

PSYCHOSOCIAL IMPACT OF LOCKDOWN AMONG STUDENTS

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ABSTRACT

Schools and colleges are closed to practice social distancing to reduce the spread of the coronavirus disease. Although online classes are being conducted, some teachers have reported that they do not find the online classes as effective as the real classroom. In online classes, there is reduced student interaction, lack of realistic experience and absence of community feeling. The lockdown is generally considered to have more negative psychological effects due to financial loss, inadequate supplies and fear of life. A cross sectional survey was conducted among students to study the psychosocial impact of lockdown among students. The study population in the study are the students with a sample size of 200. The questionnaire consisted of 31 questions divided into three parts and was shared to students using online survey platform. 17.5% of the students felt that they could communicate to friends the same way as that of regular class, 53.5% did not and 29% partially felt so. 57% of the students felt anxious that their studies are affected during this lockdown, 21.5% did not feel anxious and 21.5% partially felt anxious. Most of the students are showing some symptoms of depression due to the closed schools and colleges and social distancing as a result of lockdown. Hence teachers have to handle them differently after the lockdown ends.

Keywords

COVID-19; depression; psychosocial impact; lockdown; students

INTRODUCTION

Governments are forced to shut down all the Schools and colleges and declare lock down to reduce the spread of the disease. Human alteration of the environment has caused change in global distribution of organisms and spread of infectious diseases like coronavirus (Sarbeen and Gheena, 2016). Most of the schools and colleges are closed from March 2020 till further notice. The psychosocial approach views an individual in the context of psychological factors along with the surrounding social environment and their effect on physical, Mental wellness and their ability to function. It includes the individual perception of self and functional capacity in a community. It also includes the factors such as the work environment, marital status, loneliness, social status and social integration. Most of the schools and colleges have started online classes while some of them were very quick to respond. Some of the institutions have not yet started online classes which will have a great impact on the learning skills of the students. Although online classes are being conducted, some teachers have reported that they do not find the online classes as effective as the real

classroom. In online classes, there is reduced student interaction, lack of realistic experience and absence of community feeling.

The COVID-19 pandemic has affected our day to day life, businesses and also have slowed down the global economy (Haleem et al., 2020). The COVID-19 has caused enormous human casualties and serious economic loss hence the global institutions and companies have begun to develop vaccines to prevent further damage to the people and the economy (Ahn et al., 2020). lockdown is generally considered to have more negative psychological effects due to financial loss, inadequate supplies and fear of life. The negative feelings experienced by the lockdown people include fear of isolation, anger, confusion, infection fears and boredom (Brooks et al., 2020). The psychosocial impact on the people is a huge problem but there are very few reports focusing on it while the majority of them focuses only on the medical problems. Patients diagnosed with SARS during the SARS pandemic were found to experience fear, loneliness, boredom, anger and insomnia (Ko et al., 2006). Healthcare workers who were exposed to high-risk work settings were noted to have less general psychological distress in emergency department workers during the SARS pandemic (Maunder et al., 2006).

The present study is conducted because the previous studies have reported to have post-traumatic stress during the previous lockdown. Hence most likely, students will experience the same and they have to be handled differently than before. During isolation, the interaction with friends is reduced due to which there might be an impact in their social life. Besides these negative impacts, the positive impact of this lockdown is that the students get to spend more time with their family and do extracurricular activities. There are many recent researches in cancer and dentistry but since lockdown due to coronavirus is the ongoing problem, this topic was chosen (Hema Shree et al., 2019) (Sheriff and Santhanam, 2018) (Manohar and Abilasha, 2019) (Padavala and Sukumaran, 2018). The aim of this study is to analyse the psychosocial effect of lockdown on students.

MATERIALS AND METHODS

Study Design

A cross sectional survey was conducted among students to evaluate the psychosocial impact of lockdown among students. The sampling method is simple random sampling method. The sample size of this study is 200. The samples were selected based on inclusion and exclusion criteria (Palati et al., 2020). Inclusion criteria includes students and exclusion criteria were students who were not willing to participate in the survey. The participants did the survey voluntarily and no incentives were given to them. The sampling method is simple random sampling. The study was conducted in the month of may, 2020. Ethical approach and informed consent from the participants were obtained.

