A Virtual Positive Psychology Based Intervention Model for Young Adults during the COVID 19

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The COVID 19 pandemic has brought about considerable changes to all our lives. People have suffered numerous physical and psychological issues. This paper is an effort to create a Virtual Positive Psychology Based Intervention Model to help students overcome depression, Anxiety and Stress brought by the pandemic and develop hope and happiness to stride forward in future. An initial survey of 258 students in the age group of 18 to 23 years was conducted by psychometrically assessing using the hope, depression, anxiety, stress and the subjective happiness of the participants After the initial screening, 55 students who were vulnerable to develop anxiety and depression were selected. After informed consent, the 15-day intervention model designed by the researchers was conducted. The whole intervention had a set of exercises conveyed and followed up virtually. The tests were repeated after the intervention. A follow-up was conducted with the same psychological tests after a period of three months. The results indicated a significant difference in the Before, After and Follow-up phases in stress, anxiety and depression. It indicated that the intervention was successful in reducing the psychological issues in the participants.

Keywords: stress, anxiety, depression, positive psychology

The COVID 19 pandemic has brought about considerable changes to our lives. All over the world, people have evolved and brought forward new and effective coping strategies. Priorities of individuals have changed; people are more focused on micromanaging their health. However, the main challenge has been maintaining mental health and well-being despite many setbacks. The education system has changed too. The whole teaching-learning system has undergone substantial change. Students and teachers have responded to this in diverse ways starting from embracing the new method of online teaching and learning to being critical about the success of this new system.

During the last two years, people from diverse backgrounds, cultures, socioeconomic backgrounds, and various facilities have all had multiple reactions to these changes. They have faced uncertainties and frustrations through everyday exposure to news about COVID 19, causing stress and anxiety, frustrations and depression and many more psychological difficulties. Much uncertainty has plagued the minds of students and their parents. The life skills were needed to overcome this pandemic stress. It ranged from simple relaxation to resilience-building, to resetting and reorganizing their goals and objectives while working through constraints posed by this global threat. This

resulted in creating a Virtual Positive Psychology Based Intervention Model called CARE (C: Compassion and Self Compassion, A: Achievement and Purpose in Life, R: Good Relationships and E: Positive Emotions). The intervention module has the objective to improve the well-being of the participants through exercises designed to enhance the feelings of compassion and self-compassion, achieving a purpose in life, building and maintaining good relationships, building positive feelings such as optimism, resilience, hope and happiness. Thus, this intervention was designed to get the participants involved in activities to bring about lasting wellbeing for them. Jain (2021) suggests that greater exposure to COVID related news leads to more significant stress and hence lesser satisfaction and gratitude levels and suggests building positive emotions to overcome this stress. In a study on the effectiveness of positive psychology-based online intervention among adults in Greece, Brouzos et al. (2021) reported that the positive psychology intervention helped to reduce anxiety, stress and loneliness. Also, this intervention improved positive psychology constructs such as empathy and resilience among the participants. Jordan et al. (2021), in a study on the protective factors for elders during the COVID pandemic, outlined the importance of forward-focused coping that can be built through

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positive psychological interventions. In a study on employee positive psychology coaching, Nieuwerburgh et al. (2021) reported that such coaching re-energized their employees. Also, positive psychology coaching brought forth increased awareness and self-reflection. The coaching helped alleviate negative emotions in participants and improved their confidence levels. In a similar study benefitting communities, Waters et al. (2021) discuss the positive effects of positive psychology on schools, workplaces, and families that are inclusive of marginalized populations during the pandemic.

Tejada-Gallardo et al. (2020) conducted a meta-analysis of nine randomized and non-randomized control trials on the effectiveness of multicomponent positive psychology interventions on improving well-being and reducing distressing symptoms such as depression. This study found the positive psychological components such as optimism, hope and happiness to be very effective in improving subjective and psychological well-being and reducing depressive symptoms among adolescents. A similar result was reported in clinical populations where positive psychology interventions focusing on increasing positive psychology constructs such as optimism and hope helped improve emotional and psychological well-being. (Bolier et al., 2013). Parks and Boucher (2020) suggest that positive psychology interventions focusing not only on happiness but on building hope and optimism are necessary for the pandemic period. The researchers suggest that due to social distancing norms, these interventions have to be developed in such a way that they can be conveyed digitally are necessary.

