

A SURVEY ON THE EMOTIONAL AND ANXIETY LEVELS DURING POST VACATION PERIOD AMONG HOME SICKNESS INDUCED COLLEGE STUDENTS

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ABSTRACT:

Homesickness is the mental and physical distress caused by the anticipated separation of students from their families. This homesickness may lead to depression, stress, and other psychological problems. The objective of this study is to observe the post-vacation mental state of the students who have been suffering from homesickness in the hostel. In this study, a standardized tool that measures the level of anxiety of the students was used. A questionnaire DASS-21 (Depression Anxiety Stress Scale), containing 21 questions was used which was circulated among 100 -1st-year dental students of Saveetha Dental College who were affected by homesickness. Data collection was done through the administration of Google forms and the data were analyzed in SPSS version-15 using cumulative frequency and percentage analysis. The results of the study showed that the post-vacation period had considerable changes in the student population. The students developed a feeling of positivity, had good energy levels and they were not stressed and anxious and felt enthusiastic during the post-vacation period. Thus the present study concludes that physical and mental stress disorders can only be reduced by spending time with family and home place.

KEYWORDS: Anxiety; depression; homesickness; post vacation; stress.

INTRODUCTION:

In this fast-moving world, there were developed a lot of courses and subjects for studying in the college sector. For this, a lot of students migrate from their home place for their ambition, goal, and career. Thus a common problem which these students face is Homesickness. Homesickness is the distressed state of mental or physical stress caused by the anticipated separation of students from their families. This homesickness among students often leads to depression, stress, and other psychological problems (English *et al.*, 2017). The depression and anxiety are often caused by the mental stress which they undergo due to homesickness. (Vázquez *et al.*, 2012). Stress is defined to be the mental exhaustion that leads from mild to severe which is the characteristic symptom of homesickness (Liddell and Robert 1811-1887 Scott, Joint Author, 2016). The prevalence of stress among the students leads to a reduction in their performance in academics and also causes memory-related disorders (Turner *et al.*, 2015). Thus, it results in a negative effect on learning, decreases concentration, and focuses on the subjects which sometimes leads to depression. The Excessive Stress causes more of emotional, behavioral, Physical disorders in which these symptoms include muscle ache, headache, fatigue, loss of appetite, weight loss, hypertension, obese, etc (Fathima and Preetha, 2016; Baheerati and Gayatri Devi, 2018; Greca *et al.*, 2020). Some students may also indulge in unhealthy behavior such as cigarette smoking, nutritional disorders, mental and physical illness, etc (Choudhari and Jothipriya, 2016)(Pascoe, Hetrick, and Parker, 2020)(Harsha *et al.*, 2015). These students also lag in their physical activities which also develops adverse conditions and make them feel stressed (Hamer and Steptoe, no date; Shruthi and Preetha, 2018; David *et al.*, 2019). The result of the

stress factor leads to various health problems and diseases. This is due to the new campus university with all of the new experience, unable to adapt, missing their home place leading to homesickness. The sufferers have more difficulties to adapt and focus on studies (R and Sethu, 2018; Iyer, Gayatri Devi, and Jothi Priya, 2019)(Thurber and Walton, 2012). Thus some AAT programs were also conducted in some cases for the well-being of the first-year students experiencing homesickness (Binfet and Passmore, 2016). Thus these students (Thomas, Liu and Umberson, 2017)(Kawachi, 2001) at their vacation to reach home, creates a bond with their family and a state of their mental health and physical well being(Dave and Preetha, 2016; Abigail *et al.*, 2019) status is just discussed and observed in this study.

The previous research includes that, Social anxiety has a major relation with homesickness which results in stress and affects their mental and physical health (Thurber and Walton, 2012)(Dave and Preetha, 2016; Abigail *et al.*, 2019). Other studies were also made regarding anxiety status due to the stress undergone by homesickness (Jovanovic, Djonovic and Dutina, 2017) to the correlations between males and females MBBS students who were under more criticism of homesickness measures. Following the other study also mentioned as the scores given to students based on the pre and post-assessment of vacation on which the depression level is found to be decreased at post-assessment (Saravanan, Alias and Mohamad, 2017).

The lacunae of this study are to explore the emotional stress-related changes in students among the student population who have been suffering from homesickness, away from home and staying in the hostel. This study was done in a post-vacation period of about 2 months.