Survey Instrument

The survey instrument which was a questionnaire was prepared after extensive review of the existing literature. The questionnaire was reviewed and amendments were made to improve clarity of the questions to eliminate ambiguous responses. The questionnaire consisted of 31 questions with both open and closed ended questions. The questionnaire consisted of three parts. The first part is the demographic data which includes the participants age, gender, location and other questions related to their social conditions such as the number of days spent in lockdown. The second part of the questionnaire consists of questions about how

the students felt about their studies, friends and online classes. The third part of the questionnaire consists of categorical data. This part of the questionnaire was adopted from a pre-existing questionnaire which was obtained from the Center for Epidemiologic Studies Depression Scale (CES-D). The CESD is a measure of depressive symptoms composed of 20 self-report items, each with a rating scale of 0 to 3. The scoring of positive items is reversed. The maximum score is 60 with the score more than 16 has been shown to identify persons with depressive symptoms. The framed questionnaire was put up on an online survey platform. The link was shared to students of different schools and colleges in different locations.

Data Analysis

Only completed surveys were taken for analysis and the uncompleted surveys were eliminated.

The statistical test used is descriptive statistics. The data received was categorized as nominal (Hannah et al., 2018). All the responses obtained were tabulated and reliability of the data was checked. Frequency table was prepared for each question using spss data analysis software (Gunasekaran and Abilasha, 2016). Descriptive analysis was performed to calculate frequency of categorical variables. The overall scores were assessed and compared with various parameters.

RESULTS AND DISCUSSION

A total of 200 students participated in this survey. Out of the participants, 52.5% were below 18 years, 42.5% belonged to the age group of 18 to 30 years and 5% of the participants were more than 30 years. 69.5% of the respondents were female and 30.5% are males. Among the participants, 56.5% were school students, 39% of them were undergraduate students and 45% were postgraduates. The location of the participants were, 34% in India, 50.5% from UAE, 12.5% from Singapore, 1% from Malaysia, 1% from Bangladesh, 0.5% from China and 0.5% from France (table 1). 3% of the participants are in lockdown for less than 14 days, 10% are in lockdown for 14 to 28 days and the majority 86.5% are in lockdown for more than 28 days.

92.5% of the participants live with their family, 3% live in hostels, 3.5% live alone and 1% live with other relatives.

Among the participants schools or colleges, 89% of them have started online classes in this lockdown, 11% have not started (graph 1). 17.5% of the students felt that they could communicate to friends the same way as that of regular class, 53.5% did not and 29% partially felt so (graph 2). 45% of the participants felt that they could communicate to the teacher and clear their doubts in online classes, 18% felt that they couldn't easily communicate with the teacher and the remaining 37% partially could ask doubts to their teacher (graph 3). 32% of the participants said that it will take time for them to get readjusted with friends after the lockdown, 32.5% of the respondents said it will not take time to get readjust with friends and 35.5% said maybe (graph 4). 57% of the students felt anxious that their studies are affected during this lockdown, 21.5% did not feel anxious and 21.5% partially felt anxious (graph 5).

In the chi square analysis between gender and depression levels, the p value obtained was 0.361 and it was statistically not significant (graph 6). In the chi square analysis between location and depression levels, the p value obtained was 0.863 and it was statistically not significant (graph 7). In the chi square analysis between the length of the lockdown practised by the participants and depression levels, the p value obtained was 0.023 and it was statistically not significant (graph 8). In the chi square analysis between the living

environment of the participants and depression levels, the p value obtained was 0.824 and it was statistically not significant (graph 9).

From the scores obtained from the CESD scale, the possible scores ranged from 0 to 60 with higher numbers indicating more symptomatology. In our study, 69% of the participants scored 16 or more than 16 which indicates more symptomatology and 31% scored less than 16 indicating less symptomatology of depression.

The ongoing outbreak of the COVID-19 has claimed hundreds of thousands of lives and has millions of confirmed cases around the world (Ye and Jin, 2020). Since the coronavirus is spreading rapidly and the fact that all the people are generally susceptible ,it leads to an impact psychologically and a sense of fear among everyone (Li et al., 2020). This new virus is very contagious and has quickly spread globally at a faster rate than the previous viruses like MERS-COV (Cascella et al., 2020).