Chakhssi et al. (2018) reported that positive psychological interventions focusing on developing positive emotions, cognitions, and behaviour help improve well-being while effectively reducing symptoms of Stress, Anxiety, and Depression among the clinical population. A similar randomized control study (Pietrowsky & Mikutta, 2012) reported that brief positive psychology interventions helped alleviate the symptoms of Depression and helped to increase well-being. An investigation on the effectiveness of the Compassion Cultivation Programme on burnout and job satisfaction among health care workers (Scarlet et al., 2017)

concluded that improvements in compassion levels showed a significant increase in job satisfaction, mindfulness, self-compassion, and reduced interpersonal conflict. However, no effect was seen on burnout. This study had an intervention programme to build and develop compassion in everyday life.

In interesting research by Cohen et al. (2006), study participants were initially assessed on their Positive Emotional Style (Happy, Cheerful, Lively or Calm) versus a Negative Emotional Style (stressed, anxious, hostile or depressed). Then they were exposed to the Influenza virus. The results remarkably indicated that increased positive emotional style was associated very clearly with a lesser risk of upper respiratory tract infections.

The CARE Intervention that is taken up for study in the present research was effective in reducing social anxiety and improving the happiness levels of 55 female college students. (Sudha & Gayatridevi, 2021). The same intervention is being used in the present study to reduce stress, anxiety and depression and help build hope and happiness.

Given the enormous uncertain circumstances, it is essential to help people in their coping strategies, to help in reducing psychological distress and helping to build hope and optimism when the COVID variants continue their nonstop onslaught. Building a simple to use positive psychology-based intervention that could be conveyed virtually was hence undertaken by the researchers.

Method

The study was conducted to identify the psychological distress in the students during the COVID and to analyze the effectiveness of a virtual positive psychological intervention to reduce stress, anxiety, and depression among the participants and analyze the effectiveness of a virtual positive psychological intervention to improve hope and happiness among the participants. The overall aim of the study was to bring forward an easy-to-use positive psychological intervention that can be given virtually to the participants. The literature review reveals that positive psychology-based interventions help in reducing psychological distress

Hypotheses

H[1]: There will be a significant difference between Before, After, and Follow-up phases in depression, anxiety and stress through CARE intervention programme students.

H[2]: There will be a significant difference between Before, After and follow-up phases in hope and happiness through CARE Intervention among Students.

Materials

The following psychological scales were used in the assessment process in the Before, After and the Follow-up phases. Before the onset of the programme, the participants were administered:

The Adult Trait Hope Scale (Snyder et al., 1991): The scale consists of 12 items using Likert-type response scales of 1 (definitely false) to 8 (definitely true). Across many studies, internal reliability alphas for the overall hope Scale have ranged from 0.74 to 0.84. The construct validity was also sufficiently established. (Snyder et al.,1991).

The Depression, Anxiety, Stress Scale (DASS-21) (Lovibond, & Lovibond, 1995): This scale consists of 21 items, seven each measuring depression, anxiety and stress, respectively. The scale uses a rating scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much or most of the time). The Cronbach alpha values of reliability (0.80) and factorial validity have been established. (Vasconcelos-Raposo et al. 2013).

Subjective Happiness Scale (Lyubomirsky, 1999): This scale uses four items, with a rating scale ranging from 1 (less happy) to 7 (happier). More than 14 studies have proved the reliability and validity of this scale among adults, school students and college students. Cronbach alpha values of 0.77 have been reported (Lyubomirsky, S. 2020). Another study reported the Cronbach alpha values of 0.84 for a translated version (Alquwez et al. 2021)

Procedure

An initial survey of 258 female students in the age group of 18 to 24 years from a women's was conducted during the COVID pandemic, were conducted using the scales mentioned above. After the initial screening, 55 students who were vulnerable to develop anxiety and depression and who displayed high levels of stress were selected. After obtaining informed consent, the 15-day intervention module was designed by the researchers was conducted. The whole intervention consisted of a set of exercises conveyed and followed up virtually through electronic mail, videos, Google meets and WhatsApp. Daily motivational messages with small activities were also sent to them and their responses were collected for each day. After every five days, a feedback session was conducted with a break day to reflect upon the intervention. So the complete intervention module took 18 days time.

