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Effectiveness of Laughter Therapy in Reduction of Stress Among First Year BSC Nursing Students

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Abstract

Stress is a state of worry or mental tension brought on by challenging circumstances. Stress is something we all experience that encourages us to tackle with challenges and risks in everyday life. All individuals experiences instances of stress. On the other hand, our capacity to deal with stress encounters a major effect regarding how we feel altogether. Everyone responds to challenging circumstance in different ways. The indicators of stress and ways of handling them vary between person to person. Aim of the study was to assess the effectiveness of laughter therapy in reduction of Stress Among first year BSc Nursing Students. The investigation was carried out at Nursing College of TMU, Moradabad, Uttar Pradesh. The Study participants were chosen by using a simple random probability sampling technique. Following that, 50 samples were separated into two groups: Experimental and Control Group through Lottery Method. The Students in the study were divided into 25 experimental and 25 control groups through Lottery Method. The result depicted the significant reduction in the level of Stress of 1st year BSc Nursing students in the experimental group after the introduction of laughter therapy (t= 12.760, p=0.01). The mean of post-test stress scores of experimental group (21.72) was less than the post-test stress scores of control group (36.28), and in control group, pre-test mean was 32.44 and post-test mean was 36.28, t value was 1.641 and p value was 0.522. The study determined that laughter therapy was efficient in reducing stress among nursing students. Thus, employing laughter therapy may aid nursing students manage with the stress brought on by their demanding daily schedules.

1. Introduction

Everybody perceives stress during every aspect of their lives, since academia provides an experience of alter, with nurse students are notably susceptible to stressful circumstances. Elevated levels stress can exert a detrimental effect upon student performance wellness and productivity, academic performance of nursing Students is additionally compromised due to stress. Once stress fails to be properly controlled, it might result in troubles that involve insomnia, worry, & isolation. Nursing students encounter four different forms of stress: interpersonal, economical, intellectual, and practical. To mitigate effects of these stresses, certain measures may be sometimes

undertaken. Stress may be efficiently managed with the help of right awareness.

One of the most stressful careers is nursing. Numerous studies carried out globally demonstrate that stress during nursing school is caused by a variety of factors. Curriculum requirements, assignments, and exams, as well as mixing clinical practise with studies, are the most common forms of stress experienced by students.

Laughter may indeed be the best medicine, as the proverb "laughter is the best medicine" states. Laughing believed to be a great technique for relieving stress and tension that may help us deal with and survive tough situations. Our

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muscles get a thorough workout from laughing, and endorphins that reduce tension are released in a hurry. laughter therapy has a positive effect because our bodies cannot tell the difference between genuine and fake laughter. It is not necessary to be joyful or humorous. We may continue to have connections with other people, and we enjoy social interactions. So, it's possible to make other people happy by making them laugh. Intensive breathing activities, rhythmically applause, ho-ho-ha-ha chanting, childish activities, laughing physical activity and closing method are the six elements that make up laughter therapy. Laughter is a physical emotion, not a mental one. The endorphins released during laughter therapy give you a feel-good element, relax your whole body, and lower your stress levels.

After 1970, laughing therapy is being recognised as a complementary therapy and as a different remedial strategy. Its usage has fast risen because it is a gentle supplemental treatment. laughter intervention is a unique form of exercise which mixes with breathing techniques from yoga (Pranayama) with uncontrolled laughter.

2. Objectives of the Study

1- To assess the pre-interventional level of stress in the control and experimental group of 1st year BSc nursing students of different colleges of Moradabad.
2- To assess the post interventional level of stress in control and experimental group of. 1st year BSc nursing students of different colleges of Moradabad.

3- To assess the effectiveness of laughter therapy by comparing pre and post intervention level of stress between the control and experimental group of 1st year BSc nursing students of different colleges of Moradabad.
4- To find out the association of pre-interventional level of stress in control and experimental group in 1st year BSc nursing students with their demographic variables.

HYPOTHESIS

Hypothesis were evaluated with a level of significance of 0.05

1- H_1 -There is a significant decrease in post interventional level of stress in experimental group among 1st year BSc nursing students of different colleges of Moradabad.
2- H_2 -There is a significant association between the pre-interventional level of stress score with their selected demographic variables.