In a study conducted in Canada during the SARS pandemic, the cesd scale was used. The scores of the participants were greater than 16 in 31.2% of the lockdownd person, less than score 16 in 31% of the people. The depression rate is higher than our study. The difference could be because lockdown during the previous pandemic, lockdown was confined to few people but lockdown in COVID-19 is worldwide. Compared to other previous pandemic, the media is more transparent now and the people are more eager to know more about world events such as crimes . forensic identification is important for solving crimes and it is done using various methods (Palati et al., 2019) (Abitha and Santhanam, 2019) (Harrita and Santhanam, 2019) . People have access to more information regarding the severity of the disease and increasing death rates. The total number of cases in SARS were 8098 whereas more than 66 lakhs people are affected in COVID-19 and the count is continuously increasing. The death rate was also less in SARS with only 774 deaths and COVID-19 death counts are more than 3.5 lakhs and increasing (Hawryluck et al., 2004).

A previous study conducted among patients of congenital heart disease, 80% scored more than 18. In our study 69% got more than the score 16, less depression found in our study. As this study has used the cesd scale which is used in our study. We can say that less depression is seen in our study participants (Moon et al., 2017).

Another study conducted in hospital employees in China after the SARS epidemic, found that 10% of the respondents had experienced high levels of post traumatic stress symptoms since the SARS outbreak (Wu et al., 2009). Doctors are expected to deliver good service all times hence they experience stress due to long working hours and due to empathizing with the patient (Prasanna and Gheena, 2016) (Uma et al., 2020). They also have to avoid wrong diagnosis and inappropriate treatment which can be achieved by reviewing current evidences (Krishnan et al., 2018) (Ahad and Gheena, 2016) .During the SARS outbreak, many healthcare workers were emotionally affected and traumatized. Hence it is important for health care institutions to provide psychosocial support and intervention for their health care workers (Chan and Huak, 2004). This survey can be done in large sample size for more accuracy in future and a wide variety of population can be included. Apart from students, the working population can also be included.

CONCLUSION

From the present survey, we can infer that most of the students are showing some symptoms of depression due to the closed schools and colleges and social distancing as a result of lockdown. People who were in

longer duration of lockdown were affected more than those in shorter periods of lockdown. Hence, an active way to take care of the mental well being of the younger generation is required. **Author contributions**

Shifa Jawahar Ali: literature search, survey, data collection, analysis, manuscript writing

Gifrina Jayaraj: study design, questionnaire preparation, Data verification, manuscript drafting

