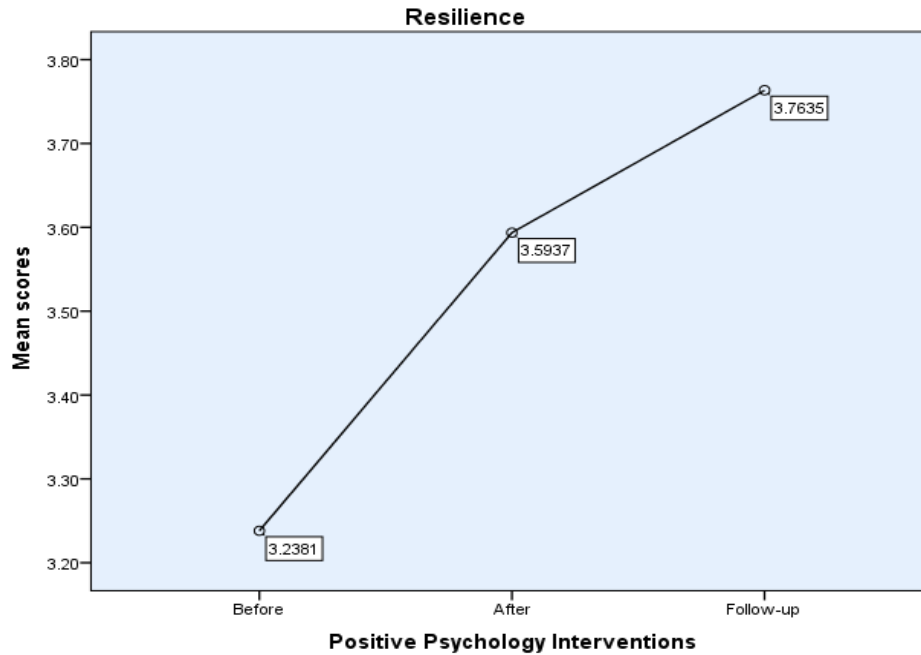


Figure 17 depending Plot representation of Mindfulness of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

TABLE 29

Post hoc Comparisons for the Positive Psychology Interventions in Resilience of the College Students from Single Parent Family

Variables		Mean Difference (I-J)	Std.Error	Sig	
Resilience	Before	After	-0.35*	0.06	0.000
		Follow-up	-0.52*	0.06	0.000
	After	Before	0.35*	0.06	0.000
		Follow-up	-0.17*	0.06	0.014
	Follow up	Before	0.52*	0.06	0.000
		After	0.17*	0.06	0.014

Bonferroni test was used to understand the efficacy of positive psychology interventions in college students from single parent family. The significant difference in resilience between before-training and after-training (0.35 ± 0.06 , $p = 0.000$), and between before-training and follow-up (0.52 ± 0.06 , $p = 0.000$); and between after-training and follow-up (0.17 ± 0.06 , $p = 0.014$). These findings convey that positive psychology interventions have successfully produced statistically significant improvement in the after and follow-up experimental phases.

Relevant to the current study, a study was conducted in thirty-eight orphanages adolescents from Malaysia to improve their self-concept using resilience training in a positive psychology interventional counselling setting and a statistically significant improvement after the training was noted (Madihie, Noah, Baba, And Jaafar, 2015). Contrary to many findings, this experimental study had not created a statistically significant resilience change in these college students from single parent family. So, the alternate hypothesis H5, finding out the efficacy of the positive psychology interventions program among college students from single parent family for resilience, was completed.

TABLE 30
Descriptive Statistics across Mindfulness of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Stage	Mean	Standard Deviation
Before	3.38	0.67
After	3.69	0.58
Follow-up	3.80	0.55

Table 30 illustrated the development of the mindfulness mean scores and standard deviation during the before, after, and follow-up phases showed positive psychology interventions' efficacy. Breathing meditation, body scan meditation, mountain meditation, and loving kindness meditation would have helped develop mindfulness. Thus, positive

psychology interventions assisted the development of the mindfulness of college students of single parent family.

