An Exploratory Study to Analyze the Factors Affecting Virtual Classes Among Bachelor Nursing Science Studentsof Northern Border University, Arar, Saudi Arabia

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Abstract
Virtual classes are the classes taken by the teacher in the digital learning environment.A virtual classroom is an online digital learning environment that allows for live interaction between the teacher and the learners as they are participating in learning activities. Aim of the study was to explore the factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University. Quantitative Research Approach with Exploratory Descriptive Design was the methodology used in this study. This study was done at College of Nursing, Northern Border University,Arar, Saudi Arabia. Proportionate Stratified Random Sampling Technique was used to collect the data from 96 Bachelor Nursing Science students. The structured questionnaire was administered through online media. Results of the study depicts that 46.8 percentage of the subjects were between the age group of 18-21 years, whereas 2.1 percentage of the samples were above the age of 30 years. Majority (88.5 percentage) of the subjects were studying in Basic B. Sc Nursing program and 11. 5 percentage of the samples were studying in Post Basic B.Sc Nursing program.About 87.5percentageof the subjects were unmarried. Around 35.4 percentage of them were done their 9-10 credits in theory, and 24 percentage of them were finished 8-10 credits in their practical subjects. About57.2 percentage of them were reported that Black Board collaborate ultrawas an excellent online media for virtual classes. More than fifty (59.4) percentage of them were stated that the faculty have excellent skills in managing virtual classes. Around 58.3 percentage of the participants were excellent in all virtual classes. More than 25 percentage of the samples were reported that they have the problems of fear and anxiety due to Virtual classes.Majority (92.7%) of the faculty were used Lecture with Power Point Presentation was the instructional methodology for their virtual classes, whereas 38.5 percentage of the samples were reported that demonstrations/ activity/ presentations/ role playing are the methods used in laboratory. Around fifty (48) percentage of the teachers were having good skills in handling different instructional strategies used in Virtual classes. More than 20 percentage of them were writing journals. Around 60 percentage of the samples were reported that mark distribution and weightage of the assessment task was excellent. More than fifty percentage (54.2%) of the samples were reported that Rubrics system was excellent. Regarding challenges of virtual classes, more than 22 percentage of the subjects were commented that they have internet problems during virtual classes. There was a significant association between socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science students, P value is less than 0.05* so the research hypothesis H1 was accepted. Pearson Correlational Coefficient (r) test shows that there was a significant correlation between socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science students. Correlation is significant at the 0.05 level*. So the research hypothesis (H2) was accepted. The researcher strongly recommended to modifying the Bachelor Nursing Science students curriculum with the facilities of Blended learning and Cooperative learning, so it will help our students to overcome all these types of crisis situations in future.
Key words: Exploratory Study,Analyze., Factors of Virtual classes.,

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I. Introduction

Virtual classes are the classes taken by the teacher in the digital learning environment.A virtual classroom is an online digital learning environment that allows for live interaction between the teacher and the learners as they are participating in learning activities. The Students can perform individual and collaborative teaching learning activities (Veronica Racheva, 2018). Virtual Classroom is BYOD (Bring Your OwnDevice) friendly. Students can join Virtual Classroom using any Internet enabled device such as Personal Computer, Laptop, Mobile, Tablet and so on.

NEED AND SIGNIFICANCE OF THE STUDY

Due to COVID*19 pandemic, Schools, Universities and Colleges have closed either on a nation-wide or on local basis in 193 countries. It is affecting approximately 99.4 percentage of the world's student's population. More than 300 million students worldwide are thevictims of disrupted education by the spread of Coronavirus. Schools and Universities haven't faced this level of disruption in generations, but unlike any time in the past, we have the ability to continue education even when schools close (WHO Report 2020).

This has brought an unexpected challenge in education sector, so it is the very crucial time to think to overcome this situation by starting virtual classes for the students. This is the transformation period from traditional classroom teachings to the virtual platforms.

Because of lockdown and closure of educational institutions in Saudi Arabia, most of the classes were taken through different virtual platforms like Learning Management System (LMS), Microsoft, and Zoom.In Saudi Arabia, Virtual classes were started from March 2020 onwards. Hi-tech connections by means of online classes, and video conference were the most common mode of instructional strategies used for educational purposes from the school level to higher studies.

Northern Border University is the leading institution in the North Province of Saudi Arabia. In our college, Learning Management System (LMS)i.e. Blackboard Collaborate Ultrawas the platform used for virtual classes. With the support and guidance from Deanship of ELearningand Distance Learning Department of Northern Border University, the researcher experiences different virtual learning strategies of Health Sciences. Nursing Educators and Educators in other disciplines were faced with the challenging task of providing continuity and quality in education via virtual platforms. So the teachers were used different educational strategies to provide efficient and enthusiastic virtual classes to the students.

STATEMENT OF THE PROBLEM

An Exploratory Study to Analyze the Factors Affecting Virtual Classes among Bachelor Nursing Science Students of Northern Border University, Arar, Saudi Arabia.

AIM

Aim of the study was to explore the factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University.

OBJECTIVES
1. Assess the Socio- demographic variables of Bachelor Nursing Science Students of Northern Border University.
2. Analyze the factors affecting Virtual classes among Bachelor Nursing Science Students of Northern Border University.
3. Determine the association between the socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University.
4. Determine the correlation between socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University.

HYPOTHESIS

H1: There will be a significant association between the socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University, $P<0.05$.

H2: There will be a significant correlation between the socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University, $P<0.05$.

II. Research Methodology

RESEARCH APPROACH: Quantitative Research Approach
RESEARCH DESIGN:Exploratory Descriptive Design
- Setting: College of Nursing, Northern Border University, Arar. Saudi Arabia.
- Population: Bachelor Nursing Science Students
- Sample: Second, Third and FinalYear Bachelor Nursing Science Students of College of Nursing, Northern Border University.
- Sample Size:96
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- **Sampling Technique: Proportionate Stratified Random Sampling Technique.**

The researcher divides the population (Bachelor Nursing Science students)into different strata or classes, i.e. II year, III year and Final year.According to the proportion of students in each class the investigator randomly selected the final subjects proportionately from the different strata or classes, i.e. 32 students fromsecond year, 30 from III year, 34 students from final year. They were the samples of the study.

- **Research Tool: Structured Questionnaire**
  Section I: Socio-demographic data of the Bachelor Nursing Science Students of Northern Border University.
  Section II: Factors AffectingVirtual classes
1. General Factors related to the Virtual classes
2. Factors Related to the Instructor- who was Handled the Virtual Classes
3. Factors Related to the Learner or students- who was attendedthe Virtual Classes
4. Factors related to the Instructional Strategies or methodology used in the Virtual classes
5. Factors related to the Evaluation methods used in the Virtual classes

- Techniques: Self reports
- Ethical Consideration- Digital Consent was taken from the participants of the study.
- Data Collection Process
  Online data collection with the help of Google form -Structured Questionnaire was prepared in Google form, and created link for the questionnaire. This link was send to the participants through the mobile,and email.So the response was directly recorded in the google data sheet.
- Period and Duration of Data Collection: 7th June- 4th July 2020, for the duration of one month.
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- **Criteria**
  Inclusion Criteria
- The Students who are attended the Virtual Classes through Black Board Collaborate Ultra.
- The Students who are attended Virtual classes for the duration of 2-3 Months (March –May 2020).
- Female Bachelor Nursing Science Students
  Exclusion Criteria
- I Year Bachelor Nursing Science Students was excluded from the study, because they are not in our campus.

III. Results Of The Study
I. SOCIO-DEMOGRAPHIC DATA OF THE BACHELOR NURSING SCIENCE STUDENTS

Figure1: Distribution of Subjects According to Age
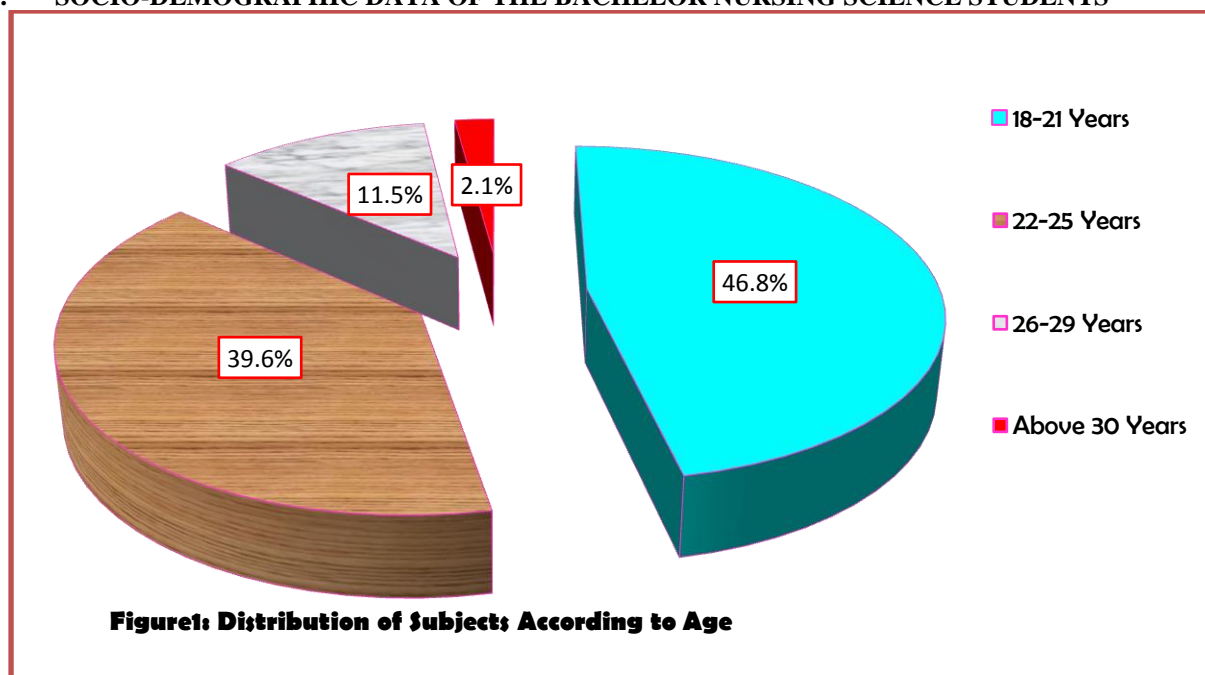
This figure depicts that 46.8 percentage of the subjects were between the age group of 18-21 yearsand 2.1 percentage of the samples were above the age of 30 years.