Conflict of interest: None declared

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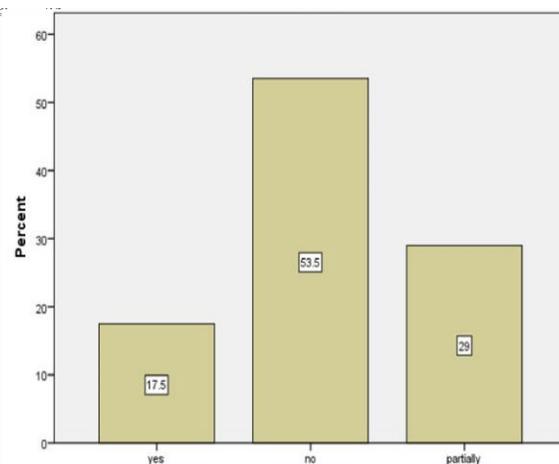
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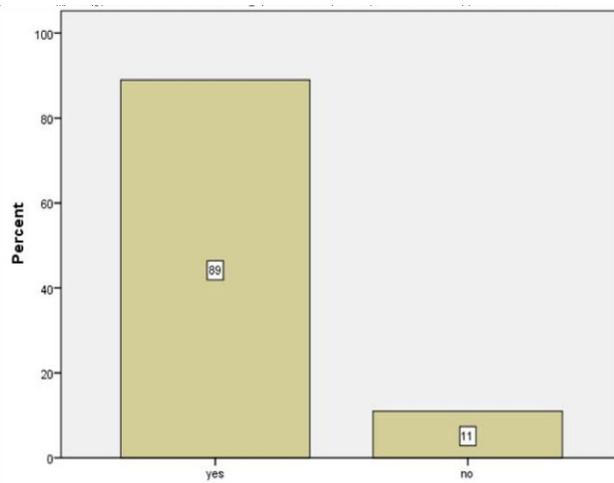
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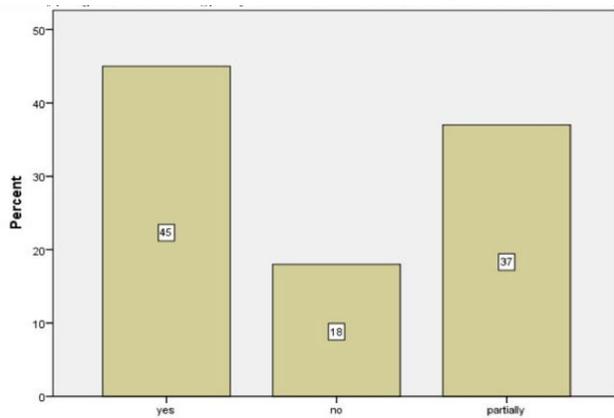
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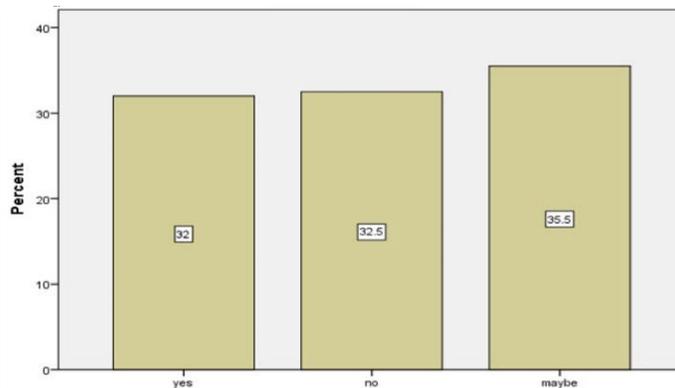
Graph 1: Bar graph showing respondents communication with their friends. 17.5% of the participants said that they were able to communicate with their friends the same way as that of regular class, 53.5% of the participants said no and 29% said partially. Majority were not able to communicate with their friends.



Graph 2: Bar graph showing respondents whose institution have online classes. 89% of the participants schools or colleges have started online classes and 11% of the participants schools or colleges have not started online classes. Majority of the schools or colleges have started online classes.

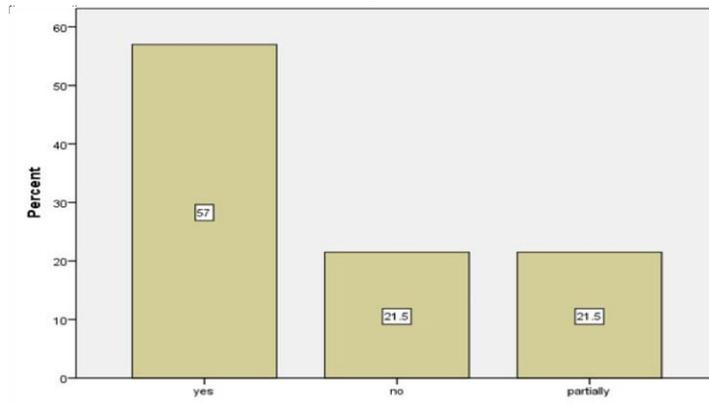


Graph 3: Bar graph showing respondents ability to communicate with the teachers. 45% of the participants were able to communicate with the teacher easily and clear their doubts, 18% said no and the remaining 37% said partially. Majority of the participants could communicate with their teachers and clear their doubts.



Graph 4: Bar graph showing responses on ability to readjust with friends after lockdown. 32% of the respondents said that it will take time to readjust with their friends after the lockdown, 32.5% of the

