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Research Article

**LEARNING STYLES AND THEIR IMPACT ON THE NURSING  
STUDENTS' PERCEPTION: ACROSS-SECTIONAL  
DESCRIPTIVE RESEARCH**<sup>1</sup>Maha Aulakh, <sup>2</sup>Zartasha Munir Khan, <sup>3</sup>Dr Azwa Sana<sup>1</sup>Hospital Services Hospital Lahore<sup>2</sup>Bhatti International Teaching Hospital Lahore<sup>3</sup>DHQ Hospital Kasur**Abstract:**

**Background & Objective:** Learning is not an easy cognitive process rather it is complex as numerous ways are responsible for knowledge acquisition. VAK (Visual, Auditory and Kinesthetic) learning model is commonly employed. In this particular research, we aimed at the assessment of these three learning modes in the Baccalaureate students of nursing.

**Methods:** This descriptive, cross-sectional research was carried out at Allied Hospital, Faisalabad and few nursing institutes in the timeframe of June 2016 to May 2017. Total one hundred students were enrolled in this research from three medical institutes named as Medical College I, II, III and IV.

**Results:** Visual learning style was preferred by 61% of the students; whereas, auditory (33%) and kinesthetic (6%). Outcomes suggest that visual style is more preferred than the other two in order to learn the concepts by the majority of the participants.

**Conclusion:** Kinesthetic approach cannot be overruled in the nursing profession especially in knowledge and practice shades. Learning model also depends on the contents to be taught with the contextual background.

**Keywords:** Visual, Auditory and Kinesthetic (VAK), Learning Style and Model.

**\* Corresponding author:**

**Maha Aulakh,**  
Hospital Services Hospital,  
Lahore

QR code



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**INTRODUCTION:**

Various ways are used for the reception and perception of knowledge by the learners. Sensory learning is also very much involved in this learning process. Learning strategy is the combination of perception and processing. The difficult process is better learnt through concentration and learning strategy [1]. It is a personal approach to make idea concrete from the abstract. Passive learning and failure cases do not know the learning strategy employment. Active learning is encouraged through learning strategies employment. In this particular research, we aimed at the assessment of these three learning modes in the Baccalaureate students of nursing.

Student learning is very much influenced by learning styles [2]. Teachers are to take a keen interest in the learning behaviour of their students. Our research outcomes postulates; cooperative learning is to be practised by the nursing faculty for active participation of the learners, with positive reinforcement in order to simulate self-guidance instead of spoon feeding. One should have his own teaching style with skill development to make students concepts clearer. Role of the nurse educators is to be of facilitator and they make optimum use of available resources.

Technology and resources can also be best utilized for higher education [3]. Traditional teaching methods need to be replaced with the modern strategies and active participation of the students is to be planned in the lesson plans by the utilization of the technology [4]. A research in UAE addressed the learning preferences of the nursing trainees and concluded that idea should be made concrete from abstract for better learning experience [5]. Another research compared the outcomes of two groups of baccalaureate nursing trainees and preferred that traditional strategies were preferred [6]. Almost 55.2% nurses considered them as an independent learner. There was a difference in the age of the students at senior and junior levels [7]. Another author probed the influence of inappropriate assessment and workload, but there was no relation of the workload with the deep approach of the study. Perception of quality teaching and learning because of the good environment was a strong predictor which directly and indirectly affected the learning outcomes [8]. Another research investigated the contextual impact of the learning and proved its dependence on the learning [9]. Learning styles are unanimously accepted by various authors in order to

develop knowledge and skill and for the improved learning outcomes [10]. Numerous learning model is also proposed for this purpose such as Kolb, Canfield and Witkin's experimental models which underlay various model of learning [11, 12, 13].

Student's learning is affected by the change in the environment and learning approach directly affects the learning outcomes. Students' positive perception about learning is positively associated with academic achievements and all the qualitative learning objectives. It is positive and at the same time weak predictor of the achievement in the Universities. The learning environment of the university and its perception contributes to the learning outcomes which is superior to the academic gains. There is no significant influence of the prior academic gains on the assessment of the learning environment. These patterns can be observed in disciplinary context and general student's level [14].