3. Materials and Methods

RESEARCH APPROACH - Quantitative Research Approach

RESEARCH DESIGN - True Experimental (Pre-test Post-test Control Group Design)

Table 1: Diagrammatic representative of research design

Group	Pre-test	Intervention Laughter therapy (once in a day for 30 min for 7 days)	Post test
Experimental group	RO1	X	RO2
Control group	RO1	-	RO2

KEY'S

RO1: Assessment of initial test level of stress within Nursing students from 1st year BSc by utilizing Modified perceived stress scale in both Control and Interventional group.

X: Administration of Laughing techniques to experimental group.

RO2: Assessment of stress levels after administering laughing techniques on 7th day by utilizing Modified perceived stress scale in both of the groups.

VARIABLES

Dependent Variable: Stress

Independent Variable: Laughter Therapy

Attribute Variable: age, gender, religion, Family type, area of residence, residing with, Relation with classmates, monthly income of family, Medium of instruction, Fathers Occupation, Mothers Occupation.

SAMPLE: Students of 1st year BSc Nursing

SAMPLING TECHNIQUE: Simple random probability sampling technique

SAMPLE SELECTION CRITERIA

Inclusion Criteria

- Students who were willing to get involved in the research as research participants.

- Students who were available during the time of Data Collection

- Students who were between the 17-25 years of age group

- Students those who were literate and proficient in English.
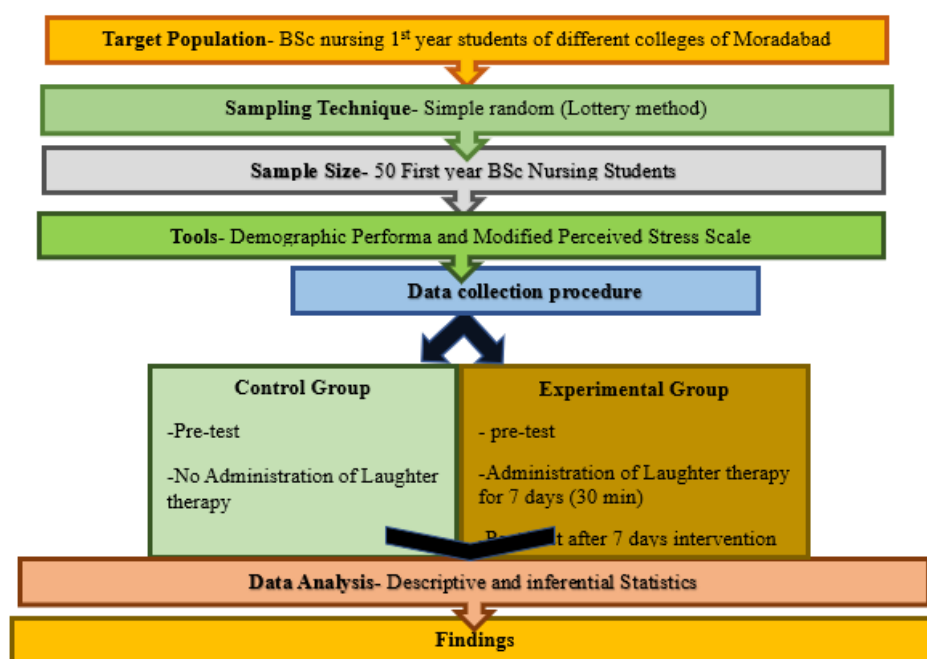
Exclusion Criteria

- Students those who already undergone any Stress reduction therapy.

DESCRIPTION OF THE TOOL

Tool 1 – Demographic Performa
Tool2- Modified Perceived Stress Scale

Figure 1: Schematic representation of research methodology

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The Study's findings were organized and presented under following sections: -

SECTION A: Description of the Socio demographic variables.

SECTION B: Findings related to pre-interventional level of stress in the control and experimental group

SECTION C: Findings related to post interventional level of stress in control and experimental group

SECTION D: Findings related to comparison of pre and post intervention level of stress between the control and experimental group

SECTION E: Findings related to association of pre-interventional level of stress in control and experimental group in 1st year BSc nursing students with their demographic variables.

