

## Assessing Perception of Active Learning among Nursing Students at Al-Baha University: A descriptive Cross-sectional Study

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### Abstract

**Background:** Active learning (AL) strategies engage students in the learning process and encourage them to reflect on their learning. **Aim:** The aim of the current study was to assess perception of active learning among nursing students at Al Baha University. **Design:** Descriptive cross-sectional research design was adopted to conduct this study. **Setting:** This study was conducted at Al-Baha University, Faculty of Applied Medical Sciences, Nursing Department. **Sample:** Convenience sampling technique was employed to select 89 students who fulfill the inclusion criteria. **Instruments:** An online questionnaire was used to assess students' perception of active learning. This instrument consists of three dimensions; benefits of active learning, factors affecting active learning, and barriers to active learning. **Results:** Active learning was beneficial from study subjects' perspectives. The highest percentage of agreement was that active learning boosts self-confidence amongst the students, increases teacher-student interaction and develops more interest in studying. Furthermore, students agree on almost all factors influencing active learning. Regarding barriers to active learning, most of students considered large group of students in the class as a major barrier for active learning. **Recommendation:** The active learning as teaching and learning strategy should be adopted in teaching students in nursing program, there should be motivation in the form of extra marks and recognition for students who are active participants in the active learning process.

**Keywords:** Active Learning, Nursing Education, Nursing Students

### Introduction/Background:

University education is a human and social profession of education and the transfer of science and knowledge to generations through time. Through developments and advances in science, education strategies have evolved into 10 strategies; "Using the TEAL Classroom, Case-Based Learning, Digital Learning, Effective Class Discussions, Effective Lecturing, Team-Based Learning, Flipped Classroom, Large Classes, Group Work and, Active Learning" (Arvalho, 2021). Under the influence of education for sustainable development, active learning classrooms, as the new learning environment in higher education, have become increasingly diversified and flexible, with a greater emphasis on student experience and engagement (Peng, Jin, Deng, Gong, 2022).

Active learning is an approach to instruction that involves actively engaging students with the course material through discussions, problem solving, case studies, role plays and other methods. Active learning approaches place a greater degree of responsibility on the learner than passive approaches such as lectures, but instructor guidance is still crucial in the active learning classroom. Active learning activities may range in length from a couple of minutes to whole class sessions or may take place over multiple class sessions (Cohen, Buzinski, Armstrong-Carter, Clark, Buck, & Rueman, L, 2019).

The concept of active learning is one in which students are directly involved by the teacher through which they understand better and they tend to learn more. There is sometimes certain knowledge that is not directly

understood by the student; therefore, the teacher tends to make it easier by involving them in the part of learning with one on one interaction and discussions. This in turn results in the student engaging himself and learning better which helps him remember that information for a longer period of time. Active learning is essential in the classroom. It is very important to engage students in thinking and taking part in activities like analyzing and evaluation. In classrooms, some students chose to stay silent and listen to lectures rather than actively participating. Other in-class activities that uplift the students' communication skills are games, group discussions active and collaborative learning (Zeeshan, et al., 2020).

Active learning (AL) strategies engage students in the learning process and encourage them to reflect on their learning. Although nursing students in many programs prefer to be passive learners, nursing faculty are integrating active learning in their courses (Oermann, 2015). Active learning involves use of different student centered teaching strategies. Whereby students are actively engaged in building and understanding of facts, ideas, and skills through instructor directed tasks and activities (Miguel, et al., 2022).

Students state that AL improve understanding of course material and learning in small group help them to learn the concept. Likewise, Socratic lectures facilitate two-way communication in class, and are hence, preferred by students. The students stated that AL strategies promote critical thinking, motivate students in the class, and integrate theory into practice. Other studies stated that AL strategies enrich students' engagement, comprehension of content, and boost critical thinking skills. Active learning techniques are an effort and opportunity for students to actively build their knowledge (Patil & Kamerikar, 2020).

Active learning also enhances the performance of nursing student in clinical practices as well as in theory classes. Active learning model is encouraging in the clinical setup as well as in class room, the nursing student might improve their performance which will increase their ability to learn and practice

their expertise with willingness and interest. The effectiveness of active learning strategy was determined by comparing it with passive learning, a session on NCP was arranged for all students, a group of students were taught through traditional lecture (Leong & Clutter, 2015).