MATERIALS AND METHODS

The study was conducted among first-year dental students of Saveetha Dental College particularly to the students who stayed at the hostel. All participants were asked to complete the survey honestly. The inclusion criteria for this study include 100 Healthy college students in the age group of 17-20 years of both genders belonging to Saveetha dental college were included as participants for the study. Exclusion criteria were the students who were day scholars and taking medications like antidepressants were excluded from the study. The Sampling method used in this study was random survey sampling. The questionnaire enquired about the mental state and physical health of the students during their vacation period. The DASS questionnaire was used as a measuring tool to assess the emotional state of the participants in the post-vacation period.

Each question was made to answer by the students which were given in the form of scale with score pattern in which "0" represents that the criteria did not apply to them at all; "1" represents the criteria applied to them to some degree of some of the time; "2" represents that the criteria applied to them to a considerable degree or good part of the time and "3" represent that the criteria applied to them very much or most of the time. Thus the standard DASS-21 questionnaire included the questions are discussed (appendix). Thus, this standard DASS-21 questionnaire was circulated and the responses for data collection were collected through the Google forms spreadsheet. Finally, the scores obtained as data were compiled and collected through the SPSS Version 15, and the statistical analysis used was the cumulative frequency and percentage analysis.

RESULTS AND DISCUSSION:

The DASS questionnaire was circulated among the students during the vacation holidays, the results and the statistical analysis obtained for the questions were given by,

In response to the question no.3 asked as, did they found it hard to wind down to which the responses included, did not find at all were answered by 72.1% students; some degree of time by 25% of students and to a good part of the time of 1.9% of students and most of the time by 1% students. (Table 1)

In response to the question no.4 includes whether they had dryness of mouth to which responses included that, no dryness by 67.3% of students, dryness for sometimes by 28.8% of students; dryness experienced for a good part of the time by 2.9% of students and most of the time given by 1% students (Table 1)

In response to the question no.5 includes as, They couldn't seem to experience any positive feeling, to which the responses were, there was no thought like that was given by 78.8% of students; sometimes had a thought-18.3% of students; had thought for a good part of time given by 2.9% of students and most of the time provided by 0% of students.(Table 1)

In response to the question no.6, it was enquired whether they had breathing difficulty in which no breathing difficulty by 76.9% of students; Breathing difficulty applied sometimes by 19.2% of students; to a good part of the time by 1% of students and most of the time given by 2.9% students. (Table 1)

In response to the question no.7 was, do they found difficult to work up the initiative to do things to which the responses stated as, not applied to them for 78.8% of students; for sometimes applied by 19.2% of students; applied to the good part of the time by 1% of students, most of the time by 1% students. (Table 1)

In response to the question no.8 raised as, did they tend to overreact, to which responses were not at all by 64.4% of students, some point of time answered by 31.7% of students; to a good part of the time by 2.9% of students and most of the time by 1% students. (Table 1)

In response to the question no.9, as did they experience trembling, to which not at all were answered by 82.7% of students; sometimes by 14.4% of students; to a good part of the time by 0% of students and most of the time by 1% students. (Table 1)

In response to the question no.10 represented that they lose a lot of nervous energy, the responses were not at all by 73.1% of students, sometimes by 26% of students; a good part of the time by 0% of students; and most of the time by 1% students. (Table 1)

In response to the question no.11 represents as, were they worried about the situation and caught panic to which responses include not at all by 80.8% of students, sometimes given by 16.3% of students, a good part of the time by 1.9% of students; mostly by 0% students. (Table 1)

In response to the question no.12 includes that they had nothing to look forward to for which responses were not at all by 76% of students, sometimes by 22.1% of students; most of the time by 1% of students. (Table 1)

In response to the question no.13 raised as did they agitated to which not agitated at all was stated by 77.9% of students; sometimes agitated 18.3% of students; most of the time by 2.9% of students. (Table 1)

In response to the question no. 14 includes that were they difficult to relax for which not difficult at all was stated by 77.9% of students population; sometimes difficult by 21.2% of the population; most of the time by 1% of students (Table 1)

In response to the question no.15 was did they feel downhearted and blue for which not at all was given by 80.8%, sometimes by 16.3% a good part of the time by 1.9%. and most of the time by 1% of the individuals participated. (Table 1)

In response to the question no.16 stated as they were intolerant to keep themselves from getting what was being done, for which not at all was stated by 85.6% of the student population, sometimes by 12.5% of the student population and most of the time by 2% of students. (Table 1)