SECTION A

Table 2: Frequency and percentage of distribution of demographic variables

Demographic Variable	Experimental group		Control Group	
	Frequency	Percentage	Frequency	Percentage
Age (in Years)				
17 to 19 years	15	60%	20	80%
20 to 22 year	09	36%	05	20%
23 to 25 years	01	4%	-	-
Gender				
Male	04	16%	05	20%
Female	21	84%	20	80%
Religion				
Hindu	14	56%	14	56%
Muslim	10	36%	09	36%
Christian	01	4%	01	4%
Others	-	-	01	4%
Total monthly Income				
Below 20000	7	28%	5	20%
20001 to 30000	7	28%	9	36%
30001 to 40000	6	24%	6	24%
Above 40000	5	20%	5	20%
Area of residence				

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Rural	15	60%	8	32%
Urban	10	40%	17	68%
Residing with				
Family/Relatives	16	64%	19	76%
Classmate	3	12%	2	8%
Alone	-	-	2	8%
Students of different Course	06	24%	2	8%
Type of Family				
Nuclear Family	19	76%	18	72%
Joint Family	6	24%	7	28%
Relation with Classmate				
Good	12	48%	22	88%
Average	12	48%	3	12%
Poor	1	4%	-	-
Previous Medium of Instruction				
Hindi	14	56%	16	64%
English	11	44%	9	36%
Father's Occupation				
Government Job	7	28%	9	36%
Business	14	56%	12	48%
Not Working	1	4%	-	-
Other	3	12%	4	16%
Mother's Occupation				
Government Job/Pvt. Job	2	8%	3	12%
Housewife	22	88%	22	88%
Business	1	4%	-	-

The findings reveals that of the 50 samples, Almost half of total half participants in experimental group 15 (60%) of samples includes the age group of 17 to 19 years, 09(36%) of the sample includes to age group 20 to 22 years and 01(4%) were comprised of age group 23 to 25 years and in Control group, 20(80%) of the students comprises to age group 17 to 19 years, 5(20%) of the Students comprised of age Group 20 to 22 years and none of them were in age group 23 to 25, Majority of the samples 21(84%) in Experimental Group were Female, 04(16%) were Males and under Control Group, Most 20(80%) of Students were under Female category and 5(20%) Students were Male, none of the student in both group were under other category, In experimental group, majority of the Students 14(56%) were Hindu, 10(40%) were Muslim, 01(4%) were Christian, none of them were under other category and in Control Group, Majority 14(56%) of the Students were Hindu, 09(36%) were Muslim, 01(4%) were Christian and 01(4%) were under other Category, In Experimental group, 7(28%) of the students were under category below 20000, total monthly income of the family, 7(28%) were in 20001 to 30000 category, 6(24%) were in category 30001 to 40000 and 5(20%) falls under category Above 40000. And in Control group 5(20%) were under category below 20000 total family income, 09(36%) were under category 20001 to 30000, 06(24%) were under category 30001 to 40000 , 5(20%) were under category Above 40000, In Experimental Group, Majority 15(60%)of the Students were residence of Rural area, 10(40%) of the students were resident of urban region, and in control group majority 17(68%) students were living in urban area, 08(32%) were living in Rural area, Majority 16(64%)