Active learning has multiple benefits on student learning outcomes. AL describes pedagogical methods that provide students with opportunities to actively engage, process, and apply information they have been taught. AL is based on the constructivist learning theory—new knowledge is built from prior knowledge—proposed by Jean Piaget by providing regular structured and guided opportunities for students to become active players in their learning process—such as AL in lectures—provides them with opportunities to construct personal understandings of concepts and subsequent reflection, helps them integrate new knowledge with what they already know. This phenomenon has been coined the “Carnegie Hall hypothesis”. AL activities provide students with the opportunity to regularly use higher-order cognitive skills and learn constructively, allowing them to integrate new information with pre-existing information and develop a deeper understanding that increases student learning (Jaime McDermott, 2022).

Barriers to the adoption of active learning practices are pedagogical approaches that have demonstrated value in the classroom. There are a number of reported barriers to the adoption of active learning in general and these include institutional climate, time constraints and background. It is interesting that many of these perceived barriers have been known for some time (Tharayil, et al., 2017).

Nursing students, who are digitally connected, appreciate the use of innovative and active teaching strategies such as gaming to enhance their satisfaction and even enjoyment in their educational endeavors. In addition, the need to enhance traditional learning facilitates their motivation and promotes effective learning. Nursing educators who incorporate the use of gaming into active learning teaching strategies in the classroom and/or clinical setting can effectively provide positive change to the

learning process (Sharma, 2017; Xu, 2016).

Learning can be seen to be exciting, may increase how the nursing student engages and retains the information, assists with problem-solving, increases the nursing students' monitoring of their own abilities to learn, and most importantly, enables critical thinking skills (Verkuyl, et al., 2016). For many years, traditional teaching methods have been the mainstay for both the nursing classroom and nursing clinical setting. Today, as technology and social media have engrossed the nursing student, newer methods must be incorporated (Bector, 2019; Kinder & Kurz, 2018; Sharma, 2017; Ferguson, et al., 2015). Ferguson et al. (2015) defined games as simply that of playing a game. These games can be in many forms such as puzzles, role-play, clickers, computers, tabletop, or card games (Xu, 2016).

Koivisto et al., (2018) presented that gaming in the form of simulation can be repeated, can offer the same content to all nursing students, and depending on the game, can allow nursing students to progress at their own speed. Even though the nursing students tend to have a positive perception of the games, nursing faculty must listen to the nursing student's post-game comments. Additional suggestions from nursing students can be helpful for future games. Wingo et al., (2019) used Kaizen gaming with Millennials finding that they preferred the use of a mobile application instead of using a link to access the game. The nursing students also suggested a competition with another nursing program in their community and were allowed to have questions available for future studying purposes (Wingo et al., 2019).

Student engagement with the current nursing student learners are key to keeping their attention and allowing learning to take place. As nursing faculty, we must replace the past learning methods and move into the future with our techniques. Nursing student involvement can be facilitated with the use of gaming and especially with the incorporation of technology. Whether nursing content is presented through a board game or a computerized method, finding the most optimal manner to augment the teaching and learning process is imperative for

not only nursing students but also students in any discipline (Bector, 2019).

Performance of nursing requires a cognitive ability that includes problem solving, decision-making, and clinical judgment. The growth of Problem based learning (PBL) modules and curricula throughout many health care disciplines have increased dramatically over recent years. PBL encourages a more meaningful engagement by trainees in problems representative of the scope, complexity and difficulty of real-world issues they are likely to encounter in the workplace. In this way, PBL facilitates the instructor in achieving one of the most important goals of education, the development of trainees who are effective problem solvers (i.e., critical thinkers) and lifelong learners (Pérez-Perdomo A, Zabalegui, 2023).