In response to the question no.17 included as were they panic, to which not panic at all was given by 86.5 % of the population Sometimes panic by 11.5% of students and most of the time panic by 1% of students. (Table 1)

In response to the question no.18 states as they were not enthusiastic, for which they were enthusiastic was given by 76 % of the student population, sometimes non-enthusiastic by 22.1% of the population and mostly non enthusiastic by 2% of students. (Table 1)

In response to the question no.19 mentions that they felt they were not much worth as a person to which not felt at all was answered by 85.6% of students; sometimes by 13.5% of students and most of the time felt by 1% of students. (Table 1)

In response to the question no.20 presented as they were rather touchy, for which 80.8% students answered not at all and 18.3% students answered sometimes; 1% of students answered most of the time (Table 1)

In response to the question no.21 we observe that they were aware of the action of the heart to which, not at all were answered by 84.6% of students, sometimes were answered by 13.5% of students, most of the time by 1% of students. (Table 1)

In response to the question no.22 raises as were they scared without reason to which not scared at all were answered by 79.8% of students, sometimes scared by 17.3% of students & most of the time scared answered by 1.9% of students. (Table 1)

In response to the question no.23 was did they feel that life was meaningless for which 77.9% answered did not feel at all, 19.2% students answered as sometimes felt and 2.9% felt most of the time. (Table 1). Thus according to the results obtained, we confirmed that the students who suffered from homesickness after the vacation holiday period were normal and stress-free with no mental illness. Thus the students had a normal and healthy lifestyle with no mental or physical stress during the post-vacation period.

Association between gender and breathing difficulty done by using Chi square test ($p=0.591$) was found to be statistically not significant. Out of 76% students who stated that they did not face breathing difficulty 43.69% were females and 33.01% were males. Thus females were relieved from homesickness after the vacation holidays compared to males.(figure 1)

Association between gender and trembling done by using Chi square test ($p=0.102$) was found to be statistically not significant. Out of 82.5% students who stated that they did not face trembling , 48.54% were females and 33.98% were males. Thus females were relieved from trembling after the vacation holidays compared to males.(figure 2)

Association between gender and agitation done by using Chi square test ($p=0.706$) was found to be statistically not significant. Out of 78.6% students who stated that they did not face agitation , 43.69% were females and 34.95% were males. Thus females were relieved from agitation after the vacation holidays compared to males (figure 3).

Association between gender and scarefulness done by using Chi square test ($p=0.584$) was found to be statistically not significant. Out of 80.5% of students who stated that they were not scared without any reason ,46.6% were females and 33.98% were males. Thus females were relieved from scarefulness after the vacation holidays compared to males (figure 4).

The homesickness is often leading to depression among the student population. Although the general population has customarily viewed progress to school as a constructive experience and open door for self-awareness, understudies face different difficulties, including dealing with their lives freely, setting up new companionships, and adapting to the new schedules and scholastic models. During their alteration, first-year understudies may encounter a feeling of uprooting inferable from the unexpected move from their past recognizable conditions. This experience of detachment and its ensuing mental side effects has much of the time been distinguished as a yearning to go home, which can create negative social and scholarly outcomes. As a result of lowering their academic and curricular performance(Johnson and Sandhu, 2007). According to a study where it states that the assessment of mental stress using the DASS questionnaire was provided and was observed among the female students. And in their case, they observed it as the students performed less in their college due to the stress of mental state undergone due to homesickness. (Geethanjali and Adalarasu, 2014)(Renuka and Sethu, 2015; Swathy and Gowri Sethu, 2015; Timothy, Gayatri Devi and Jothi Priya, 2019). Another study also states that the prediction of homesickness was