TABLE I. DISTRIBUTION OF SAMPLES BASED ON SOCIO-DEMOGRAPHIC DATA

N=96

Variables	Frequency (N)	Percentage (%)
Education Program		
B.Sc Nursing	85	88.5
Post Basic B.Sc Nursing	11	11.5
Year of Study		

Second Year	32	33.3
Third Year	30	31.3
Final year	34	35.4
Marital Status		
Married	10	10.5
Unmarried	84	87.5
Divorced/Separated	2	2.0

This table depicts that majority (88.5 percentage) of the subjects were studying in Basic B. Sc Nursing program and 11. 5 percentage of the samples were studying in Post Basic B.Sc Nursing program. Around 35.4 percentage subjects were studying in Final year, whereas 33.3 percentage of them were in second year. Majority (87.5%) of the subjects were unmarried, but 2percentage of them were divorced/Separated.

## II.   ANALYZE THE FACTORS AFFECTING VIRTUAL CLASSES AMONG BACHELOR NURSING SCIENCE STUDENTS

1.   GENERAL FACTORS   RELATED TO THE VIRTUAL CLASSES
TABLE 2: GENERAL FACTORS   RELATED TO VIRTUAL CLASSES
N=96

Variables	Frequency (N)	Percentage (%)
Number of Subject Registered for Virtual Classes		
7-8	32	33.3
5-6	30	31.3
3-4	34	35.4
Theory Credit Hours Allotted PerWeek		
14-16	32	33.3
11-13	30	31.3
9-10	34	35.4
Practical Credit Hours Allotted Per Week		
3-4	43	44.8
5-7	30	31.2
8- 10	23	24.0
Mode of Sending Information on Virtual Classes		
Email	4	4.2
Black Board Collaborate Ultra	78	81.2
WhatsApp Message	9	9.4
Mobile Call	5	5.2

This table shows that 35.4 percentage of the samples were registered 3-4 subjects, where as 33.3 percentage of them were doing 7-8 subjects for their virtual classes. About 33.3 percentage of the samples were doing 14-16 credits and 35.4 percentage of them have 9-10 credit hours per week for their theory classes. Around 44.8 percentage of them were having 3-4 credit hours, but 24 of them were having 8-10 credit hours per week for their practical subjects. Majority (81.2 %) of the participants were reported that the faculty were sending the information about Virtual Classes through Black Board Collaborate Ultra by means of announcement, but few (4.2%) of them were reported that the teachers are also sending information through email.
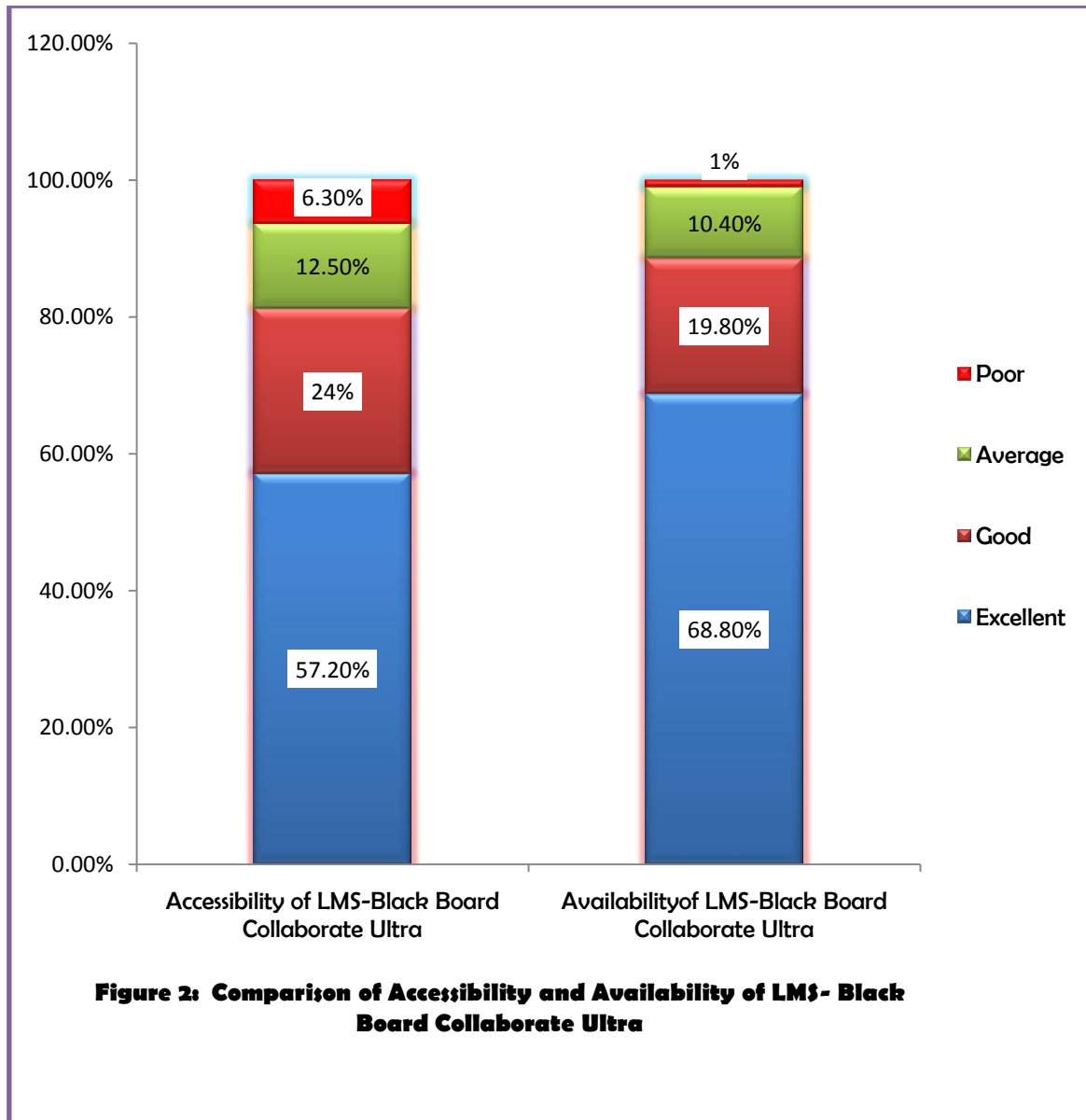
Figure 2: Comparison of Accessibility and Availability of LMS- Black Board Collaborate Ultra

This figure depicts that more than fifty (57.2) percentage of the subjects were reported that Black Board Collaborate ultra was havingan excellent accessibility, whereas 68.8 percentage of them are responded that Black Board Collaborate ultra was always available to the students, it is an excellent user friendly virtual platform.

2. **FACTORS RELATED TO THE INSTRUCTOR OR WHO WAS HANDLED THE VIRTUAL CLASSES**

TABLE 3: FACTORS RELATED TO THE INSTRUCTOR

N=96

Variables	Frequency (N)	Percentage (%)
Clarity of the Virtual classes		
Excellent	55	57.3
Good	32	33.3
Average	9	9.4
Poor	0	0
Level of understanding of the Instructor/ teacher, about the technologies used in the Virtual classes		
Excellent	55	57.3
Good	23	24.0
Average	16	16.7
Poor	2	2.0

This table depicts that more thanfifty (57.3%) percentage of the subjects were reported that, the instructor was excellent in clarity and level of understanding about the technologies used in the virtual classes.