TABLE 31

Repeated Measures of ANOVA for the Mindfulness of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source	Type	III Sum of Squares	df	Mean Square	F
Phases	Sphericity Assumed	12.91	2	6.45	136.03
	Greenhouse- Geisser	12.91	1.12	11.52	136.03
	Huynh - Feldt	12.91	1.12	11.49	136.03
	Lower - bound	12.91	1.00	12.91	136.03
Phases X	Sphericity Assumed	9.87	208	0.04	
Intervention	Greenhouse- Geisser	9.87	116.48	0.08	
	Huynh - Feldt	9.87	116.86	0.08	
	Lower - bound	9.87	104.00	0.95	

Mauchly's sphericity test indicated that the sphericity assumption was violated, $\chi^2(2) = 158.61, p=0.00$ therefore, multivariate was reported. The results indicated a significant difference among tests, Pillai Trace $V = 0.73, F(2, 103) = 136.54, p=0.00$. The Greenhouse-Geisser corrected results showed that the mindfulness of the college students of the single parent family has improved, $f(1.12, 116.48) = 136.03, p=0.00$.

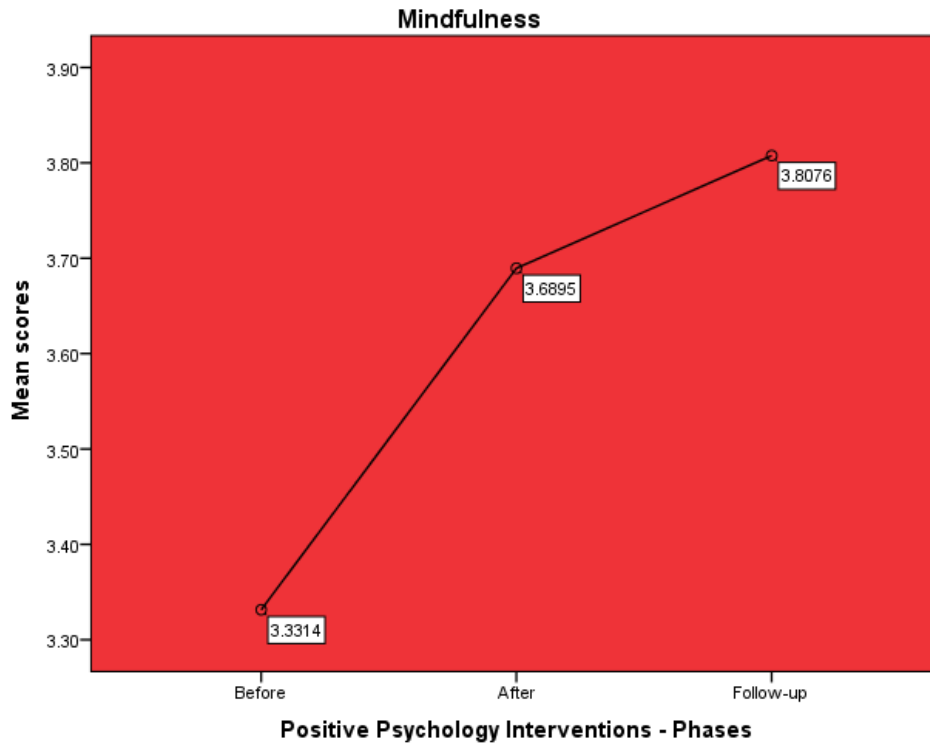


Figure 18 depicting Plot representation of Mindfulness of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Figure 18 represents the mindfulness of college students from single parent family in the before, after, and follow-up experimental phases of positive psychology interventions. Thus, hypothesis H5, "Positive psychology interventions will enhance grit, resilience, mindfulness and psychological well-being among college students of single parent family before, after and follow-up phases", is accepted.