Portfolio is defined as a collection of various documents in learning products or their storage in the virtual environment in order to evaluate the development of students' abilities and academic success. A structured portfolio can be used as a tool for evaluation, education and management (Demirtas & Gogus, 2013). A paradigm shift in nursing education is occurring, one that is changing the role of both the nurse educator and student. Active learning strategies are being integrated into more classrooms to "shift the focus from covering decontextualized knowledge to teaching for a sense of salience and situated cognition" (Culha, 2019).

The scrambled classroom is composed of a "mix of direct instruction and practice and feedback". It allows educators to use both lecture and active strategies in a balanced, complementary manner. Replacing one rigid pedagogy with another rigid pedagogy is subsequently avoided. The term "flipping the classroom" can be problematic for many faculties who are apprehensive about completely changing how they teach. Replacing "flipping the classroom" with the less intimidating and more accurate "scrambled classroom" might support a more positive attitude towards using active learning strategies. The flipped classroom is a pedagogical model in which the typical lecture and homework

elements of a course are reversed. Eric Mazur, a physics professor, began using peer instruction and interactive learning in the 1990s. He was prompted to change his instructional methods when students at the end of his physics course demonstrated a lack of understanding of basic concepts (Betihavas, Bridgman, Kornhaber, & Cross, 2016).

### Research Problem:

Some studies (Zeeshan et al., 2020; Patil & Kamerikar, 2020; Jaime McDermott, 2022) emphasized the importance of including active learning within the educational system for nursing students, as they found a positive and effective impact on students and educational outcomes.

Al-Baha University has begun to apply different learning methods and effective educational strategies, including active learning in scientific disciplines, including nursing, which is one of the most important scientific and practical disciplines.

The study problem is defined in terms of identifying the perception of nursing students at Al-Baha University towards the active learning strategy. This is done by answering the following question: What is the perception of nursing students at Al-Baha University towards active learning?

### 1.2 Rationale and Justification

Active learning is one of effective educational methods in teaching and learning, which focuses on making the learner the one who acquires information through interactive activities such as (case study - role playing - solving problems - searching for information). It is a good method for the student to acquire information in non-traditional ways. In today's active-learning classrooms, learning is a social activity, requiring students to interact and learn from their peers. To develop effective active-learning exercises that engage students, it is important to gain a more holistic view of the student experience in an active-learning classroom (Wiggins, et al., 2017).

Many studies (Shin et al., 2014;

Huda et al., 2016) recommended introducing active learning during classroom activities and adopting it as an effective activity in engaging students to search and find information and solutions to problems and other strategies for active learning.

The current study would help members of the teaching staff and policy makers in the college and the university to take corrective decisions based on the results of the current study about students' perception of active learning, factors affecting it and barriers from their points of views. Therefore, the aim of the current study was to assess perception of active learning among nursing students at Al-Baha University.

### Aim of the study:

The aim of this study is to assess perception of active learning among nursing students at Al-Baha University.

**This aim was achieved through the following objectives:**

- 1- Assess students' perception of the active learning during the classroom.
- 2- Assess factors influencing implementation of active learning among nursing students.
- 3- Assess barriers for implementing active learning from nursing students' points of view.

### 2- Materials and methods:

#### 2.1 Study design:

Descriptive cross-sectional design was adopted to achieve the aim of the current study.

#### 2.2 Study Setting:

This study was conducted at the Faculty of Nursing, Al-Baha University, Saudi Arabia.

#### 2.3 Study Population:

Nursing students at the Faculty of Nursing, Al Baha University, Saudi Arabia.

**Inclusion Criteria:** Students who fulfilled the following inclusion criteria were included:

- Students from both sections (male and female).
- Students from levels 4, 6, 8 and stumble students form different levels.
- All ages were included.

**Exclusion Criteria:**

- Students at the preparatory year (levels 1 and 2).

**2.4 Sampling Technique:**

Convenience sampling technique was used to select all available nursing students who fulfill the inclusion criteria and accept to participate in the study.

Sample size: The total sample size was 89 students from both male and female sections.

**2.5 Data collection tool:**

Data were collected using a structured questionnaire developed by Zeeshan, (2020) and modified by the researchers based on review of literature. This questionnaire consists of two sections:

**Section I:** Demographic data of students including: Gender, age, level of study and GPA.

**Section II:** Active learning questionnaire: this part consists of three dimensions namely; students' perception of active learning (8 items), factors influencing active learning (7 items), and barriers of active learning (17 items).