The CARE intervention module included includes Relaxation Exercises such as Counted Breathing, Deep Breathing, Breathing from the Stomach, and Jacobson's Progressive Muscle Relaxation for a period of 30 to 40 minutes every day in the morning. The CARE intervention with a sample of the activities used in the intervention is given below:

On the first day, one, the focus of the activities were on developing compassion. This activity required the participant to choose a certain task(s) such as donate money/time/clothing for a good cause, smile and wish someone when they least expect it, show concern to someone, give time and pleasantness to someone from one's family. The second day consisted of activities striving to build optimism. The participants were asked to deliberately consider an adverse event that has happened to him/her in the past 15 days and look at the advantages/positives deliberately hidden behind the negative emotion associated. Examples were provided to the participants. They are then required to write down a thoughts opposed to the negative thinking which were associated with the adverse life events. The third day comprised of helping to build resilience. Here, the participants were asked to think of a stressful situation weighing them down. They are asked to write it down in detail. Also, to write down ways in which they think they can challenge themself and bounce back from the negativity. They are asked to imagine that the stressful event is a cloud spreading over them. They are then required to break through the barrier and build on thoughts focusing on building the strength to bounce back. Each day comprised of activities to build one particular positive experience. The

constructs included were building a sense of purpose, building good relationships, constructing one positive emotion of their choice, developing self-compassion, understanding and practicing gratitude even for small things in life, exploring their strengths through an activity, building hope and happiness, spreading smiles, and overcoming obstacles in the path to positivity.

The above intervention programme was conveyed to the selected participants virtually for 15 days, with one activity scheduled for a day. A schedule of activity was provided to the participants for practice (Annexure-1). The session consisted of 20 to 30 minutes. Their responses were collected for each task. Discussions were held with the students individually if they required any clarifications. They all posted their thoughts freely and participated willingly in the intervention programme.

The above intervention programme was conveyed to the students virtually and their responses collected for each task. Discussions were held with the students individually if they required any clarifications. They all posted their thoughts freely and participated willingly in the intervention programme. After the intervention programme, the psychological scales were administered to all the participants. A follow-up of the same psychological scales was conducted after three months.

Results

The data collected were analyzed using the SPSS software version 21. Statistics such as distribution analysis (to analyze the levels of depression, anxiety, stress, hope and happiness among the participants) and Repeated Measures ANOVA (to analyze the significant differences in the levels of depression, anxiety, stress, hope and happiness in the before, after and follow-up phases of intervention) were conducted. Initially, the distribution analysis for the levels of depression, anxiety, stress, hope and happiness in the initial survey of 258 students was analyzed. The results are presented in Tables 1 and 2 respectively.

Table 1: Distribution Analysis of Depression, Anxiety, and Stress among students   (N=258)

S. No.	Levels	Depression		Anxiety		Stress	
		Number	Percent	Number	Percent	Number	Percent
1	Normal	65	25	52	20	43	17
2	Mild	73	28	81	31	90	35
3	Moderate	53	21	58	23	42	16
4	Severe	36	14	39	15	52	20
5	Extremely Severe	31	12	28	11	31	12

Table 2: Distribution Analysis of Hope and Happiness among students (N=258)

S. No.	Levels	Hope		Happiness	
		Number	Percent	Number	Percent
1	Low	87	34	96	37
2	Moderate	121	47	119	46
3	High	50	19	43	17

Table 1 indicates that 12 percent of the participants had Very Severe Depression, 11 percent had Very Severe Anxiety, and 12 percent had Very Severe Stress. Table 2 indicates that only 19 percent of the participants had High levels of Hope, while only 17 percent had High levels of Happiness. The differences in mean values in the Before, After, and Follow-up phases of Intervention for Depression, Anxiety, Stress, Hope and Happiness was further analyzed. The results are presented in Tables 3 and 4, respectively. Table 3 shows that the means of Depression, Anxiety and Stress have reduced in the After Intervention phase compared to the Before Intervention phase. Also, this change is maintained in the follow-up phase. This difference is also manifested in figure 1.