TABLE 32

Post hoc Comparisons for the Positive Psychology Interventions in Mindfulness of the College Students from Single Parent Family

Variables			Mean Difference (I-J)	Std.Error	Sig
Mindfulness	Before	After	-0.35*	0.08	0.000
		Follow-up	-0.47*	0.08	0.000
	After	Before	0.35*	0.08	0.000
		Follow-up	-0.11	0.08	0.475
	Follow up	Before	0.47*	0.08	0.000
		After	0.11	0.08	0.475

Table 32 shows the Bonferroni tests' results on the mindfulness means of the participant's before, after, and follow-up periods of positive psychology interventions. In a pilot randomized control trial, twenty-three adolescents gained mindfulness training, and they showed significant differences in their positive effect and primary coping levels (Rawlett, Friedmann, And Thomas, 2019). There was a significant difference in mindfulness between before-training and after-training ($0.35 \pm 0.08, p = 0.000$) and between before-training and follow-up ($0.47 \pm 0.08, p = 0.000$), but no significant differences between after-training and follow-up ($0.11 \pm 0.08, p = 0.47$). These results reveal that Mindfulness had an effect after the intervention. However, there was a rise in the mean score level during the follow-up phase, which was not statistically significant. So, the alternate hypothesis H5 was accepted for the efficacy of positive psychology interventions among college students from single parent family in mindfulness.

TABLE 33
Descriptive Statistics across Well-being Variables of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

N=105

Variables	Stage	Mean	Standard Deviation
Grit	Before	3.20	0.52
	After	3.55	0.35
	Follow-up	3.65	0.31
	Total	3.47	0.44
Resilience	Before	3.23	0.54
	After	3.59	0.37
	Follow-up	3.76	0.35
	Total	3.53	0.48
Mindfulness	Before	3.33	0.67
	After	3.68	0.58
	Follow-up	3.80	0.55
	Total	3.60	0.63
Psychological	Before	29.85	3.59

Well Being -	After	31.29	3.94
Autonomy	Follow-up	31.67	3.92
	Total	30.94	3.89
Environmental Mastery	Before	25.37	4.36
	After	31.39	3.88
	Follow-up	31.80	3.69
	Total	29.52	4.94
Personal Growth	Before	26.50	4.52
	After	32.26	3.50
	Follow-up	32.91	3.12
	Total	30.56	4.72
Positive Relations	Before	27.63	4.25
	After	32.71	4.68
	Follow-up	33.14	4.08
	Total	31.16	5.08
Purpose in Life	Before	24.38	4.05
	After	30.92	3.86
	Follow-up	31.65	3.23
	Total	28.98	4.95
Self Acceptance	Before	25.91	4.34
	After	31.71	4.05
	Follow-up	31.98	3.85
	Total	29.86	4.94

Table 33 provides descriptive statistics across well-being variables of the college students from single parent family before, after, and follow-up of positive psychology interventions. To improve the level of grit, college students from single parent family learned growth mindset. They would have connected how they have fixed the parent's absence with their academic issues and not have been actively involved in reaching their aspirations. This realization would have been the reason behind the Grit's rise in after and Follow-up phases.

College students from single parent family watched the Japanese anime Naruto video showing waterfall of truth scene. The scene showed the importance of accepting the negative feelings and incidents as a part of life and both positive and negative events are essential for the development of the individual. Thus, this scene, helped them understand acceptance commitment therapy's dimension acceptance. This understanding of acceptance would have helped them accept the loss and behaviors of parents and enhanced their resilience level.

Loving kindness meditation involves accepting and forgiving oneself and others. The suggestions like, "I am filling and held with loving-kindness; I am calm and feel at peace; I am connected and settled; I accept myself; I enjoy living" were meditated towards self and other people also. The practicing of loving kindness meditation would have healed their unprocessed emotions and reflected on the enhancement of mindfulness scores in after and follow-up phases.