students in experimental Group were residing with their Family or relatives, 3(12%) were residing with Classmate, none of them residing alone, 06(24%) Students were residing with Students of different course, and in Control Group, 19(76%) were residing with their Family/ relatives, 02(8%) students residing with Classmate, 02(8%) residing Alone, 02(8%) residing with Students of different course, In experimental group 19(76%) were living in Nuclear Family and 06(24%) were living in Joint Family. 18(72%) in control group were in nuclear family,07(28%) were living in joint family, In experimental group, 12(48%) have good relationship, 12(48%) have average relation, 01(4%) in have poor relations with classmate and 22(88%) in control group have good relationship with their classmates and 03(12%) have average relation with their classmates, In experimental group majority 14(56%) students have Hindi as their previous medium of instruction, 11(44%) students had English as previous medium of instruction and majority 16(64%) students in control group had Hindi as previous medium of instruction, 09(36%) students had English as previous medium of instruction, Among 50 Students, in experimental 07(28%) student's Father's Occupation Was Government Job, 14(56%) students father's were doing Business, 01(4%) students Father's were not working, 03(12%) falls under other category And in Control Group, 09(36%) Students father were doing Government Job, 12(48%) were doing business, 04(16%) falls under Other category, Among 50 Students, in Experimental group 02(8%) students mother's were doing Government Job, 22(88%) were Housewives, 01(4%) were engaged in Business and in control group, 03(12%) had having Govt. Job, 22(88%) were Housewives.

SECTION B – Data shows the pre-interventional level of stress in the control and experimental group.
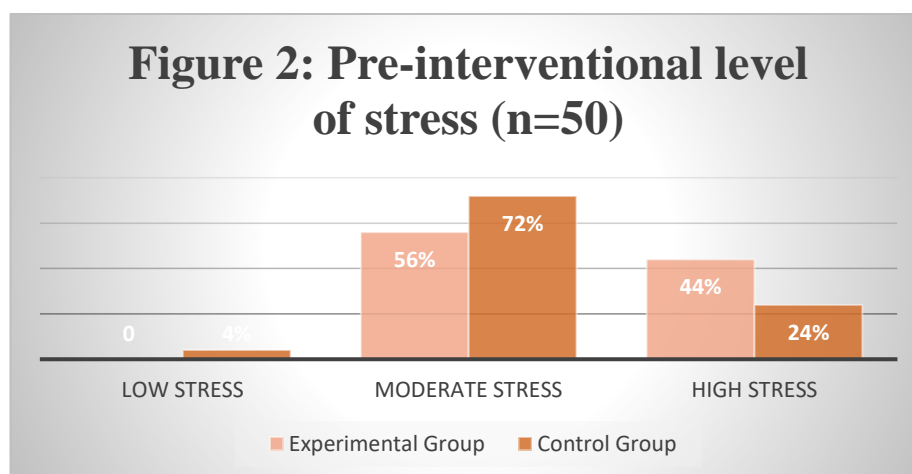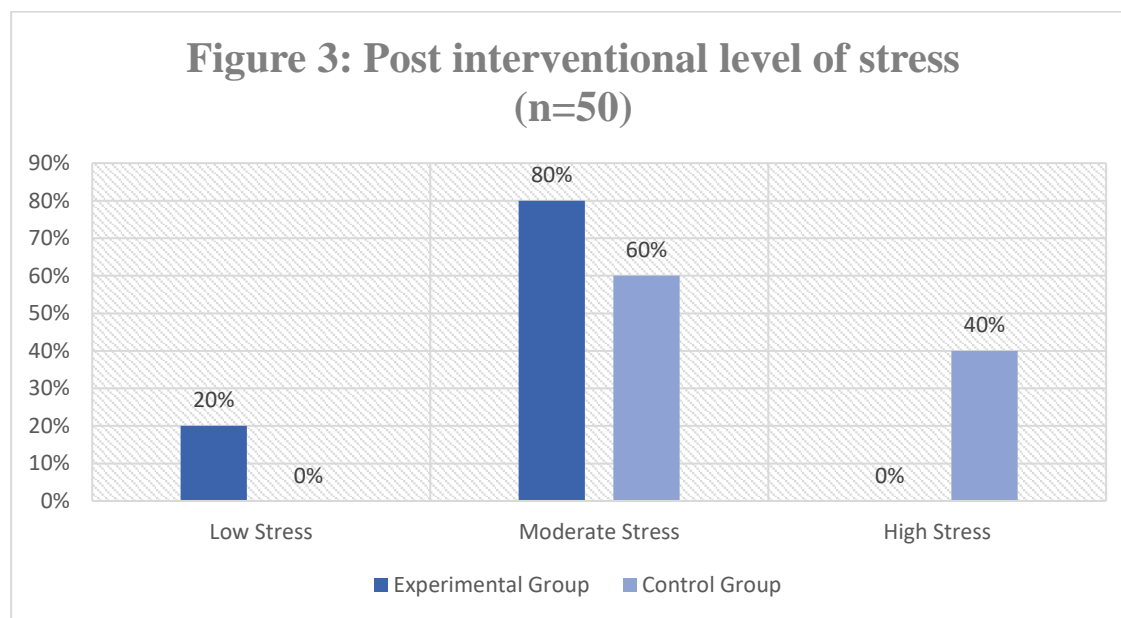

Figure 2: Findings related to pre-interventional level of stress in control and experimental group.