Table 3: Mean and Standard Deviation of Depression, Anxiety and Stress in Before, After and Follow-up Phases of Intervention among students (N=55)

S. No.	Levels	Depression		Anxiety		Stress	
		Mean	SD	Mean	SD	Mean	SD
1	Before Intervention	24.27	3.58	20.95	4.04	30.00	5.49
2	After Intervention	8.82	2.21	8.24	2.06	9.85	3.30
3	Follow-up	11.00	1.61	9.51	2.28	10.53	2.07

Table 4: Mean and Standard Deviation of Hope and Happiness in Before, After and Follow-up Phases of Intervention among Students (N=55)

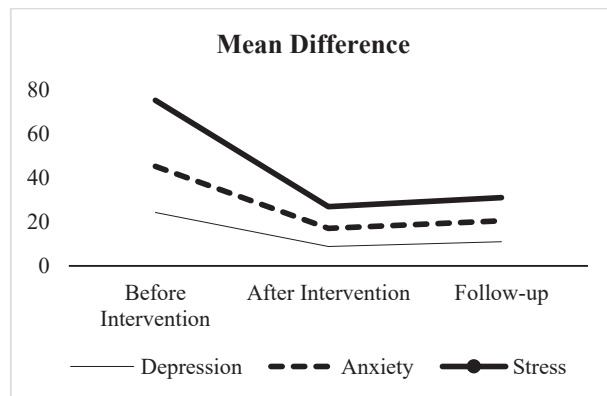| S. No.	Levels	Hope		Happiness	
		Mean	SD	Mean	SD
1	Before Intervention	10.75	1.71	10.71	3.13
2	After Intervention	25.00	3.31	24.02	3.44
3	Follow-up	20.53	3.65	20.71	2.97

Figure 1: Mean difference of Depression, Anxiety And Stress in the Before, After and Follow-up phases of CARE intervention

Table 4 shows that the levels of Hope and Happiness have increased in the After Intervention phase compared to the Before Intervention phase. Also, this change is maintained in the follow-up phase. This difference is also manifested in Figure 2.
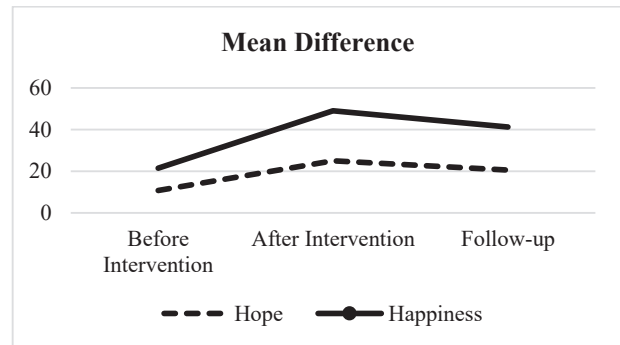

Figure 2: Mean Difference of hope and happiness during before, after and follow-up phases of c a r e intervention among students

One-way Repeated Measures ANOVA was conducted to find significant differences in the Before, After and Follow-up phases of intervention in the students. The results are presented in the following tables.

Table 5: Repeated Measures One Way ANOVA for Depression among Students (N=55)

Source		Type III Sum of Squares	df	Mean Square	F
Depression	Sphericity Assumed	7695.76	2	3847.88	539.07 **
	Greenhouse-Geisser	7695.76	1.74	4436.12	539.07 **
	Huynh-Feldt	7695.76	1.79	4305.80	539.07 **
	Lower-bound	7695.76	1.000	7695.76	539.07 **
Error (Depression)	Sphericity Assumed	770.91	108	7.14	
	Greenhouse-Geisser	770.91	93.68	8.23	
	Huynh-Feldt	770.91	96.51	7.99	
	Lower-bound	770.91	54.00	14.28	

**Significant at 0.01 level

Table 6: Pairwise Comparisons for Before, After and Follow-up Phases in Depression among Students (N=55)