made as a comparative study involving in college and home - mood regulation of the students. To which the results of their study included that there was a significant reduction of scores of CBT (Cognitive Behavioural Therapy) for depression assessment in post-assessment at home compared to the group assessment taken at college. (Saravanan, Alias and Mohamad, 2017). The consideration of another study that also provides that homesickness relationship with stress, anger anxiety among the college students to which the depression is more adverse than other scales (Samuel and Devi, 2015)(Verschuur, Eurelings-Bontekoe and Spinhoven, 2004). Also, a related study stated that although a lot of measures could be provided to overcome homesickness(Verschuur, 2004) the only possible way is the importance of loving and accepting the home environment for the development and expression of homesickness (Nijhof and Engels, 2007). Family plays an important role in modeling a child's character. At home, children are rewarded for their good attitudes and punished for their mistakes. Reward centers are found for the most part in the area of the medial forebrain group and there mainly in parallel and ventromedial nerve centers. Numerous researchers accepted that these structures are the most significant punishment Centers because their solid incitement inspires outrage(Aguilera, 2011). Also, that homesickness is a form of stress faced by the student population. Stress is a demand forced on an individual in response to a threatening situation. The important parts of the brain that provide reactions to stress include the hypothalamic-pituitary-adrenal axis, the amygdala, and the prefrontal cortex. The major neuroendocrine reaction intervening pressure adjustment is the enactment of the hypothalamic-pituitary-adrenal axis, with incitement of corticotropin-releasing hormone (CRH) and vasopressin (VP) from parvocellular neurons of the hypothalamic paraventricular nucleus, prompting incitement of pituitary ACTH emission and increments in glucocorticoid emission from the adrenal cortex. Basal creation and transient increments during the stress of glucocorticoids and its hypothalamic controllers are basic for neuronal plasticity and ordinary mind work. While the initiation of the HPA axis is fundamental for endurance during stress, incessant presentation to stress hormones can incline to mental, metabolic and immune causing adverse changes.

As an opposing article, some of the articles also state that homesickness is more intensive but then this study states that the homesickness indulged students before and after the assessment of mental stress found to be with no negative effects and does not interfere with the academic performance of the students (Vliet, 2001). Other studies were also found to be opposing such a way stating that homesickness of most of the students before and after the assessment of the college Students (Kassel, Bornovalova, and Mehta, 2007) did not undergo any mental regulation and relationship quality in the post-assessment. Thus there was a null effect according to their study of homesickness at home or even in college. (Landa, Bono and English, 2020).

In this study, with the generation of our results, it is proven that people who are the Students suffered from homesickness after returning to home and family place, the mental stress and physical stress became low and normal due to the quality time spent with family. The stress that occurred in their workplace /college often leads to a lot of health issues and diseased state. The stressed state of the students makes them feel lonely and makes them unfocused at their studies as well as in academic performance. (Turner *et al.*, 2015)(Rj and R, 2016) .Treatment that incorporates parents is a powerful, basic piece of treatment for kids' direct issue and rising as a compelling treatment for discouragement and nervousness and stress issues too. The quality time spent with family is never replaceable by any other video game, etc. Studies have proved that family time and enjoyment makes a person relieved from all his work, peer professional study stress, etc. Thus, we state that homesickness and its adverse effects are controlled in the post-assessment in the holiday vacation period rather than the college assessment. Thus, even though many precautions and steps are welcomed to provide a reduction of homesickness, the assessment to return to the home place and

quality time spent with family alone relieves the mental stress caused by homesickness among the college students.

Limitation: The limitation of this study includes this survey was conducted within a geographical area. This survey only included the dental students for assessment, thus limiting the sample size of the survey. This survey only includes stress that is related to homesickness, hence other stress-causing factors could also be included. Moreover, the survey did not include the pre-assessment of the DASS stress scale of homesickness at college before vacation as it was difficult in implementation.

Future scope: The awareness about homesickness and knowledge on homesickness and its effects can be assessed among the college students. Counseling and public speaking can also be assessed for the students for making up their minds prepared for reducing homesickness. And also other stress-related causes could be discussed.

CONCLUSION:

Thus, this study was conducted among the first-year dental students through which anxiety, stress level, and depression state were identified during the post-vacation period. Through which we conclude that homesickness of physical and mental stress disorders can only be reduced by employing spending time with family and home place even though other substitutes were also present.

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AUTHOR CONTRIBUTIONS:

Ms. Deepika : Literature search, survey, data collection, analysis, manuscript writing

Dr. Sridevi.G : Study design, data verification, manuscript drafting

CONFLICTS OF INTEREST:

The authors declare that there are no conflicts of interest in the present study

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APPENDIX:

DASS21		Name:	Date:		
Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week . There are no right or wrong answers. Do not spend too much time on any statement.					
The rating scale is as follows:					
0	Did not apply to me at all				
1	Applied to me to some degree, or some of the time				
2	Applied to me to a considerable degree or a good part of time				
3	Applied to me very much or most of the time				
1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3