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Data highlights that no Student in experimental and 01(4%) in control group had low Stress levels, followed by 14(56%) students in experimental & 18(72%) students in control group had Moderate Stress levels and 11(44%) in experimental group and 06(24%) in control group student had high Stress levels.

SECTION C– Data highlights that post interventional level of stress in control and experimental group.

Figure 3: Findings related to post interventional level of stress in control and experimental group

Data highlights that 5(20%) experimental group Students & no student in control group had low level of stress. 20(80%) students in experimental group & 15(60%) students in control group had Moderate Stress levels and no Student in experimental group and 10(40%) students in control group had high stress.

SECTION D – Data Shows the Findings Related to comparison of pre and post intervention level of stress between the control and experimental group

Table 3: Findings related to comparison of pre and post intervention level of stress between the control and experimental group **(N=50)**

Group		Mean	SD	Mean difference	T value	P value
Experimental group	Pre-test	34.48	7.177	12.760	7.710	0.001*
	Post-test	21.72	4.118			
Control group	Pre-test	32.44	8.155	3.840	1.641	0.522
	Post-test	36.28	8.389			

*Significant at 0.05 level.

Data in above table highlights that in experimental group, pre-test mean value of stress was 34.48 with standard deviation of 7.177 and post-test value of mean was 21.72 and standard deviation of 4.118, Calculated 't' value was 7.710 and p value 0.001* which shows the effectiveness of Laughter therapy. In control group pre-test mean value

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of stress was 32.44 with standard deviation of 8.155, post-test value of mean stress was 36.28 with standard deviation of 8.389, calculated 't' value was 1.641 and p value 0.522 depicting no reduction of Stress in control group.

Table 4: Association of pre-interventional level of stress in control group in 1st year BSc nursing students with their demographic variables.   **(N=25)**

Variables	Low Stress	Moderate Stress	High Stress	Chi-square value & df	P value	Inference
Age in years						
17 to 19 years	0	14	06	5.556	0.62	NS
20 to 22 years	01	04	0	df=2		
Total	01	18	06			
Gender						
Male	0	02	03	4.514	0.105	NS
Female	01	16	03	df=1		
Total	**01**	**18**	**06**			
Religion						
Hindu	01	09	05	4.056	0.669	NS
Muslim	0	07	01	df=2		
Christian	0	01	0			
Other	0	01	0			
Total	**01**	**18**	06			
Total Monthly Income of the Family						
Below 20000	0	02	03	11.11	0.085	NS
20001-30000	0	06	03	df=3		
30001-40000	0	06	0			
Above 40000	01	04	0			
Total	**01**	**18**	**06**			
Area of Residence						
Rural	01	06	01	2.788	0.248	NS

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Variables	Low Stress	Moderate Stress	High Stress	Chi-square value & df	P value	Inference
Urban	0	12	0	df=1		
Total	**01**	**18**	06			
Residing with						
Family/relative	01	13	05	2.485	0.870	NS
Classmate	0	02	0	df=2		
Alone	0	02	0			
Student of different Course	0	01	01			
Total	**01**	**18**	**06**			
Type of Family						
Nuclear Family	01	12	05	1.025	0.599	NS
Joint Family	0	06	**01**	df=1		
Total	**01**	**18**	**06**			
Relationship with Classmate						
Good	01	15	06	1.326	0.515	NS
Average	0	03	05	df=2		
Total	**01**	**18**	06			
Previous medium of instructions						
Hindi	01	11	04	0.646	0.724	NS
English	0	07	02	df=1		
Total	**01**	**18**	**06**			
Father's occupation						
Govt./Pvt. Job	0	06	03	6.366	0.173	NS
Business	0	10	02	df=3		
Not Working	0	02	01			