**Instrument Testing:**

**a. Pilot Study:** was carried out on (9 students) to evaluate the validity of the tool, used in this study for data collecting and accordingly necessary modifications were done. The participants included in the pilot study was excluded from the study sample.

**b. Expert Evaluation:** content validity of the questionnaire was tested through review by 5 experts in Nursing in order to prove the relevancy of questionnaire to the study objectives and test for face and content validity.

**c. Reliability Test:** the instrument's reliability was done using Cronbach's Alpha test which was ( $\alpha=89$ ).

**2.6 Data collection:**

Data were collected from January 2023 to February 2023. Collection of data collection were done after necessary modification in the tool based on the pilot study and experts' report. Data were collected through a google form questionnaire. Contact official e-mails for all students who fulfill the inclusion criteria were obtained after obtaining official permission. Then the invitation to participate in the study plus the link of google form were send to students via e-mails. Returning the filled questionnaire was considered an implied consent to participate in the study.

**2.7 Ethical Considerations**

The investigators obtained an ethical approval to conduct the study from the Post-graduate and Research Committee at Al-Baha University. The participants were given the data collection tool that contained an explanation of the study, and its purpose. Anonymity and voluntary participation in the study were assured to all participants. Utilization of data for research purposes only was also confirmed to all participants. No harm or conflict impacted the participants.

**2.8 Data analysis:**

Data were categorized, coded and analyzed using appropriate Statistical tests using Statistical Package for Social Sciences (SPSS) program. Descriptive statistics were used to describe the sample major variables. Descriptive statistics: e.g. percentage (%), mean ( $\bar{x}$ ) and standard deviation (SD) were used to present categorical data. Analytic statistics: e.g. Chi-square test ( $\chi^2$ ) was used to study association between two categorical variables. Statistical significance level was considered at ( $P \leq 0.05$ ).

**Results summary:**

Table (1) presents sociodemographic characteristic at the study sample. As presented in the table, the highest percentage (58.4 %) of the study sample were males. Furthermore, the majority (89.9 %) of the studied students were in the age group between 20 to less than 23. Regarding the academic level, the highest percentage (39.3 %) of them were in level 6. Most of the studied students (74.2 %) have GPA from 3 to less than 4.

Table 2 shows number and percentage distribution of students' perception of benefits of active learning. As shown in the table, the majority of both male and female students agree on all benefits of active learning. Moreover, the highest percentage of agreement in male group was that Active learning boosts self-confidence among the students, while the highest percentage of agreement in female group was that Active learning increases teacher-student interaction and develops more interest in studying. On the other hand, there was no statistically significant difference between male and female perception regarding benefits of active learning except for the first benefit

(Active learning increases students' knowledge integration and memory).

Table (3) demonstrates ranking of benefits of active learning as perceived by students. It's clear from the table that the mean of all items of benefits was high, this means that nearly all students agreed that active learning is beneficial. Moreover, the first benefit that they agreed on was that active learning develops more interest in studying. On the other hand, the benefit that gained the last rank was that active learning enhances students' communication skills.

Table 4 shows number and percentage distribution of the students' perception regarding Factors Influencing Active Learning. As shown in the table, the majority of both male and female students agree on all factors influencing active learning. Moreover, the highest percentage of agreement in male group was on the second, third, and fourth factors (Student-Teacher interaction is necessary for a good learning environment, Good communication skills and social interactive skills become better, Stress in life affects the students' learning) while the highest percentage of agreement in female group was on the third factor. On the other hand, there was no statistically significant difference ( $p>0.05$ ) between male and female perception regarding factors influencing active learning.

Table (5) displays ranking of Factors Influencing Active Learning as perceived by students. As noticed from the table, the highest mean agreement on factors influencing active learning was for good communication skills and it was on the top of ranking. On the other hand, the lowest factor influencing active learning from the students' perceptive was for school background.