(I) Depression	(J) Depression	Mean Difference (I-J)	Standard Error
Before	After	15.40*	0.60
	Follow-up	13.22*	0.50
After	Before	-15.40*	0.60
	Follow-up	-2.18*	0.42
Follow-up	Before	-13.22*	0.50
	After	2.18*	0.42

*Significant at 0.05 level

Table 5 shows a significant effect of the C. A. R. E intervention on Depression among students, $F_{(2, 108)} = 539.07$, where p=0.000. Table 6 shows that three paired-samples t-test was used to make post hoc comparisons between the before, After, and Follow-up conditions. There is a significant mean difference in the Before and the After Phases (M=15.40, SE=0.60). Also, there is a significant mean difference in the Before and Follow-up Phases (M= 13.22, SE=0.50).

The table shows that there is a significant mean difference in the After and the Before Phases (M=-15.40, SE=0.60). Also, there is a significant mean difference in the After and Follow-up Phases (M= -2.18, SE=0.42).

The above table shows that there is a significant mean difference in the Follow-up and the Before Phases (M=-13.22, SE=0.50). Also, there is a significant mean difference in the Follow-up and After Phases (M= 2.18, SE=0.42).

difference in the After and the Before Phases (M=-12.71, SE=0.62). Also, there is a significant mean difference in the After and Follow-up Phases (M= -1.27, SE=0.38). There is a significant mean difference in the Follow-up and the Before Phases (M=-11.44, SE=0.57). Also, there is a significant mean difference in the Follow-up and After Phases (M= 1.27, SE=0.38).

Table 8: Pairwise Comparisons for Before, After and Follow-up phases of Anxiety among Students (N=55)

(I) Anxiety	(J) Anxiety	Mean Difference (I-J)	Standard Error
Before	After	12.71*	0.62
	Follow-up	11.44*	0.57
After	Before	-12.71*	0.62
	Follow-up	-1.27*	0.38
Follow-up	Before	-11.44*	0.57
	After	1.27*	0.38

*Significant at 0.05 level

Table 7: Repeated Measures of One-Way ANOVA for Anxiety among Students (N= 55)

Source		Type III Sum of Squares	df	Mean Square	F
Anxiety	Sphericity Assumed	5388.74	2	2694.37	343.72 **
	Greenhouse-Geisser	5388.74	1.60	3361.16	343.72 **
	Huynh-Feldt	5388.74	1.65	3276.38	343.72 **
	Lower-bound	5388.74	1.00	5388.74	343.72 **
Error (Anxiety)	Sphericity Assumed	846.59	108	7.84	
	Greenhouse-Geisser	846.59	86.58	9.78	
	Huynh-Feldt	846.59	88.82	9.53	
	Lower-bound	846.59	54.00	15.68	

**Significant at 0.01 level

Table 9: Repeated Measures of One-Way ANOVA for Stress among Students (N=55)

Source		Type III Sum of Squares	df	Mean Square	F
Stress	Sphericity Assumed	14400.45	2	7200.22	443.63 *:
	Greenhouse-Geisser	14400.45	1.45	9928.06	443.63 *:
	Huynh-Feldt	14400.45	1.48	9729.65	443.63 *:
	Lower-bound	14400.45	1.00	14400.45	443.63 *:
Error (Stress)	Sphericity Assumed	1752.89	108	16.23	
	Greenhouse-Geisser	1752.89	78.33	22.38	
	Huynh-Feldt	1752.89	79.92	21.93	
	Lower-bound	1752.89	54.00	32.46	

**Significant at 0.01 level

Table 7 shows a significant effect of the C. A. R. E intervention on Anxiety among students, $F_{(2, 108)} = 343.72$, where p=0.000. Table 8 shows that three paired-samples t-tests were used to make post hoc comparisons between the Before, After, and Follow-up conditions. There is a significant mean difference in the Before and the After Phases (M=12.71, SE=0.62). Also, there is a significant mean difference in the Before and Follow-up Phases (M= 11.44, SE=0.57). The table shows that there is a significant mean

Table 9 shows a significant effect of the C. A. R. E intervention on Stress among students, $F_{(2, 108)} = 443.63$, where p=0.000. Table 10 shows that three paired samples t-test were used to make post hoc comparisons between the Before, After and Follow-up conditions. There is a significant mean difference in the Before and the After Phases (M=20.15, SE=0.95). Also, there is a significant mean difference in the Before and Follow-up Phases (M= 19.47, SE=0.77).