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Variables	Low Stress	Moderate Stress	High Stress	Chi-square value & df	P value	Inference
Others	01	0	0			
Total	**01**	**18**	**06**			
Mother's occupation						
Government job	0	03	01	1.326 df=2	0.515	NS
Housewife	01	15	06			
Total	**01**	**18**	**06**			

*Significant at 0.05 level.   S = Significant, NS = Not-Significant

Table 4: Data highlights Association of pre-interventional level of stress in control group in 1st year BSc nursing students with their demographic variables related to pre-interventional degree of stress in control group, P value found greater than 0.05 level in all the socio demographic variables. Which revealed that there was statistically No significant association between pre-test scores with their selected socio-demographic variables. Hence stated hypothesis H_2 - There is a significant association between the pre-interventional level of stress score with their selected demographic variables is rejected.

Table 5: Association of pre-interventional level of stress in experimental group in 1st year BSc nursing students with their demographic variables.

(N=25)

Variable	Low stress	Moderate stress	High stress	Chi-square value & df	P value	Inference
Age in years						
17 to 19 years	0	09	06	1.371 df=2	0.504	NS
20 to 22 years	0	04	05			
23 to 25 years	0	01	0			
Total	**0**	**14**	**11**			
Gender						
Male	0	02	02	0.070 df=2	0.792	NS
Female	0	12	09			

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Variable	Low stress	Moderate stress	High stress	Chi-square value & df	P value	Inference
Total	**0**	**14**	**11**			
Religion						
Hindu	0	06	08	2.563 df=6	0.278	NS
Muslim	0	07	03			
Christian	0	01	0			
Total	**0**	**14**	**11**			
Total Monthly Income of the Family						
Below 20000	0	04	03	1.287 df=6	0.732	NS
20001-30000	0	05	02			
30001-40000	0	03	03			
Above 40000	0	02	03			
Total	**0**	**14**	**11**			
Area of Residence						
Rural	0	10	05	1.732 df=2	1.88	NS
Urban	0	04	06			
Total	**0**	**14**	**11**			
Residing with						
Family/relative	0	09	07	3.609 df=6	0.165	NS
Classmate	0	03	0			
Students of different course	0	02	04			
Total	**0**	**14**	**11**			
Type of Family						
Nuclear family	0	10	09	0.365 df=2	0.546	NS
Joint family	0	4	02			

Variable	Low stress	Moderate stress	High stress	Chi-square value & df	P value	Inference
Total	**0**	**14**	**11**			
Relationship with Classmate						
Good	0	06	06	0.988	0.610	NS
Average	0	07	05	df=2		
Poor	0	01	0			
Total	**0**	**14**	**11**			
Previous medium of instructions						
Hindi	0	07	07	.465	0.495	NS
English	0	07	04	df=2		
Total	**0**	**14**	**11**			
Father's occupation						
Govt./Pvt. Job	0	02	05	3.452	0.327	NS
Business	0	09	05	df=4		
Not Working	0	01	0			
Other	0	02	01			
Total	**0**	**14**	**11**			
Mother's occupation						
Government job	0	0	02	4.339	0.114	NS
Housewife	0	14	08	df=2		
Business	0	0	01			
Total	**0**	**14**	**11**			

*Significant at 0.05 level.   NS=Not-significant

Table 5:- Data highlights Association of Pre interventional Stress levels in experimental group of nursing BSc 1st year students with their demographic variables, P value were greater than 0.05 level in all the socio demographic variables, which revealed that there was statistically No significant association between pre-test scores with their selected socio-demographic variables in experimental group, Hence, stated hypothesis H_2 -There is a significant association between pre-test level Stress with their demographic variables is rejected.

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4. Conclusion

Students experience Stress during their 1st year of BSc Nursing course, hence it is important to introduce different alternative therapies beneficial in reducing stress they suffer. The findings of study suggested that laughter therapy is effective in reducing Stress of the Nursing Students.

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