Table (6) presents Number and percentage distribution of students' perception regarding Barriers to Active Learning. As shown in the table, the highest percentage of both male and female students agree on barriers of active learning. Furthermore, the highest percentage of agreement in male and female group was on the second barrier (large group of students is a barrier for active learning). On the

other hand, the highest percentage of male students disagree that Lack of Control by Teachers over the students is a barrier for active learning. Moreover, there was no statistically significant difference ( $p>0.05$ ) between male and female students' perception regarding barriers active learning except for the fourth and seventh barriers ( $p=0.018$  &  $p=0.006$  respectively).

Table (7) shows ranking of Barriers to Active Learning as perceived by students. As noticed from the table, the highest mean agreement on barriers to active learning was that large group of students is considered a barrier for active learning and it was on the top of ranking. On the other hand, the lowest barrier for active learning from the students' perceptive was lack of control by teachers over the students.

Table 1: sociodemographic characteristic at the study sample (N=89):

Item		No	Percentage
Gender	Male	52	58,4%
	Female	37	41,6%
Age	Less than 20	6	6,7%
	20 to less than 23	80	89,9%
	23 or above	3	3,4%
Level of student	Level 4	21	23,6%
	Level 6	35	39,3%
	Level 8	33	37,1%
GPA	Less than 2	1	1,1%
	2 to less than 3	19	21,3%
	3 to less than 4	66	74,2%
	4	3	3,4%

**Table 2: Number and percentage distribution of students' perception of benefits of active learning (N=89).**

Benefits of active learning	Male (N=52)						Female(N=36)						X <sup>2</sup>	p-value
	agree		nature		disagree		agree		nature		Disagree			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Active learning increases my knowledge integration and memory.	47	90.4%	5	9.6%	-	-	35	94.4%	-	-	2	5.4%	6.41	.041*
Active learning boosts self-confidence amongst the students.	49	94.2%	2	3.8%	1	1.9%	35	94.6%	-	-	2	5.4	2.20	0.33
Active learning increases teacher-student interaction.	46	88.5%	5	9.6%	1	1.9	36	97.3%	1	2.7%	-	-	2.42	0.29
Active learning develops more interest in studying.	38	92.3%	2	3.8%	2	3.8%	36	97.3%	1	2.7%	-	-	1.56	0.45
Active learning increases my creative and critical thinking.	46	88.5%	6	11.5%	-	-	33	89.2	4	10.8%	-	-	0.01	0.91
Active learning facilitates working in a group and increases team-building skills in students.	48	92.3%	4	7.7%	-	-	34	92.1	2	5.4%	1	2.7%	1.57	0.45
Active learning enhances my communication skills.	45	86.9%	6	11.5%	1	1.9%	35	94.6%	2	5.4%	-	-	1.77	0.41

X<sup>2</sup>= Chi-Square testSignificance level:  $p > 0.05$



Table 3: Ranking of benefits of active learning as perceived by students (N=89):

Benefits of active learning		Mean $\pm$ SD	Rank
1.	Active learning increases my knowledge integration and memory.	2.90 $\pm$ 0.37	5
2.	Active learning boosts self-confidence amongst the students.	2.91 $\pm$ 0.39	2
3.	Active learning increases teacher-student interaction.	2.91 $\pm$ 0.32	3
4.	Active learning develops more interest in studying.	2.92 $\pm$ 0.34	1
5.	Active learning increases my creative and critical thinking.	2.89 $\pm$ 0.32	6
6.	Active learning facilitates working in a group and increases team-building skills in students.	2.91 $\pm$ 0.32	4
7.	Active learning enhances my communication skills.	2.89 $\pm$ 0.35	7
Total		2.90 $\pm$ 0.22	

Table 4: Number and percentage distribution of the students' perception regarding Factors Influencing Active Learning (N=89)