Table 10: Pairwise Comparisons for Before, After and Follow-up phases of Stress among Students (N=55)

(I) Stress	(J) Stress	Mean Difference (I-J)	Standard Error
Before	After	20.15*	0.95
	Follow-up	19.47*	0.77
After	Before	-20.15*	0.95
	Follow-up	-0.67	0.52
Follow-up	Before	-19.47*	0.77
	After	0.67	0.52

*Significant at 0.05 level

The table shows that there is a significant mean difference in the After and the Before Phases (M=-20.15, SE=0.95). Also, there is a significant mean difference in the After and Follow-up Phases (M= -0.67, SE=0.52). The above table shows that there is a significant mean difference in the Follow-up and the Before Phases (M=-19.47, SE=0.77). Also, there is a significant mean difference in the Follow-up and After Phases (M= 0.67, SE=0.52). The above tables demonstrate that there was a significant difference between Before, After, and Follow-up phases in Depression, Anxiety and Stress among Students. It implies that the C. A. R. E Intervention significantly reduced Stress among girl students. Hence the Alternative Hypothesis, "There will be a significant difference between Before, After and Follow-up phases in Depression, Anxiety and Stress through C. A. R. E Intervention among Students", is accepted.

Table 11 shows a significant effect of the C. A. R. E intervention on Hope among students, F (2, 108) = 386.01, where p=0.000. Table 12 shows that three paired-samples t-test were used to make post hoc comparisons between the Before, After and Follow-up conditions. There is a significant mean difference in the Before and the After Phases (M=-14.26, SE=0.43). Also, there is a significant mean difference in the Before and Follow-up Phases (M= -9.78, SE=0.51).

The table shows that there is a significant mean difference in the After and the Before Phases (M=14.26, SE=0.43). Also, there is a significant mean difference in the After and Follow-up Phases (M= 4.47, SE=0.62).

Table 11: Repeated Measures of One-Way ANOVA for Hope among Students (N= 55)

Source		Type III Sum of Squares	df	Mean Square	F
Hope	Sphericity Assumed	5846.16	2	2923.08	386.01**
	Greenhouse-Geisser	5846.16	1.71	3412.32	386.01**
	Huynh-Feldt	5846.16	1.76	3314.33	386.01**
	Lower-bound	5846.16	1.00	5846.16	386.01**
Error (Hope)	Sphericity Assumed	817.84	108	7.57	
	Greenhouse-Geisser	817.84	92.52	8.84	
	Huynh-Feldt	817.84	95.25	8.59	
	Lower-bound	817.84	54.00	15.15	

**Significant at 0.01 level

Table 12: Pairwise Comparisons for Before, After and Follow-up phases of Hope among Students (N= 55)

(I) Hope	(J) Hope	Mean Difference (I-J)	Standard Error
Before	After	-14.26*	0.43
	Follow-up	-9.78*	0.51
After	Before	14.26*	0.43
	Follow-up	4.47*	0.62
Follow-up	Before	9.78*	0.51
	After	-4.47*	0.62

*Significant at 0.05 level

The above table shows that there is a significant mean difference in the Follow-up and the Before Phases (M=9.78, SE=0.51). Also, there is a significant mean difference in the Follow-up and After Phases (M= -4.47, SE=0.62).

Table 13 shows a significant effect of the C. A. R. E intervention on Happiness among students, F (2, 108) = 386.01, where p=0.000. Table 14 shows that three paired-samples t-test were used to make post hoc comparisons between the Before, After and Follow-up conditions on Happiness. There is a significant mean difference in the Before and the After Phases (M=-13.31, SE=0.55). Also, there is a significant mean difference in the Before and Follow-up Phases (M= -10.00, SE=0.55).