Abraham maslow's hierarchy of needs describes all homo sapiens needs, and it was introduced to college students of single parent family to gain clarity about the grit's fourth pillar-purpose. The group discussion held on this theory would have led them to identify their needs in life, leading to an increase in the autonomy during after and follow-up phases when compared to before the positive psychology interventions. The mean values of well-being variables gained during the follow-up period were higher than those of the before and after positive psychology interventions periods. Thus, the mean values of the entire variable showed an increase after positive psychology interventions. The raise was sustained by the elevation of mean scores of the follow-up period. It shows that the college students follow the techniques taught during the program.

TABLE 34
Repeated Measures of MANOVA for the Overall Psychological Well-being of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	0.99	8346.32 ^a	9.00	304.00	.00
	Wilks' Lambda	0.00	8346.32 ^a	9.00	304.00	.00
	Hotelling's Trace	247.09	8346.32 ^a	9.00	304.00	.00
	Roy's Largest Root	247.09	8346.32 ^a	9.00	304.00	.00
Before	Pillai's Trace	0.69	17.86	18.00	610.00	.00
After	Wilks' Lambda	0.32	25.53 ^a	18.00	608.00	.00
Follow-up	Hotelling's Trace	2.04	34.30	18.00	606.00	.00
	Roy's Largest Root	2.02	68.30 ^b	9.00	305.00	.00

- a. Exact Statistic
- b. The statistic is an upper bound on F that yields a lower bound on the significant level

As the intercept results are not of much importance, the before, after, follow-up effect columns are noted. Wilks' Lambda is sometimes called the U statistic. Lambda ranges between 0 and 1, with values close to 0 indicating the group means are different and values close to 1 indicating the group means are not different (equal to 1 indicates all means are the same). Of the four test statistics, Wilks' Lambda is convenient and related to the likelihood-ratio criterion. The results of the before, after, follow-up effect columns showed the existence of significant difference, and the Wilks Lambda indicates that about $(1-.324) * 100 = 67\%$ of the variance of the dependent variables is accounted for by the difference between the groups.

The test statistic value is displayed, followed by the F statistic, which is a transformed value of the corresponding test statistic and has an approximate F distribution. When the significance level is relatively small (less than 0.05) for the effect being tested, it is concluded that the effect of Positive Psychology Intervention is significant. It is found that in all the tests significance level is < 0.05 , so it can be concluded that there is a significant effect. Thus, using Wilk's Lambda, it is interpreted as there is a significant effect of Positive Psychology Interventions on the psychological well-being, grit, resilience, and mindfulness of college students from single parent family, $L = 0.32$, $F(9,18) = 25.53$, $p = 0.00$.

TABLE 35
Tests of Between Subjects Effects on Well-being Variables of the College Students from Single Parent Family Before, After and Follow-up of Positive Psychology Interventions

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Before	Grit	11.46	2	5.73	34.72	.000
After	Resilience	15.09	2	7.54	40.19	.000
Follow-up	Mindfulness	12.91	2	6.45	17.62	.000
	Autonomy	193.27	2	96.63	6.60	.002
	Environmental Mastery	2724.87	2	1362.43	85.60	.000
	Personal Growth	2614.53	2	1307.26	92.29	.000
	Positive Relations	1968.88	2	984.44	52.08	.000
	Purpose in Life	3370.14	2	1685.07	120.81	.000
	Self Acceptance	2468.04	2	1234.02	73.79	.000

The above table 35 indicates that there is a significant difference among college students from single parent family in enhancing psychological well-being, grit, resilience, and mindfulness were tested using MANOVA. In this test, the positive psychology interventions intervention with before, after, and follow-up was taken as the independent variable. Other positive psychology constructs grit, resilience, mindfulness, autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self acceptance were dependent variables.

All four tests show a significant difference. The significant value of the main effect was less than 0.05, indicating that the effect of positive psychology interventions on the model's contribution. Thus the alternate hypothesis H5 was accepted.