Factors Influencing Active Learning	Male						Female						X <sup>2</sup>	p-value
	agree		Nature		disagree		agree		Nature		disagree			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
The Schooling background affect the learning process.	45	86.5%	5	9.6%	2	3.8%	35	94.6%	2	5.4%	-	-	2.06	0.35
Student-Teacher interaction is necessary for a good learning environment.	49	94.2%	3	5.8%	-	-	33	89.2%	4	10.8%	-	-	0.75	0.38
Good communication skills and social interactive skills become better.	49	94.2%	3	5.8%	-	-	36	97.3%	1	2.7%	-	-	0.47	0.49
Stress in life affects the students' learning	49	94.2%	3	5.8%	-	-	33	89.2%	4	10.8%	-	-	0.75	0.48
Social media is used to improve learning through videos and related materials.	46	88.5%	5	9.6%	1	1.9%	35	94.6%	2	5.4%	-	-	1.28	0.52
Study overload affects the studying process.	46	88.5%	3	5.8%	3	5.8%	33	89.2%	4	10.8%	-	-	2.83	0.41
The student-focused approach is done in class	43	82.7	7	13.5%	2	3.8%	30	81.1%	12	13.5%	4	4.5%	0.12	0.94

X<sup>2</sup>= Chi-Square testSignificance level:  $p > 0.05$

**Table5: Ranking of Factors Influencing Active Learning as perceived by students (N=89)**

Factors Influencing Active Learning	Mean $\pm$ SD	Rank
1. The Schooling background affect the learning process.	2.88 $\pm$ 0.39	7
2. Student-Teacher interaction is necessary for a good learning environment.	2.92 $\pm$ 0.27	2
3. Good communication skills and social interactive skills become better.	2.96 $\pm$ 0.21	1
4. Stress in life affects the students' learning	2.92 $\pm$ 0.27	3
5. Social media is used to improve learning through videos and related materials.	2.90 $\pm$ 0.34	4
6. Study overload affects the studying process.	2.90 $\pm$ 0.55	5
7. The student-focused approach is done in class	2.78 $\pm$ 0.51	6
Total	2.89 $\pm$ 0.17	

**Table 6: Number and percentage distribution of students' perception regarding Barriers to Active Learning (N=89).**

Barriers to Active Learning	Male						Female						X <sup>2</sup>	p-value
	agree		nature		disagree		agree		nature		disagree			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
There is a lack of student teacher interaction.	36	69.2%	8	15.4%	8	15.4%	26	70.3%	6	16.2%	5	13.5%	0.06	0.96
Large group of students is a barrier for active learning	42	80.8%	4	7.7%	6	11.5%	33	89.2%	2	5.4%	2	5.4%	1.25	0.53
Teachers do not use innovative methods for teaching	25	48.1%	12	23.1%	15	28.8%	21	56.8%	10	27%	6	16.2%	1.91	0.38
Students are not encouraged to involve in the studying process by the teacher.	28	53.8%	7	13.5%	17	32.7%	21	56.8%	12	32.4%	4	10.8%	8.06	0.018*
Lack of Control by Teachers over the students.	20	38.5%	8	15.4%	24	46.2%	19	51.4%	6	16.2%	12	32.4%	1.83	0.39
Lack of Experiential Learning	33	63.5%	9	17.3%	10	19.2%	25	67.6%	6	16.2%	6	16.2%	0.18	0.91
Students are given Self assessments.	31	59.6%	8	15.4%	13	25%	23	62.2%	10	27%	4	10.8%	3.75	0.15
Students are taught critical thinking.	31	59.6%	9	17.3%	12	23.1%	15	40.5%	18	48.6%	4	10.8%	10.33	0.006*
Students do not have self-confidence.	22	42.3%	12	23.1%	18	34.6%	21	56.8%	4	10.8%	12	32.4%	2.77	0.25
Students lack Communication Skills.	24	46.2%	17	32.7%	11	21.2%	23	62.2%	10	27%	4	10.8%	2.65	0.26
Language barriers between students and teachers.	37	71.2%	8	15.4%	7	13.5%	27	73%	4	10.8%	6	16.2%	0.45	0.79
Students are not interested in the subjects.	26	50%	14	26.9%	12	23.1%	14	36.8%	14	36.8%	9	24.3%	1.54	0.46
Teachers fail to motivate students.	28	53.8%	10	19.2%	14	26.9%	26	70.3%	5	13.5%	6	16.2%	2.48	0.28
Teachers do not have class management skills.	23	44.2%	11	21.2%	18	34.6%	18	48.6%	14	37.8%	5	13.5%	5.95	0.051
Lack of creativity by the teachers.	26	50%	9	17.3%	17	32.7%	21	56.8%	8	21.6%	8	21.6%	1.34	0.51
There are no group-study sessions.	35	67.3%	8	15.4%	9	17.3%	23	62.2%	8	21.6%	6	16.2%	0.57	0.75
Students do not have group discussion sessions outside classes.	37	71.2%	9	17.3%	6	11.5%	26	70.3%	4	10.8%	7	18.9%	1.43	0.48