Table 1 - Cumulative percentage responses for the DASS questionnaire

S.no	Questions	Response	Cumulative percentage
1	Age	17	3.8%
		18	56.7%

		19	33.7%
		20	5.8%
2	sex	Male	44.6%
		Female	55.4%
3	I found it hard to wind down	Did not apply to me at all	72.1%
		Applied to me to some degree	25%
		Applied to me to a considerable degree	1.9%
		Applied to me very much	1%
4	I was aware of dryness of my mouth	Did not apply to me at all	67.3%
		Applied to me to some degree	28.8%
		Applied to me to a considerable degree	2.9%
		Applied to me very much	1%
5	I couldn't seem to experience any positive feeling at all	Did not apply to me at all	78.8%
		Applied to me to some degree	18.3%
		Applied to me to a considerable degree	2.9%
		Applied to me very much	0%
6	I experienced breathing difficulty	Did not apply to me at all	76.9%
		Applied to me to some degree	19.2%
		Applied to me to a considerable degree	1%

		Applied to me very much	2.9%
7	I found it difficult to work up the initiative to do things	Did not apply to me at all	78.8%
		Applied to me to some degree	19.2%
		Applied to me to a considerable degree	1%
		Applied to me very much	1%
8	I tended to over-react	Did not apply to me at all	64.4%
		Applied to me to some degree	31.7%
		Applied to me to a considerable degree	2.9%
		Applied to me very much	1%
9	I experienced trembling	Did not apply to me at all	82.7%
		Applied to me to some degree	14.4%
		Applied to me to a considerable degree	1.9%
		Applied to me very much	1%
10	I felt that I was using lot of nervous energy	Did not apply to me at all	73.1%
		Applied to me to some degree	26%
		Applied to me to a considerable degree	0%
		Applied to me very much	1%
11	I was worried about situation in which I might panic and make on fool of myself	Did not apply to me at all	80.8%
		Applied to me to some degree	16.3%

		Applied to me to a considerable degree	1.9%
		Applied to me very much	1%
12	I felt that I had nothing to look forward	Did not apply to me at all	76%
		Applied to me to some degree	22.1%
		Applied to me to a considerable degree	1%
		Applied to me very much	1%
13	I felt myself getting agitated	Did not apply to me at all	77.9%
		Applied to me to some degree	18.3%
		Applied to me to a considerable degree	2.9%
		Applied to me very much	1%
14	I found it difficult to relax	Did not apply to me at all	77.9%
		Applied to me to some degree	21.2%
		Applied to me to a considerable degree	0%
		Applied to me very much	1%
15	I felt down-hearted and Blue	Did not apply to me at all	80.8%
		Applied to me to some degree	16.3%
		Applied to me to a considerable degree	1.9%
		Applied to me very much	1%

16	I was intolerant of anything that kept me from getting on with what I was doing	<p>Did not apply to me at all</p> <p>Applied to me to some degree</p> <p>Applied to me to a considerable degree</p> <p>Applied to me very much</p>	<p>85.6%</p> <p>12.5%</p> <p>1%</p> <p>1%</p>
17	I felt I was close to panic	<p>Did not apply to me at all</p> <p>Applied to me to some degree</p> <p>Applied to me to a considerable degree</p> <p>Applied to me very much</p>	<p>86.5%</p> <p>11.5%</p> <p>1%</p> <p>1%</p>
18	I was unable to become enthusiastic	<p>Did not apply to me at all</p> <p>Applied to me to some degree</p> <p>Applied to me to a considerable degree</p> <p>Applied to me very much</p>	<p>76%</p> <p>22.1%</p> <p>1%</p> <p>1%</p>
19	I felt I wasn't worth much as a person	<p>Did not apply to me at all</p> <p>Applied to me to some degree</p> <p>Applied to me to a considerable degree</p> <p>Applied to me very much</p>	<p>85.6%</p> <p>13.5%</p> <p>0%</p> <p>1%</p>
20	I felt I was rather touchy	<p>Did not apply to me at all</p> <p>Applied to me to some degree</p> <p>Applied to me to a considerable degree</p>	<p>80.8%</p> <p>18.3%</p> <p>0%</p>

		Applied to me very much	1%
21	I was aware of action of my heart in absence of physical exertion	Did not apply to me at all	84.6%
		Applied to me to some degree	13.5%
		Applied to me to a considerable degree	1%
		Applied to me very much	1%
22	I felt scared without good reason	Did not apply to me at all	79.8%
		Applied to me to some degree	17.3%
		Applied to me to a considerable degree	1.9%
		Applied to me very much	1%
23	I felt life was meaningless	Did not apply to me at all	77.9%
		Applied to me to some degree	19.2%
		Applied to me to a considerable degree	1.9%
		Applied to me very much	1%