Figure 3: Factors Related to the Instructor
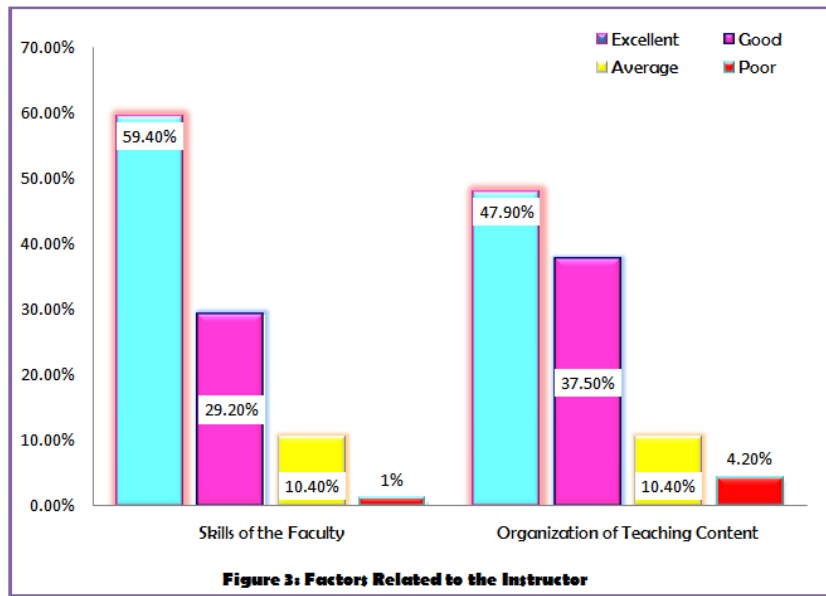
This figure shows that about sixty (59.4) percentage of them were stated that the instructor is having an excellent skills in managing virtual classes and at the same time about fifty (47.9) percentage of them were reported that the teachers are excellent in organizing teaching materials given to the students through Virtual classes.
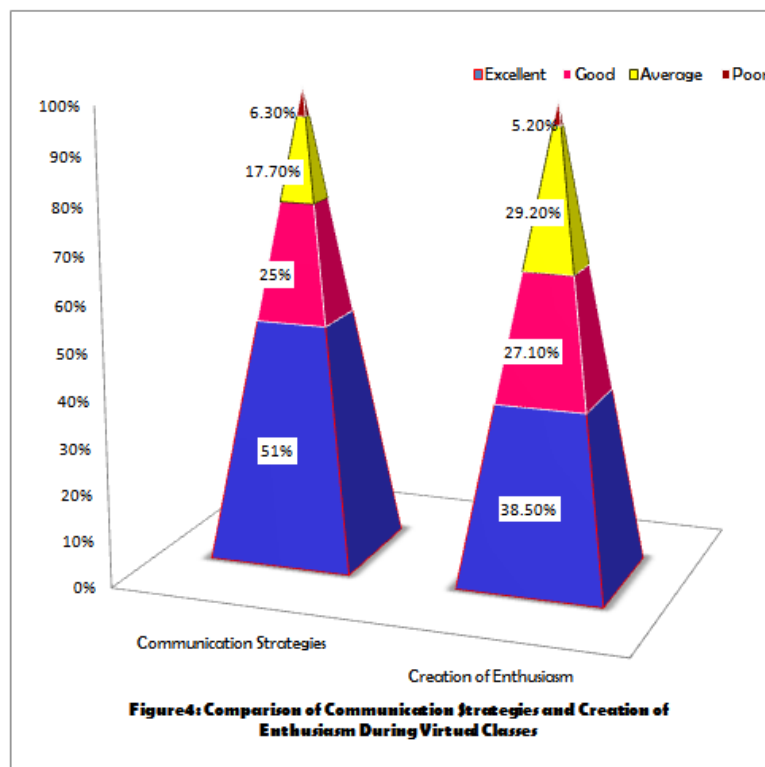
Figure4: Comparison of Communication Strategies and Creation of Enthusiasm During Virtual Classes

This figure depicts that more than fifty (51%) percentage of the samples were pointed out that the instructor is having an excellent Communication strategies during Virtual classes whereas 27.1 percentage of the subjects were reported that the instructor was good in creating enthusiasm and interest among the students during Virtual Classes.

3. FACTORS RELATED TO THE LEARNER OR STUDENTS, WHO WAS ATTENDEDTHE VIRTUAL CLASSES

### TABLE 4: FACTORS RELATED TO THE LEARNER OR STUDENTS

N=96

Variables	Frequency (N)	Percentage (%)
Level of understanding of the students about the technologies used in the Virtual classes		
Excellent	51	53.1
Good	35	36.5
Average	9	9.4
Poor	1	1.0
Participation / attendance of the students in virtual classes		
Excellent	56	58.3
Good	31	32.3
Average	9	9.4
Poor	0	0
Communication ability of the students during Virtual Classes		
Excellent	71	74.0
Good	15	15.6
Average	10	10.4
Poor	0	0
Punctuality of student's in activity related to Virtual class room		
Excellent	40	41.7
Good	49	51.0
Average	7	7.3
Poor	0	0
Student's desire to learn		
Excellent	57	59.4
Good	33	34.4
Average	6	6.3
Poor	0	0

This table depicts that about 36.5 percentage of the participants were reported that the level of understanding of the students about the technologies used in the Virtual classes was good, whereas 58.3 percentage of them was very excellent in participating all virtual classes. More than 50 percentage of the samples were very punctual in all activities related to Virtual classes. About sixty (59.4%) percentage of the participant were having excellent desire to learn. Majority (74 %) of the subjects were havingan excellent communication, whereas 15.6 percentage of them were good in communication during Virtual Classes.

Figure 5: Problems Faced by the Students During Virtual Classes
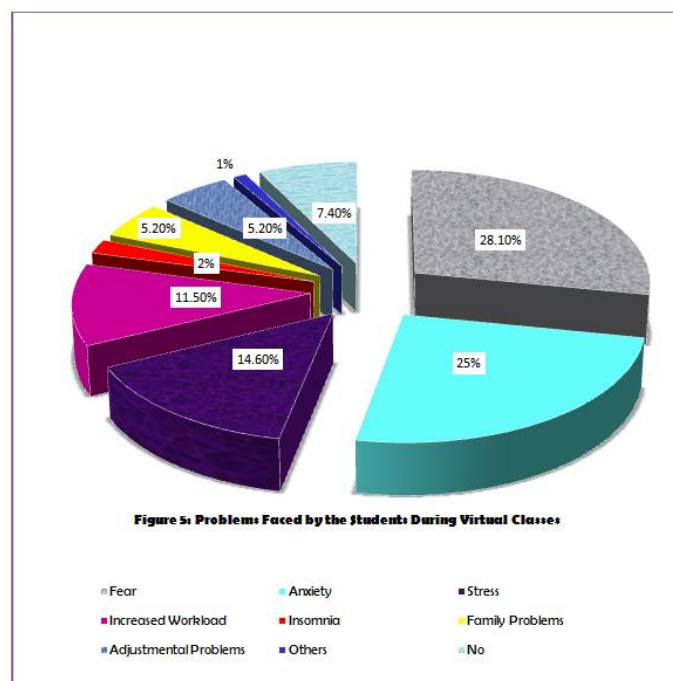
This figure demonstrated that, more than 25 percentage of the samples were have the problems of fear and anxiety dueto Virtual classes. About 11.5 percentage of the subjects were reported that they are having workload related to virtual classes. Because of virtual classes 5.2 percentage of the samples were suffered from family problems as well as adjustmental problems.

4. FACTORS RELATED TO THE INSTRUCTIONAL STRATEGIES OR METHODOLOGY USED IN THE VIRTUAL CLASSES

Figure 6: Methods of Instructional Strategies Used in Virtual Classes -Theory Session
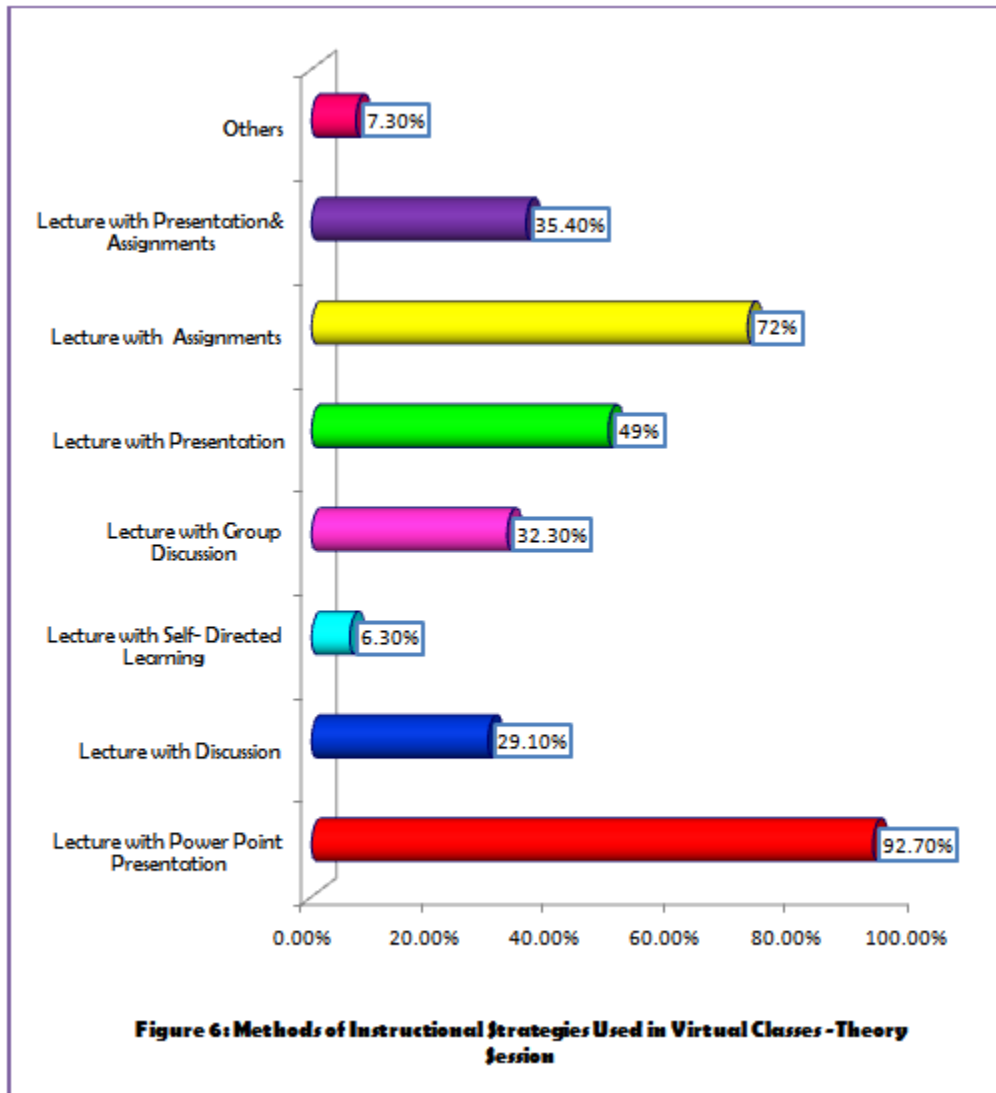
This figure shows that majority (92.7%) of the subjects were reported that the teachers are taking theory class by Lecture with Power Point Presentation method, but 32.3percentage of the samples expressed that the teachers are taking the class by lecture with group discussion.