X<sup>2</sup>= Chi-Square testSignificance level:  $p > 0.05$

Table 7: Ranking of Barriers to Active Learning as Perceived by Students (N=89).

Barriers to Active Learning	Mean $\pm$ SD	Rank
1. There is a lack of student teacher interaction.	2.55 $\pm$ 0.73	4
2. Large group of students is a barrier for active learning.	2.75 $\pm$ 0.60	1
3. Teachers do not use innovative methods for teaching	2.28 $\pm$ 0.82	12
4. Students are not encouraged to involve in the studying process by the teacher.	2.31 $\pm$ 0.83	11
5. Lack of Control by Teachers over the students.	2.03 $\pm$ 0.92	17
6. Lack of Experiential Learning	2.47 $\pm$ 0.78	6
7. Students are given Self assessments.	2.42 $\pm$ 0.79	7
8. Students are taught critical thinking.	2.34 $\pm$ 0.76	10
9. Students do not have self-confidence.	2.15 $\pm$ 0.89	16
10. Students lack Communication Skills.	2.36 $\pm$ 0.75	9
11. Language barriers between students and teachers.	2.57 $\pm$ 0.73	2
12. Students are not interested in the subjects.	2.21 $\pm$ 0.80	15
13. Teachers fail to motivate students.	2.38 $\pm$ 0.83	8
14. Teachers do not have class management skills.	2.20 $\pm$ 0.82	14
15. Lack of creativity by the teachers.	2.25 $\pm$ 0.86	13
16. There are no group-study sessions.	2.48 $\pm$ 0.77	5
17. Students do not have group discussion sessions outside classes.	2.56 $\pm$ 0.73	3
Total	2.37 $\pm$ 0.57	

**Discussion:**

Students' engagement in academic-related learning activities is one of the important determinants of students' success. Identifying the best teaching strategies to sustain and promote nursing students' engagement in academic and clinical settings has always been a challenge for nurse educators. Hence, it is essential to provide a set of strategies for maintaining and enhancing the academic engagement of nursing students. The aim of this study was to assess perception of active learning among nursing students at Al-Baha University.

The study focused on examining how students perceive active learning as beneficial teaching strategy for nursing education. Students reported that active learning was that active learning boosts self-confidence amongst the students, and that it increases teacher-student interaction and develops more interest

in studying.

In agreement, **Kamarulzaman et al., (2019)** study about self-confidence and soft skills such as leadership could be developed and enhanced since all the activities need participation from the students. In the same line, **Zeeshan et al., (2020)** study concluded that the benefits of active learning were that active learning boosts self-confidence amongst students, and that students' participation in teaching activities increases teacher-student interaction and develops more interest in studying. **Van Amburgh et al., (2017)** found that active learning includes increasing students understanding of the subjects on hand, provide the students with opportunities to revise and improve their own thinking, and increase self-confidence of students.

**Shaaruddin and Maslawati (2017)** study about "Identifying the Effectiveness of Active Learning Strategies and Benefits in

Curriculum and Pedagogy Course for Undergraduate TESL Students'' revealed that active learning allows direct interaction between lecturers and students which students hardly do in normal learning session and it will enhance communication skill since everyone has to talk using these strategies. The results of the first axis were high because the students interact with the teachers through active learning better by applying it and interacting with the class fully, and the university professors for their involvement in active learning during the education process and to the laboratories that are fully prepared for better learning.

Concerning factors influencing active learning, the current study found that student-teacher interaction is necessary for a good learning environment and good communication skills and social interactive skills in addition to stress in life are all factors affecting the effectiveness of interactive learning. In consistent with the current study result, **Zeeshan et al., (2020)** found that the statements of the respondents and learning environment significantly influence the effectiveness of active learning. Adding to that, 'Good communication, social and interactive skills are all important factors.