The table shows that there is a significant mean difference in the After and the Before Phases (M=13.31, SE=0.55). Also, there is a significant mean difference in the After and Follow-up Phases (M= 3.31, SE=0.56).

Table 13: Repeated Measures of One-Way ANOVA for Happiness among Students (N=55)

Source		Type III Sum of Squares	df	Mean Square	F
Happiness	Sphericity Assumed	5281.50	2	2640.75	312.78 **
	Greenhouse-Geisser	5281.50	1.99	2643.10	312.78 **
	Huynh-Feldt	5281.50	2.00	2640.75	312.78 **
	Lower-bound	5281.50	1.00	5281.50	312.78 **
Error (Happiness)	Sphericity Assumed	911.83	108	8.44	
	Greenhouse-Geisser	911.83	107.90	8.45	
	Huynh-Feldt	911.83	108.00	8.44	
	Lower-bound	911.83	54.00	16.89	

**Significant at 0.01 level

Table 14: Pairwise Comparisons for Before, After and Follow-up phases of Happiness among Students (N=55)

(I) Happiness	(J) Happiness	Mean Difference (I-J)	Standard Error
Before	After	-13.31*	0.55
	Follow-up	-10.00*	0.55
After	Before	13.31*	0.55
	Follow-up	3.31*	0.56
Follow-up	Before	10.00*	0.55
	After	-3.31*	0.56

*Significant at 0.05 level

The above table shows that there is a significant mean difference in the Follow-up and the Before Phases (M=10.00, SE=0.55). Also, there is a significant mean difference in the Follow-up and After Phases (M= -3.31, SE=0.56).

The above tables disclose that there was a significant difference between Before, After and Follow-up phases in Hope and Happiness among Students. It implies that the CARE Intervention significantly enhanced Happiness among students.

Hence the Hypothesis, "There will be a significant difference between Before, After and Follow-up phases in Hope and Happiness through CARE Intervention among Students", is accepted.

Discussion

The present study shows that the CARE intervention module effectively reduces Depression, Anxiety and Stress while increasing Hope and Happiness among the highly vulnerable students due to the pandemic circumstances. This intervention focuses on building positive psychological constructs to overcome the negative mental health issues and promote positivity. The COVID pandemic has created havoc on students' mental health status worldwide. Feedback and discussion sessions held with the participants revealed that some participants had been infected and had become carriers and passed on the infection to their family members. This resulted in guilt and self-criticism. Many of them expressed that the stress they faced was because their initial carelessness caused their whole family to suffer from the infection. Such anecdotes bring to the forefront the mental health issues faced by the public during the pandemic. Many studies have been conducted on students and their mental health during the pandemic. To quote a recent study, among the medical students in Iran, the presence of certain positive psychology constructs like life satisfaction, spiritual well being along with self-esteem were significantly negatively correlated with depressive symptoms. (Mirhosseini, et al. 2022). Another study by Waters et al. (2021) found that during the pandemic, positive psychology interventions such as developing self-compassion, coping, courage, gratitude, character strengths, positive emotions and relationships building are crucial for buffering and bolstering mental health.

While the present study effectively helps in reducing psychological issues in a small sample through virtual means with a small 15-day intervention model, it needs to be said that the intervention model must be extended and validated using randomized control trials. Such trials can compare the CARE intervention with a larger sample and different populations.

Conclusion

The above analysis indicated that the 15 days CARE intervention effectively reduced the Depression, Anxiety and Stress levels. Also, the intervention effectively increased the Hope and Happiness levels among the participants at the same time. Furthermore, the Follow-up clearly showed that the change was maintained even after three months. Implications for future research include modifying the research to suit the varied needs of different populations. Moreover, educational organizations and employers should introduce positive psychology-based interventions to help their students and employees. The study has limitations, such as using a smaller sample and only female students. These limitations could be overcome in future research. Despite the limitations, this study effectively uses a Virtual Positive Psychology Intervention to reduce psychological distress such as Depression, Anxiety, and Stress symptoms while improving Hope and Happiness in this pandemic era.