Figure7: Methods of Instructional Strategies Used in Virtual Classes - Practical Session
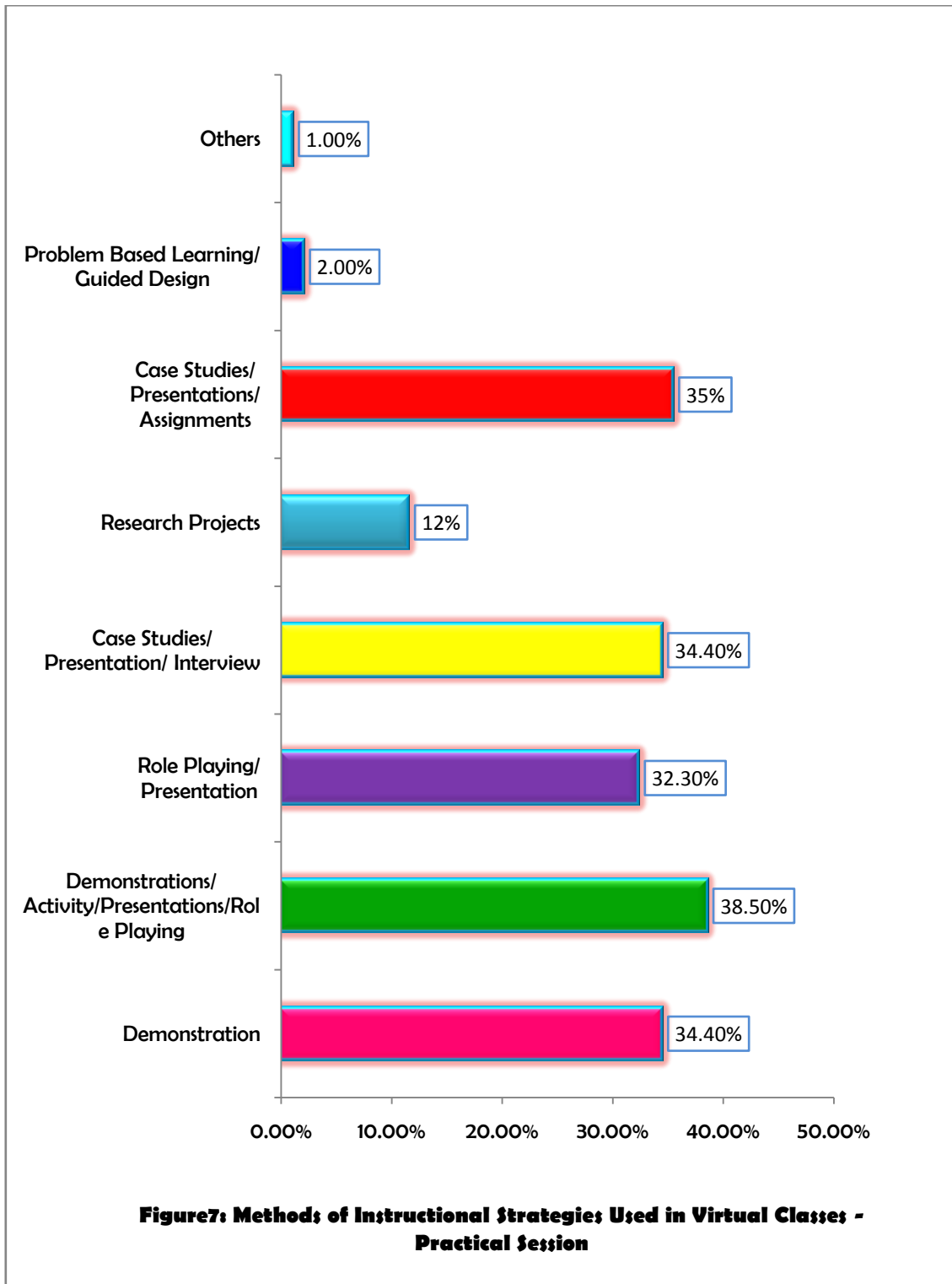
This figure exhibits that 38.5 percentage of the samples were reported that Demonstrations /Activity/ Presentations/ Role playing are the methods used in laboratory, where as 12 percentage of the subjects reported that research projects were also using in the virtual classes.

TABLE 5: FACTORS RELATED TO INSTRUCTIONAL STRATEGIES/ METHODOLOGY USED IN THE VIRTUAL CLASSES

N=96

| Variables	Frequency (N)	Percentage (%)
Skills of the teacher in handling different instructional strategies used in Virtual classes		
Excellent	40	42.0
Good	46	48.0
Average	5	5.0
Poor	5	5.0
Effect of teaching content / instructional materials given by the teacher during Virtual classes		
Excellent	56	58.3
Good	31	32.3
Average	9	9.4
Poor	0	0
Instructions given by the teacher on how to use these instructional strategies during Virtual classes		
Excellent	58	60.5
Good	37	38.5
Average	1	1.0
Poor	0	0

This table shows that 48percentage of the teachers were having good skills in handling different instructional strategies used in Virtual classes. More than fifty (58.3%) percentage of them were commented that the teaching materials as well as the instructions given by the teacher were excellent.

5. FACTORS RELATED TO THE EVALUATION METHODS USED IN THE VIRTUAL CLASSES
TABLE 6: FACTORS RELATED TOTHE EVALUATION METHODS USED IN THE VIRTUAL CLASSESN=96

| Variables	Frequency (N)	Percentage (%)
Ongoing or formative Evaluation methods used in Virtual classes		
Asking Questions to the students	57	59.4
Questions asked by the students	20	20.8
Messages through chat box	69	71.9
Feed back	24	25.0
Blog	7	7.29
Journals	20	20.8
Others	13	13.5
Weightage of assessment task - Quizzes / Midterm Exam/ Final Exam/ Hospital & Lab activities		
Excellent	57	59.4
Good	23	24.0
Average	8	8.3
Poor	8	8.3
Exam Preparation of students or Briefing of examination conducting through Black board Collaborate Ultra		
Excellent	64	66.7
Good	28	29.1
Average	4	4.2
Poor	0	0
Submission of answers of Open book exams/ Home work/ Assignments / Presentation/ Case Discussion / Group work/ Activity through Black board Collaborate Ultra		
Excellent	32	33.3
Good	59	61.5
Average	5	5.2
Poor	0	0
Announcement of the results		
Excellent	58	60.4
Good	30	31.2
Average	4	4.2
Poor	4	4.2

This table depicts that, 59.4 percentage of the teachers were asking questions to the students during online classes and more than 20 (20.8%) percentage of them were writing journals. Around 60 (59.4%) percentage of the samples were reported that mark distribution or weightage of the assessment task was