**Totoba (2021)** disagree with the current study results as the study concluded that the use of active learning methods was influenced by lack of active learning methods and teacher's 'misconception about active learning methods on the part of teachers and large class size and lack of resource as structural factors influencing the implementation of active learning strategies. On the other hand, **Lakew, (2016)** study revealed that when instructors were asked whether they faced problems in applying ALM or not, all (100%) instructors replied that they faced problems. Those who replied "yes" were asked to mention the factors that limit the application of ALM. The responses of respondents were summarized as follows; large class size, passiveness of students, lack of recently revised and updated teaching materials, lack of resources to fully employ the ALM, class structure and seats are not appropriate in addition to absence of necessary training of teachers and students on active teaching methodology.

As for barriers to active learning, the study found the highest percentage of both male and female students agree on barriers of active learning. Furthermore, the highest percentage of agreement in male and female group was on the second barrier (large group of students is a barrier for active learning). On the other hand, the highest percentage of male students disagree that lack of control by teachers over the students is a barrier for active learning. In agreement with the current study result, **Aksit et al., (2016)** study concluded that most students complained that the physical conditions of the class (classes are inflexible' since they had stationary tables and desks), lack of time and time pressure in studying schedule in addition to the size of student groups were all barriers for adopting active learning. The serious problem seemed to be because educators did not have enough time or the space to support students' work in active learning environments.

On contrary, **Zeeshan et al., (2020)** result revealed that there is a lack of student-teacher interaction', composing smaller groups was not possible and teachers do not use innovative methods for teaching. Also, lack of experiential learning and language barriers between teachers and students in adding to teachers' failure to motivate students' and lack of students' communication skills constitute barriers for implementing active learning.

**Ungar et al., (2018)** reported three different themes; technological barriers "I can't manage teaching in an innovative manner because I don't have the technological know-how, I don't know how to operate all of the equipment in the classroom;" and barriers related to the learning environment " Others claimed that they could not combine both direct presentation of materials with collaborative learning due to the physical layout of the classroom and pedagogic barriers: "I had to devote much more time to prepare a lesson for the ALC than for a regular class – I can't spend that much time preparing every lesson, which means I won't get a lot of experience using the ALC."

Despite frequent calls for more student-active learning, studies find that teaching remains predominantly traditional and teacher-

centered. While research is recognized as continuously developing, border-crossing, investigative and innovative collaborative activities that needs an infrastructure to succeed, the need for collaborative development and a supporting infrastructure is rarely mentioned in academic teaching, often described as individual and traditional in the research. **Børte, Nesje, & Lillejord, (2023)** summarized prerequisites for student active learning to succeed at three important points namely; better alignment between research and teaching practices, a supporting infrastructure for research and teaching and staff professional development and learning designs.

### Conclusion:

The aim of the current study was to assess perception of active learning among nursing students at Al Baha University. Active learning was beneficial from study subjects' perspectives but male groups perceived active learning as more beneficial for boosting self-confidence amongst the students, while the highest percentage of agreement in female groups was that active learning increases teacher-student interaction and develops more interest in studying. Furthermore, students perceived that student-teacher interaction, good communication skills, social interactive skills, stress in life are all factors affect the active learning environment. Regarding barriers to active learning, most of students considered large group of students in the class as a major barrier for implementing active learning.

### Recommendations:

The active learning as teaching and learning strategy should be adopted in teaching students in nursing program. Holding training courses for faculty members and students on communication skills, social interaction skills, and stress management is highly beneficial for enhancing the effectiveness of active learning. Also, training sessions about most recent teaching strategies and artificial intelligence applications would enhance the tools available for faculty members to engage students more in the teaching-learning process and enhance quality of teaching. Active learning is most

effective in small groups, thus, it's recommended that large groups be divided into small groups in numbers that fit the active learning strategy. Motivation in the form of extra marks and recognition for students who are active participants in the active learning process would enhance the effectiveness of active learning and facilitates its implementation.

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