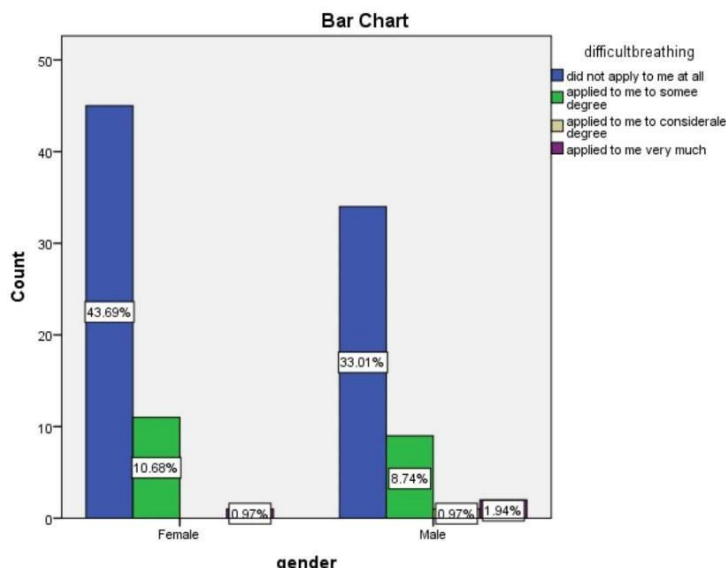


Figure 1: Bar graph depicting the association between the gender and breathing difficulty faced by the individuals participated in this survey. Blue colour denotes that they did not have breathing difficulty, green colour denotes that had breathing difficulty to some degree , yellow colour denotes that they had breathing difficulty to a considerable degree and purple colour denotes that they faced breathing difficulty very much. X axis represents the gender and Y axis represents the number of individuals responded based on the severity of breathing difficulty. Out of 76% students who stated that they did not face breathing difficulty 43.69% were females and 33.01% were males. Thus females were relieved from breathing difficulty after the vacation holidays compared to males. Association between the gender and breathing difficulty done by using Chi square test, (Pearson Chi-Square value=1.912 ; p=0.591; p<0.001) df =3 was found to be statistically not significant

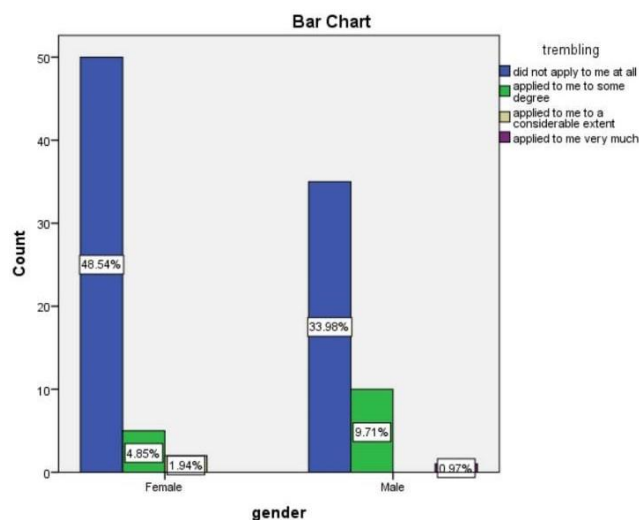


Figure 2: Bar graph depicting the association between gender and the trembling faced by the individuals participated in this survey. Blue colour denotes that they did not have trembling , green colour denotes that they had trembling to some degree , yellow colour denotes that they had trembling to a considerable degree and purple colour denotes that they had trembling very much. X axis represents the gender and Y axis represents the number of individuals responded based on the severity of trembling. Out of 82.5% students who stated that they did not face trembling , 48.54% were females and 33.98% were males. Thus females were relieved from trembling after the vacation holidays compared to males. Association between gender and trembling was done by using Chi square test, (Pearson Chi-Square value= 6.210 ; p=0.102 ; p<0.001) df =3 was found to be statistically not significant