excellent. More than sixty (66.7%) percentage of the subjects were stated that they got very much relaxation after briefingsession of examination, so they reported it was excellent. About 61.5 percentage of the participants were expressed that submission of answers through Black Board Collaborate Ultra was very good and easy. More than sixty (60.4) percentage of the samples were shared that announcement of results after online exams was excellent.
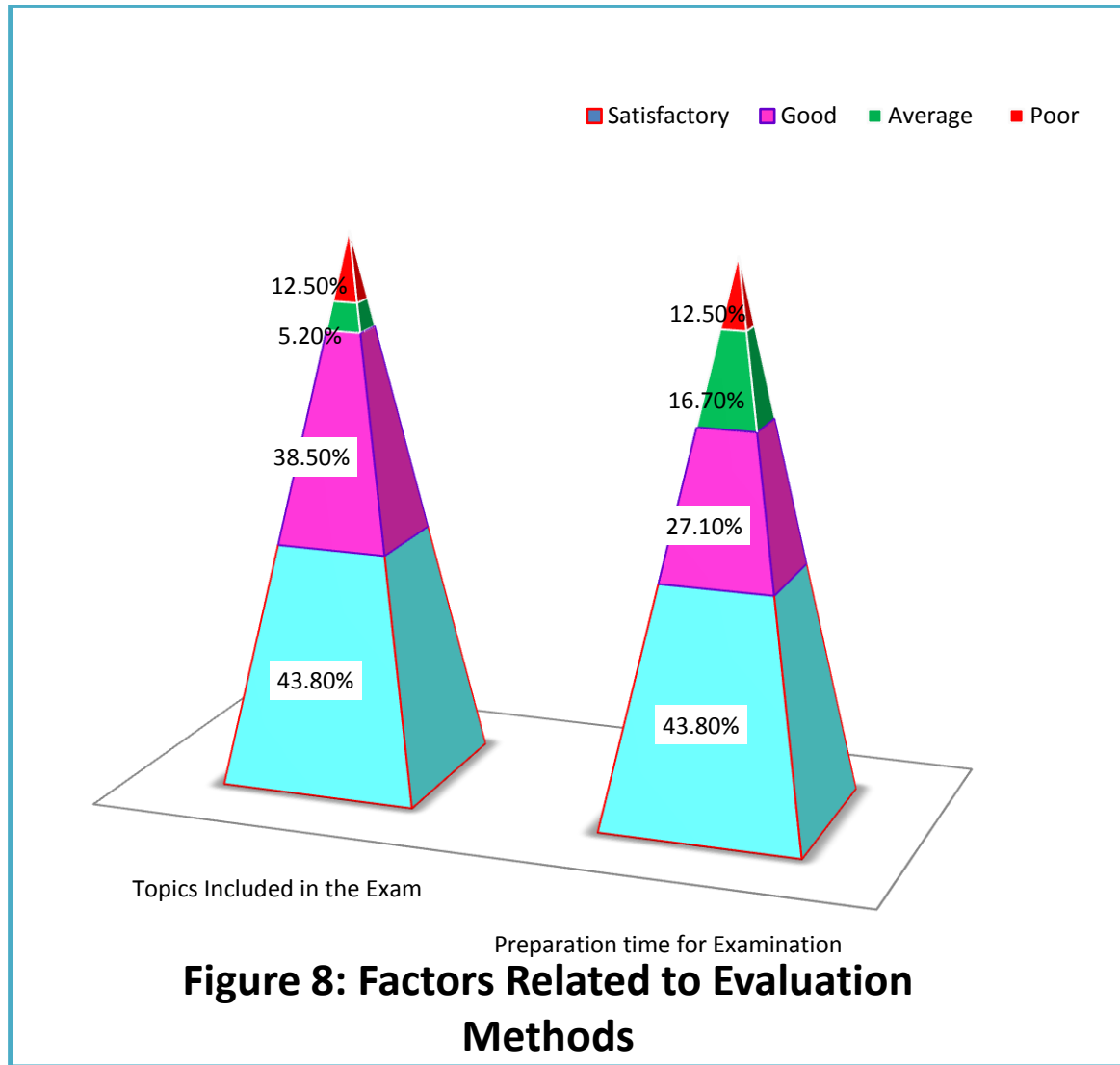

**Figure 8: Factors Related to Evaluation Methods**

This figure shows that 43.8 percentage of the samples were reported that topics included for the final Open book exams and preparation time for online exams was excellent, but 27.1 percentage of the subjects state that preparation time for examination was good.

Figure 9: Comparison of Time and Topic Allotted for Examinations
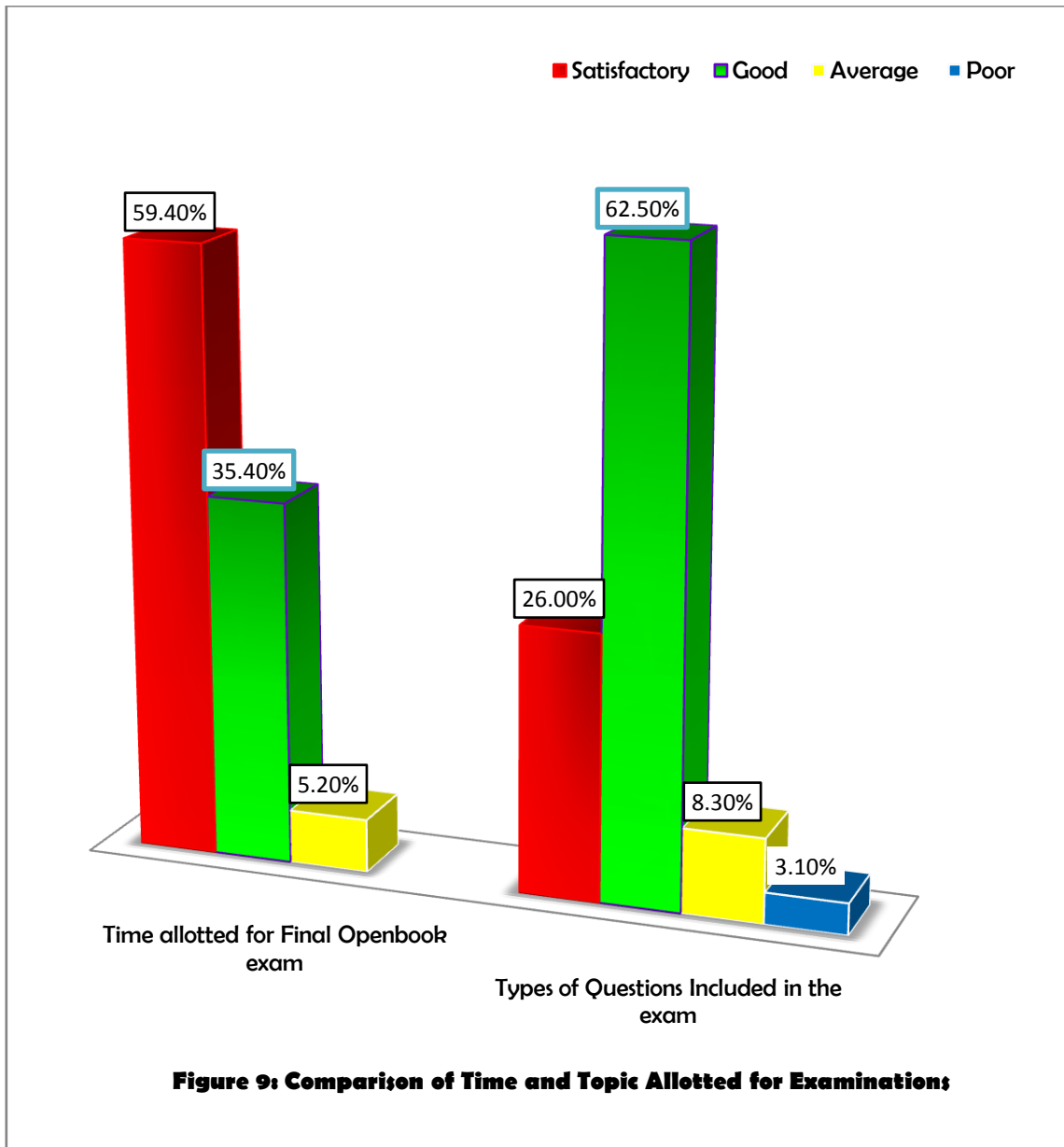
This figure revealed that 59.4 percentage of the samples were reported that time allotment for final open book exams was excellent, but 62.5 percentage of the subjects state that type of questions included in the online examination was good.