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Annexure-1

A 15-day Calendar with Daily Activities

Day 1	*Compassion Day*: Do a kind task towards another person. Choose from any one of the activities: (a) Donate money/time/clothing. (b) Smile and wish someone when they least expect it. (c) Show concern to someone. (d) Give your time and pleasantness to someone from your family
Day 2	*Optimism Day*: Deliberately consider an adverse event that has happened to you in the past 15 days. Look at the advantages/positives deliberately hidden behind the negative emotion associated. (Examples given to the participants). Write down a thought that is opposed to the negative thinking associated with the adverse event.
Day 3	*Resilience Day:* Think of a stressful situation that is weighing down on you. Write it down in detail. In the end, write down ways in which you think you can challenge yourself and bounce back from the negativity. Imagine that the stressful event is a cloud that is spreading over you. You stand upright and bring your hands fisted up to break through the cloud and emerge a winner.
Day 4	*Achievement and Purpose in Life Day*: Ask yourself the following questions:(a) What is the purpose of the day today?(b) What is the one thing that I can achieve today?(c) The motto and objective for today is……… (Choose something fulfilling and satisfying to you, something that will make you happy)
Day 5	*Relationship Day:*Today, we work to improve one relationship in our life that is not very good. Make sure you change your thought process about that person and make it positive and open. Go and make deliberate, patient conversation with eye contact. Be non-judgmental and non-critical. Try to listen. Have an open body language. Do not deny or jump to defend. Try to repair any maladjustment today.
Day 6	*Positive Emotion Day*: Today, try to cultivate, build and broaden one positive emotion. Choose one emotion from the following: Happiness, Savouring, Contentment, Compassion, Gratitude, Hope, Try to fill your mind with the chosen positive emotion and spread that positive emotion to those around you today.
Day 7	*Gratitude Day*: Identify at least five things/events/ people in your life that you are thankful/grateful for. Then, write the reasons that you are grateful for each of the five things. This exercise can also be repeated daily by identifying one thing you are grateful for that day.

Day 8	*Self-Compassion Day*: Today is kindness to self-day. Are you overly critical about yourself over any particular weakness/ fault of yours? Show a little compassion to yourself. It is all O.K. There is always tomorrow to strive to be better.
Day 9	*Hope Day:* Visualize in full detail a future, where you are very successful, a future where you are achieving all that you dreamt of.
Day 10	*Happiness Day*: Find a reason, however small or silly, to be happy today. Enjoy the Joy! Spread the happiness to all around you. Smile and be pleasant to all around you.
Day 11	*Spread the Smile Day*: Post a message, poem or a few words about a person who has brought a smile to your face today.The person can be your family member/ friend/relative or yourself.
Day 12	*Visualize Peace Day*: Sit back and picture your favourite place. Sharpen all your senses and feel calm and peaceful. Write down all the details about your favourite spot. Picture yourselves in your favourite place. Write down your thoughts.
Day 13	*Overcome Obstacle Day*: Can you think of one obstacle in your path. Then, think about how you can overcome it. Could you write it down? My Obstacle: I plan to overcome this obstacle by_____

Day 14	*Strengths Exploration Day*: For today's task, we have a Strength Exploration Worksheet. Given below are some strengths. Feel free to add/ delete and fill up the empty rows with your strengths, as many as you can think of.

Calm	Smart	Fun-loving	Intelligent
Courageous		Honest	
	Loyal		Beautiful
Focused		Hard-working	

Clues: Answering these questions may give you a list of strengths.

1. What are the qualities in me that help me in friendships?
2. What are the factors within me; that helps me in my work/academics?
3. What helps me maintain cordial relationships with my family?
4. What makes me feel contented/ satisfied/ fulfilled?

Day 15	Overcome FEAR with DARE Day Today's task is to identify and overcome your fears. So what are some things that make you feel scared or nervous?

My FEAR	My DARE
F- How do I Feel?	D - Develop Skills. What are the skills I need to develop to overcome this Fear?
E - What are the excessive emotions involved?	A – Accept what can not be changed. Can I accept a part of this situation that I cannot change?
A - Am I Avoiding? Running Away?	R - Realistic Goals. Can I have Realistic Goals? Can I take one day at a time?
R - Am I far away from Reality?	E - Embrace positivity. Can I Embrace my values and principles at this time?