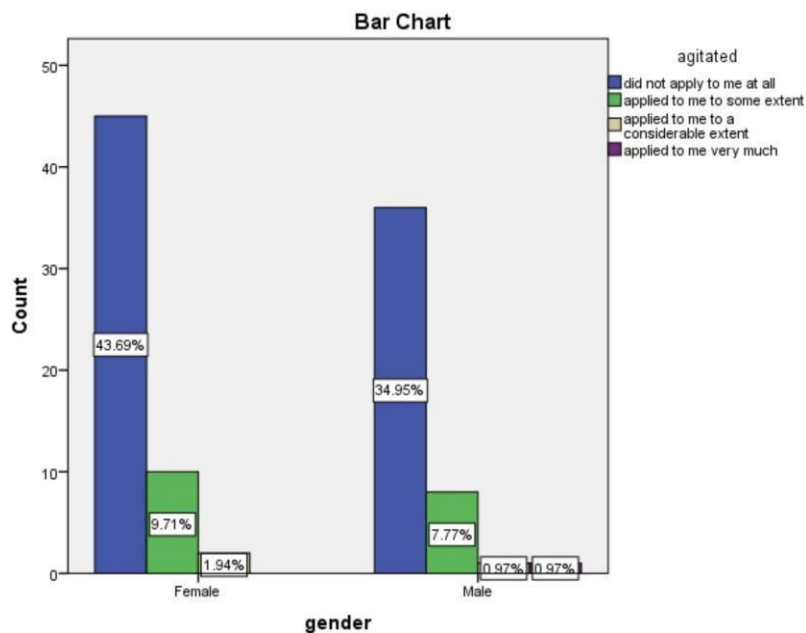


Figure 3: Bar graph depicting the association between gender and the agitation faced by the individuals participated in this survey. Blue colour denotes that they were not agitated, green colour denotes they were agitated to some degree , yellow colour denotes that they were agitated to a considerable degree and purple colour denotes that they were agitated very much. X axis represents the gender and Y axis represents the number of individuals responded based on the severity of agitation. Out of 78.6% students who stated that they did not face agitation , 43.69% were females and 34.95% were males. Thus females were relieved from agitation after the vacation holidays compared to males. Association between gender and agitation was done by using Chi square test (Pearson Chi-Square value= 1.397; p=0.706 ; p< 0.001) df = 3 was found to be statistically not significant.

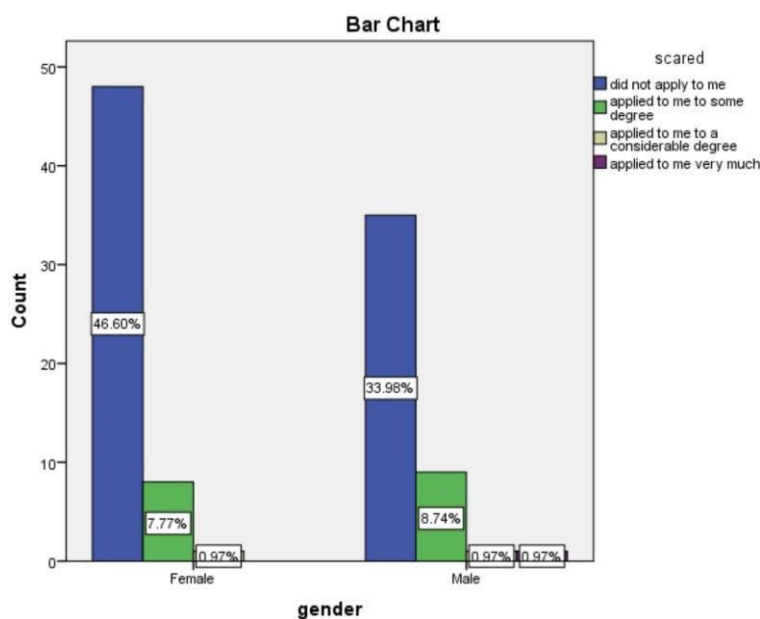


Figure 4: Bar graph depicting the association between gender and the number of respondents who are scared with no reason. Blue colour denotes that they were not scared for no reason, green colour denotes that they were scared to some degree , yellow colour denotes that they were scared to a considerable degree and purple colour denotes that they were scared very much. X axis represents the gender and Y axis represents the number of individuals responded based on the severity of scarefulness. Out of 80.5%

of students who stated that they were not scared without any reason ,46.6% were females and 33.98% were males. Thus females were relieved from scarefullness after the vacation holidays compared to males. Association between gender and the number of respondents who are scared with no reason was done using Chi square test (Pearson Chi-Square value= 1.942 ; p=0.584 ; p< 0.001) df=3 was found to be statistically not significant.