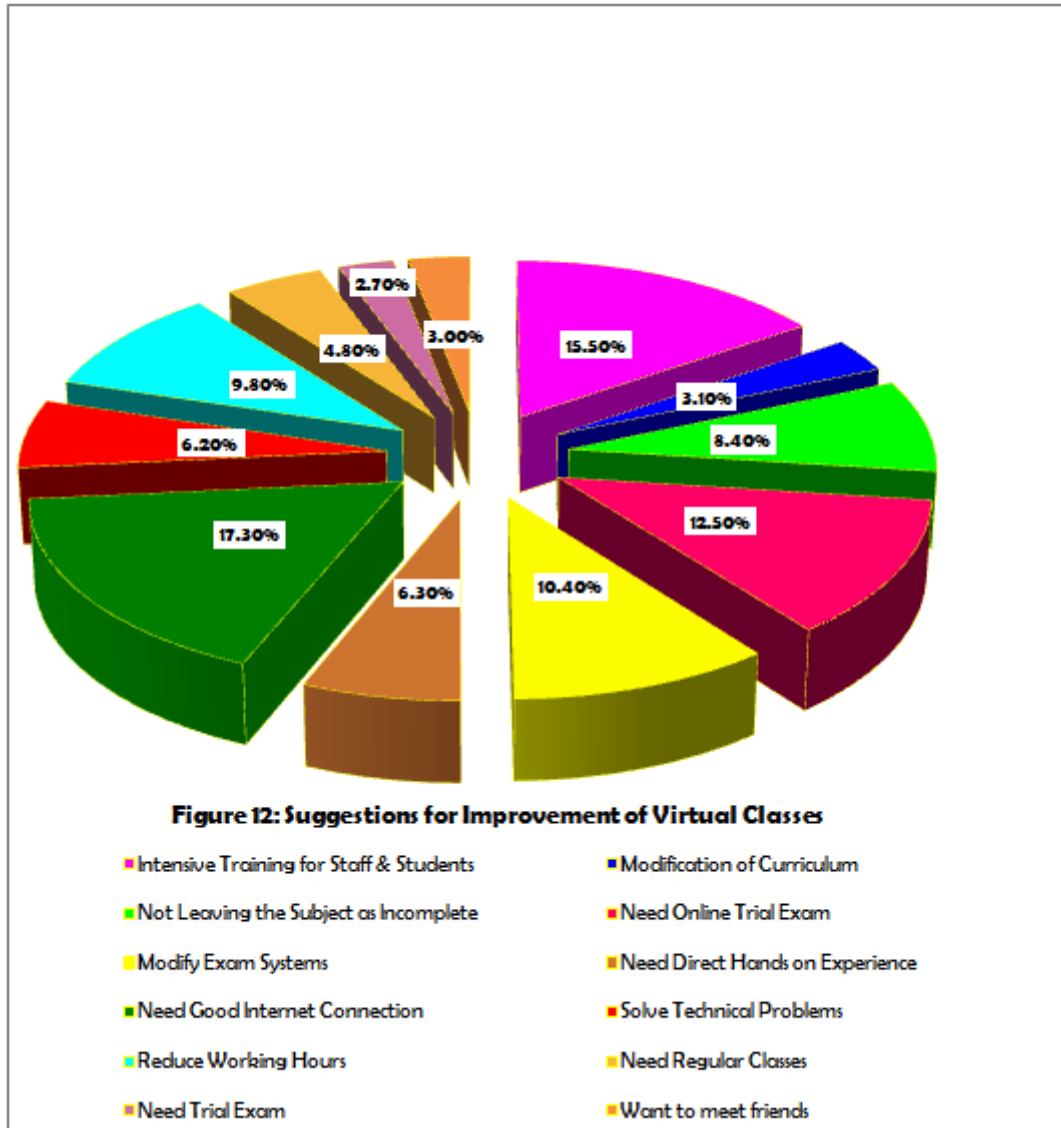**Figure 10: Rubrics/ Grading Points Used in Evaluation or Assessment**
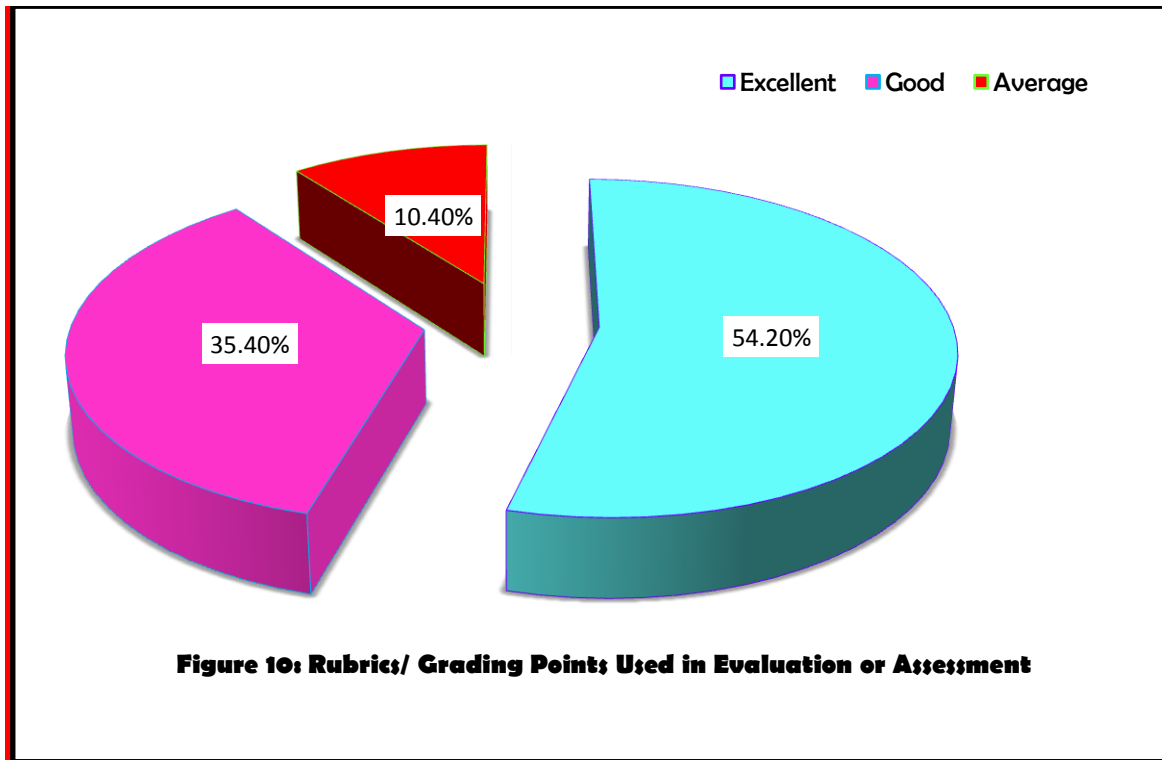
This figure demonstrated that more than fifty percentage (54.2%) of the samples were reported that Rubrics or grading points used in final Open book exams/ Home work/ Assignments / Presentation/ Case Discussion / Group work/ Activity/ Discussion board was excellent. About 10.4 percentage of the participants were reported that Rubrics system was average.
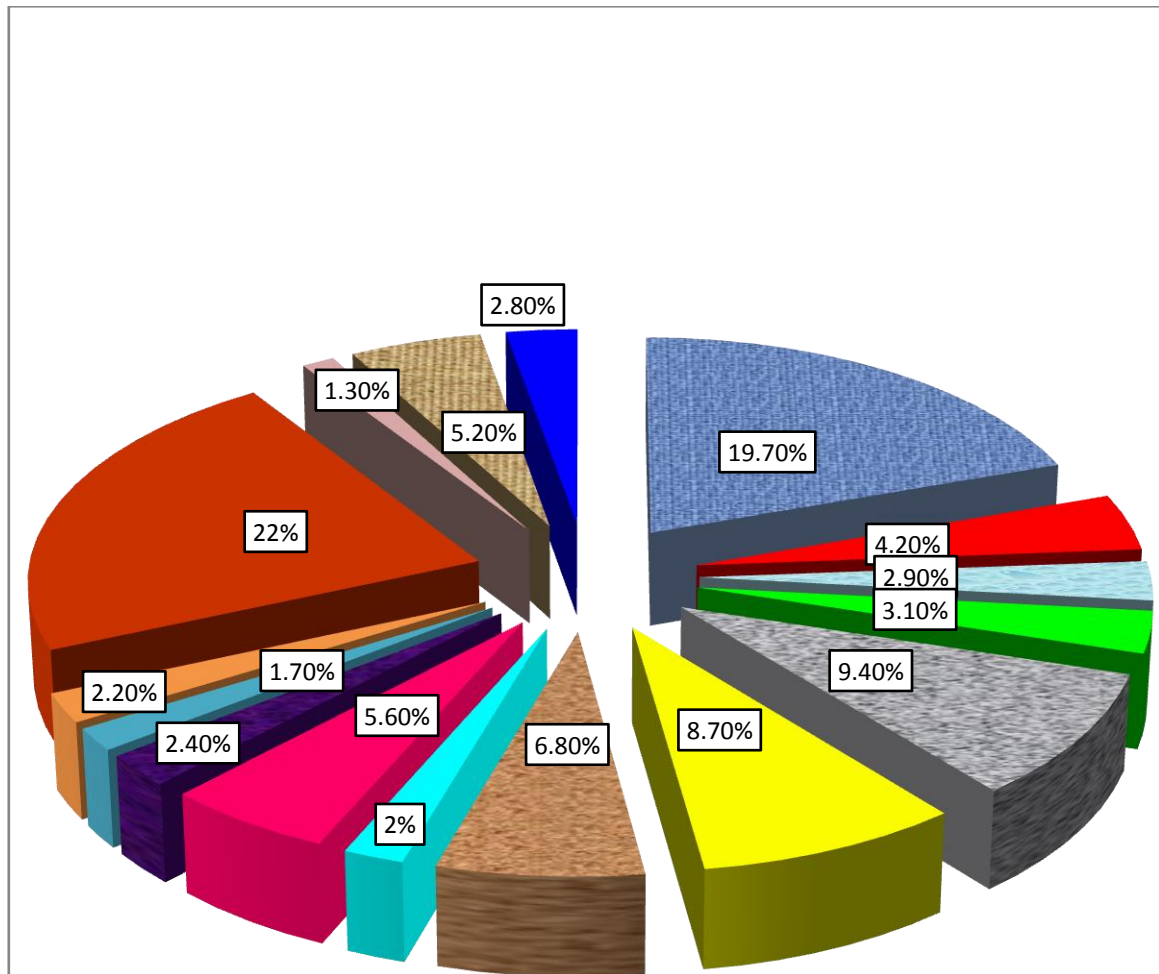
Figure 11: Challenges and Issues Related to Virtual Classes

- Problems in Internet Connections — 19.70%
- Adjustmental Problems — 4.20%
- Missing Graduation — 2.90%
- Environmental Problems — 3.10%
- Technical Problems — 9.40%
- Missing Friends — 8.70%
- Problems related to Online Evaluation — 6.80%
- Long working Hours — 2%
- Lack of Training on Virtual Classes — 5.60%
- Uncertainty — 1.70%
- Missing College Days — 2.40%
- Missing Combined study — 2.20%
- Fear and Anxiety — 22%
- Attending classes — 1.30%
- Initial Difficulties in understanding Virtual classes — 5.20%
- Missing Classroom Atmosphere — 2.80%

This figure depicts that 19.7percentage of the participants were reported that, they have problems in internet connections during the virtual classes. More than twenty (22%) percentage of the subjects were expressed that they have the problems of fear and anxiety due to virtual classes. About 8.7 percentage of the participants were shared that they have the feeling of missing friends. Few of them were reported that they missed their happy college days (2.2%) and missing graduation program (2.9%). About 5.2 percentage of the subjects expressed that they have some initial difficulties in understanding virtual classes.