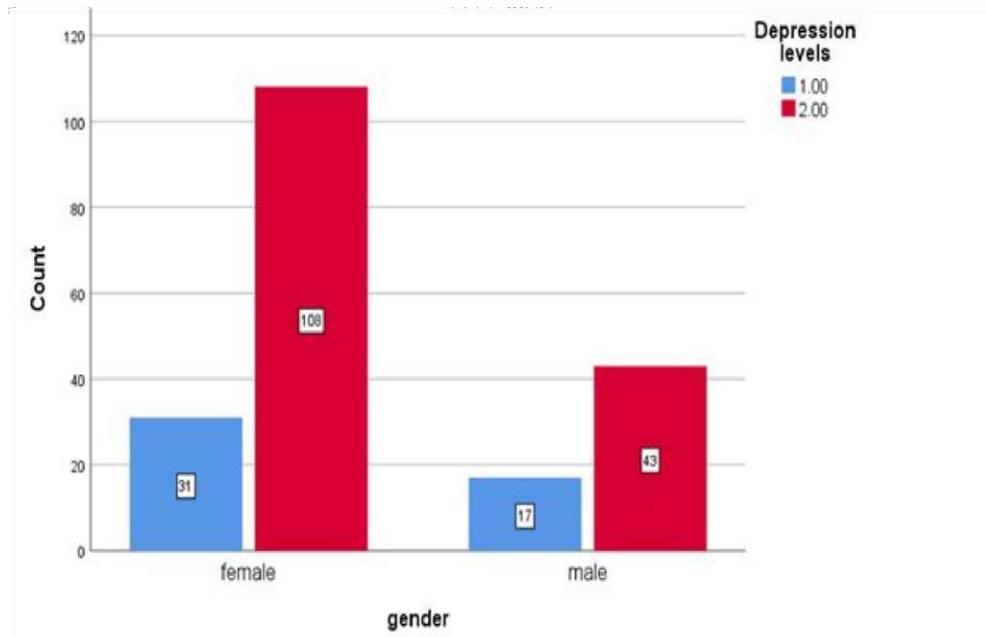
respondents said no and 35.5% of the respondents said maybe. Almost equal number of responses were seen for all options.



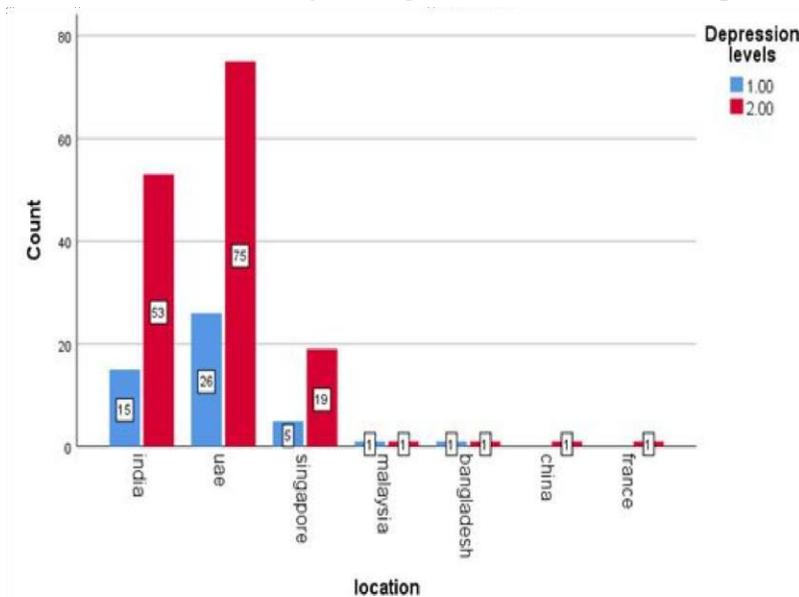
Graph 5: Bar graph showing response on anxiety about studies on students. 57% of the participants said that they are anxious that their studies are affected in this lockdown, 21.5% of the participants said they were not anxious and 21.5% of the participants were partially anxious about their studies being affected. Majority of the respondents were anxious about their studies in this lockdown.

Country	Frequency	Percentage
India	68	34.0
UAE	101	50.5
Singapore	25	12.5
Malaysia	2	1.0
Bangladesh	2	1.0
China	1	0.5
France	1	0.5
Total	200	100.0

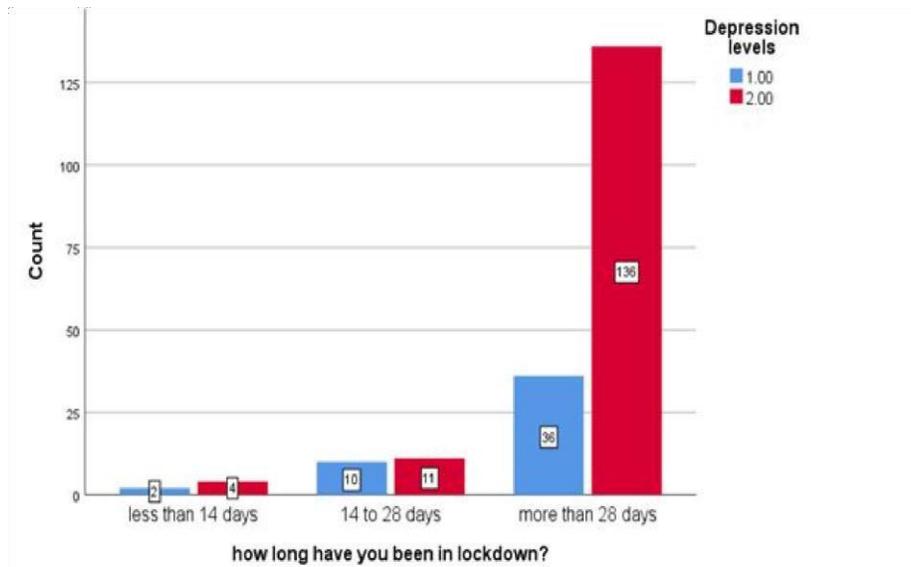
Table 1: Distribution of location of the participants



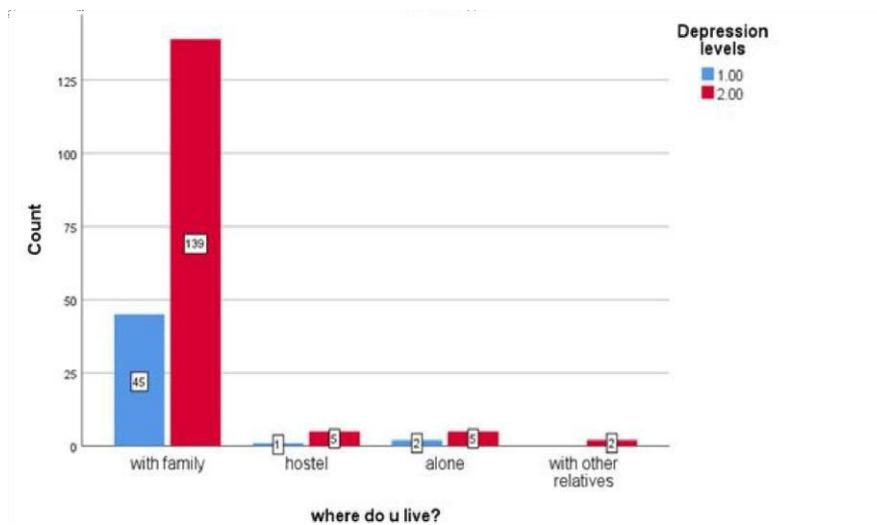
Graph 6: Bar graph represents the association between gender and depression levels as assessed by CESD-D Scale. X axis represents the gender and Y axis represents the frequency of respondents based on their depression scale. Blue represents not prone for depression, <12, Red represents symptoms of depression (>12). There was an increase in the number of people showing depression symptoms in both males and females. This was statistically not significant. Pearson Chi Square=0.361(>0.05).



Graph 7: Bar graph represents the association between location and depression levels as assessed by CESD-D Scale. X axis represents the location and Y axis represents the frequency of respondents based on their depression scale. Blue represents not prone for depression, <12, Red represents symptoms of depression (>12). There was an increase in the number of people showing depression symptoms in all locations. This was not statistically significant. Pearson Chi Square=0.863(>0.05).



Graph 8: Bar graph represents the association between the length of the lockdown practised by the participants and depression levels as assessed by CESD-D Scale. X axis represents the length of the lockdown practised by the participants and Y axis represents the frequency of respondents based on their depression scale. Blue represents not prone for depression, <12, Red represents symptoms of depression (>12). There was an increase in the number of people showing depression symptoms irrespective of the number of days in lockdown. This was statistically not significant. Pearson Chi Square= 0.023(>0.05).



Graph 9: Bar graph represents the association between the living environment of the participants and depression levels as assessed by CESD-D Scale. X axis represents the living environment of the participants and Y axis represents the frequency of respondents based on their depression scale. Blue represents not prone for depression, <12, Red represents symptoms of depression (>12). There was an increase in the number of people showing depression symptoms in all conditions. This was statistically not significant. Pearson Chi Square= 0.824(>0.05).