Figure 12: Suggestions for Improvement of Virtual Classes

- Intensive Training for Staff & Students
- Modification of Curriculum
- Not Leaving the Subject as Incomplete
- Need Online Trial Exam
- Modify Exam Systems
- Need Direct Hands on Experience
- Need Good Internet Connection
- Solve Technical Problems
- Reduce Working Hours
- Need Regular Classes
- Need Trial Exam
- Want to meet friends

This figure demonstrated that 15.5 percentage of the subjects were suggested that, before starting virtual classes staff and students need intensive training in virtual classes and Black Board Collaborate Ultra. About 12.5 percentage of the participants were expressed that they need online trail exams before starting final exams. Around 17.3 percentage of the participants were suggest that they need good internet connections. Around 6.3 percentage of them were expressed that they need direct hands on experience and 9.8 percentage suggest to reduce working hours and 3.1 percentage suggest for curriculum modification. About 8.4 percentage suggest that, not leaving the subject as Incomplete or IC. Around 4.8 percentage need regular classes, they want to come back to the College as early as possible.

III. ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC VARIABLES AND FACTORS AFFECTING VIRTUAL CLASSES

TABLE 7: ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC VARIABLES AND GENERAL FACTORS AFFECTING VIRTUAL CLASSES

Variables	Chi-Square (χ^2)	Degree of Freedom (df)	P Value
Age	53.750	3	.000***
Education	59.211	1	.000***
Year of Study	6.438	2	.040
Marital status	202.250	3	.000***
Subject registration	.250	2	.882
Theory Credit Hours	.250	2	.882

Practical Credit Hours	4.188	2	.123
Mode of announcement system used in Virtual classes	47.229	4	.000***
Accessibility of the Black Board Collaborate ultra	59.583	3	.000***
Suitability of the Black Board Collaborate ultra	55.188	2	.000***
Association between Socio-demographic Variables and Factors Related to the Instructor			
Clarity of the Virtual classes	33.063	2	.000***
Level of understanding of the Instructor, about the technologies used in the Virtual classes	60.917	3	.000***
Skills of the instructor in managing virtual classes	44.417	3	.000***
Organization of teaching content related to Virtual classes	51.000	3	.000***
Communication strategies used by the instructor during Virtual Classes	39.583	3	.000***
Ability of the instructor in creating enthusiasm and interest among the students during Virtual Classes	16.250	3	.001***
Association Between Socio-demographic Variables and Factors Related to the Student			
Level of understanding of the students about the technologies used in the Virtual classes	66.833	3	.000***
Participation / attendance of the students in virtual classes	34.563	2	.000***
Communication ability of the students during Virtual Classes	71.688	2	.000***
Punctuality in student's activity	30.563	2	.000***
Student's desire to learn	40.688	2	.000***
Health Problems related to virtual classes	50.167	7	.000***
Association Between Socio-demographic Variables and factors related to Instructional Strategies / Methodology used in Virtual Classes			
Methods of Instructional strategies used by the teacher during Virtual classes of theoretical sessions	84.104	4	.000***
Methods of Instructional strategies used by the teacher during Virtual classes of Laboratory / Practical sessions	47.333	4	.000***
Skills of the teacher in handling different instructional strategies used in Virtual classes	60.167	3	.000***
Use of teaching content / instructional materials given by the teacher during Virtual classes	34.563	2	.000***
Instructions given by the teacher on how to use these instructional strategies in Virtual classes	51.938	2	.000***
Association Between Socio-demographic Variables and Factors Related to the Evaluation Methods Used in Virtual Classes			
Ongoing or formative Evaluation methods used in virtual classes	15.625	5	.008***
Weightage of assessment task - Quizzes / Midterm Exam/ Final Exam/ Hospital & Lab activities	66.750	3	.000***
Topics included for the final Open book exams/ Home work/ Assignments / Presentation/ Case Discussion / Group work/ Activity/ Discussion board.	41.583	3	.000***
Rubrics or grading points used in final Open book exams/ Home work/ Assignments / Presentation/ Case Discussion / Group work/ Activity/ Discussion board	27.750	2	.000***
Study time or Preparation time for examination	22.333	3	.000***
Exam Preparation of students or Briefing of examination conducting through Black board collaborate ultra	57.000	2	.000***
Time allotted for final open book exams	42.438	2	.000***
Types of questions included in the exam–Match the following / Differentiating / Reasoning/Case scenario/ Short answer question	83.083	3	.000***
Submission of answers of Open book exams/ Home work/ Assignments / Presentation/ Case Discussion / Group work/ Activity through Black Board Collaborate ultra	45.563	2	.000***
Announcement of the results	83.000	3	.000***

Challenges & issues related to virtual classes	56.500	9	.000***
Suggestions for improvement of virtual classes	26.500	9	.002***

This table shows that there was a significant association between socio-demographic variables and factors affecting virtual classes among Bachelor Nursing Science Students of Northern Border University. P value is less than 0.05* so the research hypothesis H1 was accepted.

TABLE 8: CORRELATION BETWEEN SOCIO-DEMOGRAPHIC VARIABLES AND FACTORS AFFECTING VIRTUAL CLASSES

Variables	Pearson Correlation (r)	Level of Significance P Value	Type of Correlation
Education Program	.279**	.006**	Positive
Year / Level of study	.530**	.000**	Positive
Marital Status	-.220*	.031*	Negative
Number of Subject Registered for Virtual Classes	-.510**	.000**	Negative
Credit Hours for Theory Session/ Week	-.510**	.000**	Negative
Credit Hours for Practical Session / Week	.323**	.001**	Positive
Punctuality in Student's Activity	.265**	.009**	Positive
Skills of the teacher in handling Instructional Strategies used in Virtual Classes	-.206*	.045*	Negative
Issues and Problems of virtual classes	-.201*	.050*	Negative

Figure 13: Correlation Between Sociodemographic Variables and Factors affecting Virtual Classes
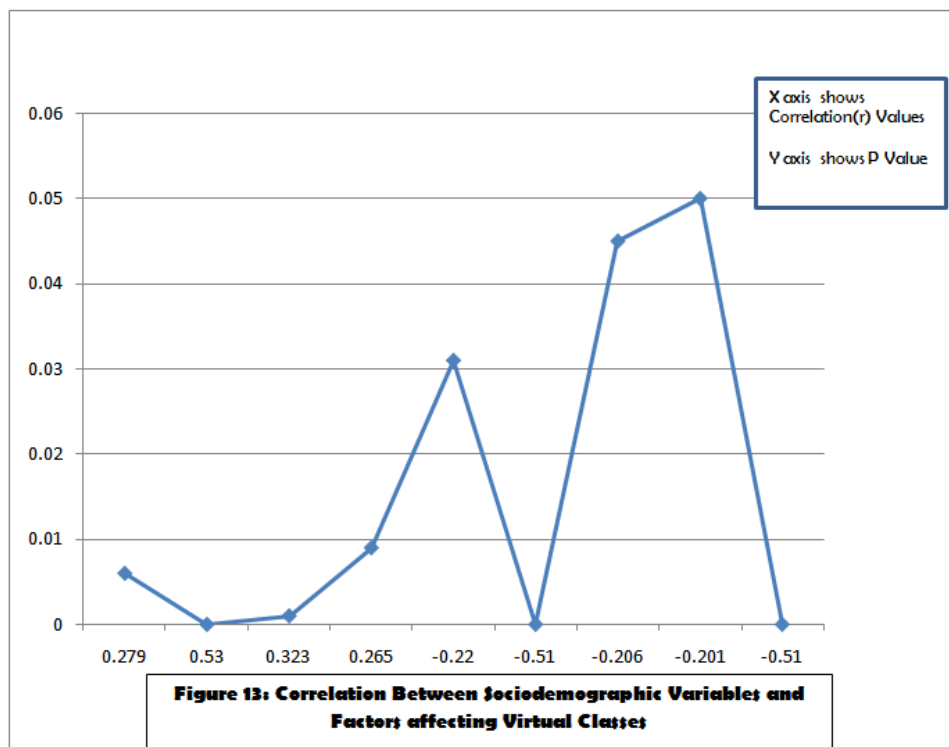
Table 8 and Figure 13 demonstrate that there was a significant positive correlation between Socio-demographic variables and factors affecting virtual classes like Education Program, Year /Level of study, Credit Hours for Practical Session / Week, Punctuality in Student's Activity among Bachelor Nursing Science Students. Correlation is significant at the 0.05 level* (2-tailed).

There was a significant negative correlation between Socio-demographic variables and factors affecting virtual classes like Marital Status, Number of Subject Registered for Virtual Classes, Credit Hours for Theory Session/ Week, Skills of the teacher in handling Instructional Strategies used in Virtual Classes,and issues and problems of virtual classes.Correlation is significant at the 0.05* level (2-tailed). So the research hypothesis H2 was accepted. All other variables are not having either positive or negative correlation..

IV. Discussion

The current study findings depicts that 88.5 percentage of the subjects were studying in Basic B. Sc Nursing program and 11. 5 percentage of the samples were studying in Post Basic B.Sc Nursing program. Around 35.4 percentage subjects were studying in Final year, 31.3 percentage of the samples were studying in third year, whereas 33.3 percentage of them were in second year. About 60(59.4 %) percentage of the participant were having excellent desire to learn. This was supported by the study of Mohamed Ali and WafaaGameel Mohamed Ali,(2016), their study reports revealed that, the majority of nursing students were studying in different academic level (3rd level to 8th level) and majority of the nursing students have high score level of e-Learning readiness.

The present study findings demonstrated that,4.2 percentage of the participants were commented that they have initial difficulties in adjusting with virtual classes and more than 20 percentage of the subjects were requesting for training sessions on virtual classes for both students and staff. More than fifty (57.2) percentage of the subjects were reported that Black Board Collaborate ultrawas an excellent virtual platform and it is very accessible and available to the participants. These findings were supported by systematic literature review of Belo Horizonte., 2019,she identified some difficulties in the implementation of virtual learning and teaching models. It was observed that such obstacles revolve around approaches of the teachers' digital competences and the use of collaborative learning tools. In this sense, the researcher suggests as an execution of teacher improvement programs for the development of good practices among the teachers.

In the current study, majority(92.7%) of the subjects were reported that Lecture with Power Point Presentation was the teaching methodology used during theory classes. Around 38.5percentage of the samples were reported that Demonstrations /Activity/ Presentations/ Role playing are the teaching methodology used in laboratory, where as 12 percentage of the samples reported that projectsmethods were also using in the virtual classes. It was supported by GarryFalloon, 2011,in her study; she suggests that the educators and course designers need to embed strategies into their online offerings to enable students to develop three specific areas of knowledge – technical, procedural and operational, that were identified as being critical to student performance in this environment. So the students will gain substantial benefit from the availability of virtual classrooms. It was also supported by the study of Alina Zapalska, (2001), she identifies four distinct learning styles: visual (V); aural (A); reading/writing (R); and kinaesthetic (K). These four dimensions are used to analyze the appropriateness of online learning structures. So she prefers to use a multi-model learning style during online education. The combination of different techniques can make it possible for students with all types of learning styles to be successful in an online course. However, it is important to keep in mind that, even if a specific student learns best in a certain way, if the student should be exposed to a variety of learning experiences to become a more versatile online learner.

Present study findings revealed that all the participants were used Black board collaborate ultrais the online platform. About 33.3 percentage of the participants were reported that online submission of Assignments /Submission of answers of Open book exams/ Home work/ Presentation/ Case Discussion / Group work/ Activity through Black Board Collaborate ultra was excellent and easy. More than fifty (54.2) percentage of the samples were reported that Rubrics or grading points were used in virtual class assessment and evaluation, it is an excellent one. About 57.3 percentage of the subjects were reported that virtual class was excellent. Around 58.3 percentage of students were have excellent participation and attendance in the virtual classes. It was supported by the study of MaySok-ching Chan and Russell F. Waugh (2007), their study was to investigate the factors that affect students' participation in the online learning environment (OLE) for distance learning students and to compile students suggestions to improve their use of the OLE. Results of the study revealed that students are like to use the Online Learning Environment (OLE) for sharing and learning from each other. They also preferred to have tutorial notes and the solutions for the assignments. Students also suggested for electronic submission for assignments.

In the present study findings depicts that, 57.3percentage of the subjects were reported that clarity of virtual class was excellent. Aboutsixty (59.4%) percentage of them were stated that the skill of the instructor/ teacher in managing virtual classes was excellent. More than fifty (51%) percentage of the samples were pointed out that the instructor is having an excellent communication strategies during Virtual classes and 27.1percentage of the subjects were reported that the instructor was good in creating enthusiasm and interest among the students during Virtual Classes. It was supported by the study of Karen Swan (2006), shefound that three general factors – clarity of design, interaction with instructors, and active discussion among course participants – significantly

influenced students' satisfaction and perceived learning. Such findings are related to various kinds of interactivity and a 'community of inquiry' model of online learning.

The current study finding shows that, an excellent level of understanding about the technologies used in the Virtual classes among the teachers and the studentswas 57.3percentageand 53.1 percentage respectively. Regarding communication strategies used by the teacher as well as the student, it was reported that 51percentage of the teachers and 74 percentage the student have an excellent interaction and participation throughout the virtual classes. More than 25 percentage of the samples were have the problems of fear and anxiety due to Virtual classes, where as 5.2 percentage of the samples expressed that they are having some family problems due to virtual classes. About 11.5 percentage of the subjects reported that they are having workload related to virtual classes. It was supported by the report of Eva Martinez-Caro(2011),suggest that the interaction isthe key to getting successful outcomes, that the right mixture of human values and technology must be found, that is crucial to teach students to learn online and that special attention must be directed to non- traditional students who have the additional pressure of resolving time conflicts between e- learning, work and/or family life. These findings can help colleges and schools offering e- learning courses to learn more about how to enhance students' success.

Present study findings depicts that, 58.3 percentage of them was very excellent in participating all virtual classes and 50 percentage of the samples were very punctual in all activities related to Virtual classes. About 59.4 percentage of the participants were having excellent desire to learn.Around 27.1 percentage of the subjects were reported that the instructor was good in creating enthusiasm and interest among the students during Virtual Classes.Cross-case analysis of naturalistic case studies of online classes by VanessaPaz Dennen's (2013) shows that how activity designs and facilitation factors affected various dimensions of student participation. Finding shows that use of guidelines, deadlines, feedback and type of instructor; all these factors affect the results of an online class. This paperalso explores how particular types of learning activities are better suited to generating discussion than others and how the integration of discussion activities with the rest of the course activities and requirements impacts learner motivation and participation. WafaaGameel Mohamed Ali's (2012) study findings was contradictory with current study findings, it revealed that 61.5 percentage of the participants were unsatisfied with their e-learning experience and learner attitude towards computer, learners' computer anxiety, e-learning course flexibility, e- learning course quality, technology quality, perceived usefulness, perceived ease of use, diversity in assessment, and learner perceived interaction with others were the critical factors affecting learners' perceived satisfaction. Hana Abdullah Al-Naim (2012), her overall result shows that for most courses, there were no significant differences in the performance of online and face-to-face students assigned to the same course and taught by the same instructor. No significant difference in student performance between online and face-to-face (F2F) learners overall, with respect to gender, or with respect to class rank were found.

LIMITATIONS AND DELIMITATIONS OF THE STUDY

This study was to explore the sociodemographic factors and factors affecting virtual classes among Bachelor Nursing Science students of Northern Border University. The researcher selected appropriate research methodology for the study i.e.Quantitative Research Approach with Exploratory Descriptive Design. Proportionate Stratified Random sampling techniques with structured questionnaire was used to collect the data from the subjects. Statistical Package for Social Science was used for analysis of the study. Findings of the study can be generalized. Recommendations of the study will be focusing on Blended Learning and Collaborative Learning, which will enhance effective online teaching learning activities. These are the delimitations of the study. This study was conducted in only one setting, i.e. at College of Nursing, Northern Border University, Arar,Kingdom of Saudi Arabia. This was the limitation of the study.

RECOMMENDATIONS OF THE STUDY

Virtual Classroom is the most important and efficient way to reduce distance barrier in education and collaboration. Virtual classroom has many advantages over traditional classrooms for teaching and learning, 24 X 7 from anywhere. Virtual classroom eliminates the limitation of time and location.

Education has changed a lot in the last couple of decades. Technology has completely changed our learning experience and has made it more personal and interactive. It's important that education evolves with these new learning styles. Virtual learning is a popular way to overcome the school closure due to COVID-19 Pandemic. It is more convenient andflexible. Due to the current situation of COVID-19 Pandemic, the Researcher strongly recommended for "Blended Learning" and Collaborative Learning during Virtual Classes. The Blended Learning will be achieved through:-

- Include Variety of Content Presentation and Learning Activities during Virtual Classes.
- Provide Psychologically Safe Environment for the Learner.
- Always maintain high interactivity with learner and the teacher in virtual classrooms.

- Always provide Student Centered Instructions about virtual classes, so it will help to improve their autonomy and independence.
- Try to maintain Positive and Constructive Feedback to the learner.
- Enhance Collaborative Learning that will promote critical thinking skills in the learners. Knowledge can be created with in a student, where members actively interact by sharing their experiences.
- The faculty will enhance the Digital Literacy Skills, Instructional Design Skills, Content Development Skills, Communication Skills, Organizational Skills, and Motivational Skills.

V. Conclusion

Virtual classes are the classes taken by the teacher in the digital learning environment. The technology cannot replace the job of the teacher, but it does lend itself as a very useful tool for enhancing the experience for both the teacher and the student. Virtual Classroom is the most important and efficient way to reduce distance barrier in education and collaboration. Learners have the freedom to study, finish assignment, engage with other participants, absorb learning content, and take exams at any time that fits best of their schedule. In order to help students succeed in online education, instructors must understand how they learn, how they perceive, and how they process information.The researcher strongly recommended to modifying Bachelor Nursing Science students curriculum with the facilities of Blended learning and Collaborative Learning facilities during Virtual Classes.According to William A Ward**"The Mediocre teacher tells., The Good Teacher explains., The Superior Teacher Demonstrates., The Great Teacher Inspires",** so all the teachers will try to make inspiration to all your students".

Acknowledgement

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