**METHODS:**

This descriptive, cross-sectional research was carried out at Allied Hospital, Faisalabad and few nursing institutes in the timeframe of June 2016 to May 2017. Total one hundred students were enrolled in this research from three medical institutes named as Medical College I, II and III. Learning is not an easy cognitive process rather it is complex as numerous ways are responsible for knowledge acquisition. VAK (Visual, Auditory and Kinesthetic) learning model is commonly employed. In this particular research, we aimed at the assessment of these three learning modes in the Baccalaureate students of nursing.

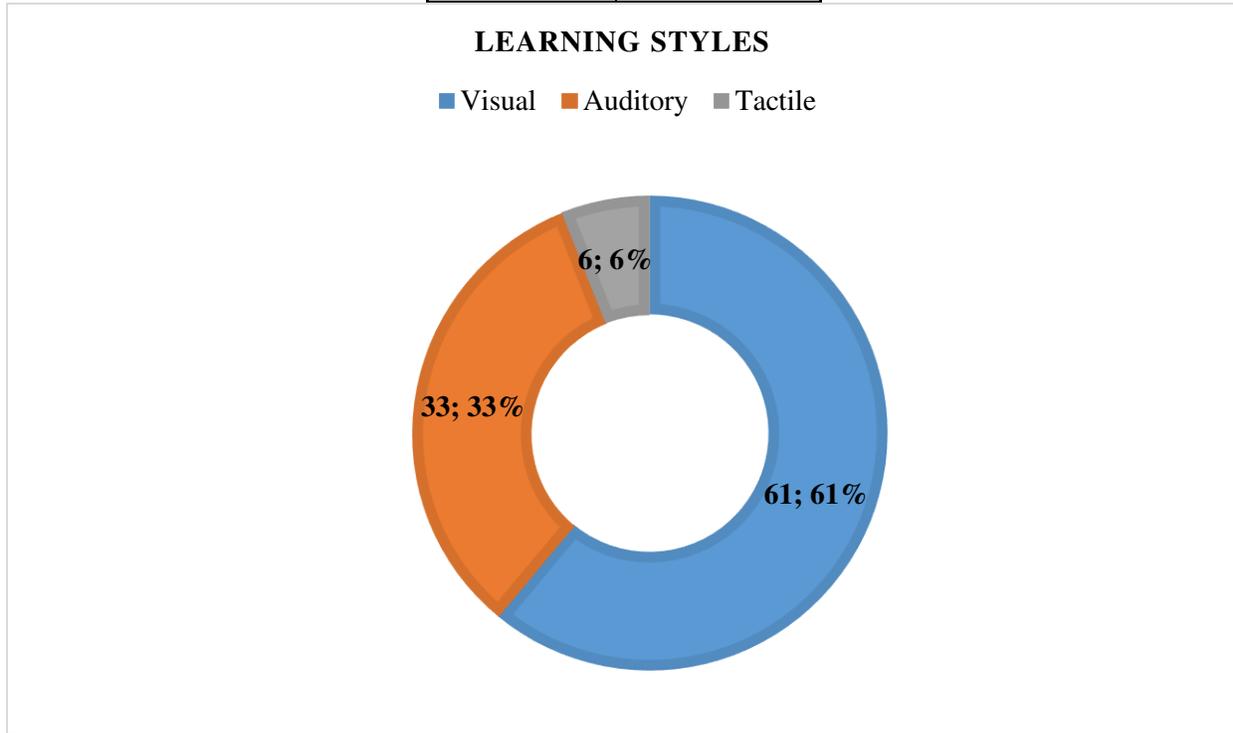
The sample was selected through Simple Random Sampling method. We included all those nurses who were the student of baccalaureate level; whereas, all the lower or higher levels were excluded from the research. The total sample was of one hundred nurses of three medical colleges. The sample was calculated through Open-epi. We considered all the ethical protocols and maintained the confidentiality of the participants. Research commenced after an informed consent.

**RESULTS:**

A questionnaire was used to document the response of the participants. Visual learning style was preferred by 61% of the students; whereas, auditory (33%) and kinesthetic (6%). Outcomes suggest that visual style is more preferred than the other two in order to learn the concepts by the majority of the participants (Table – I).

**Table – I:** Learning Styles

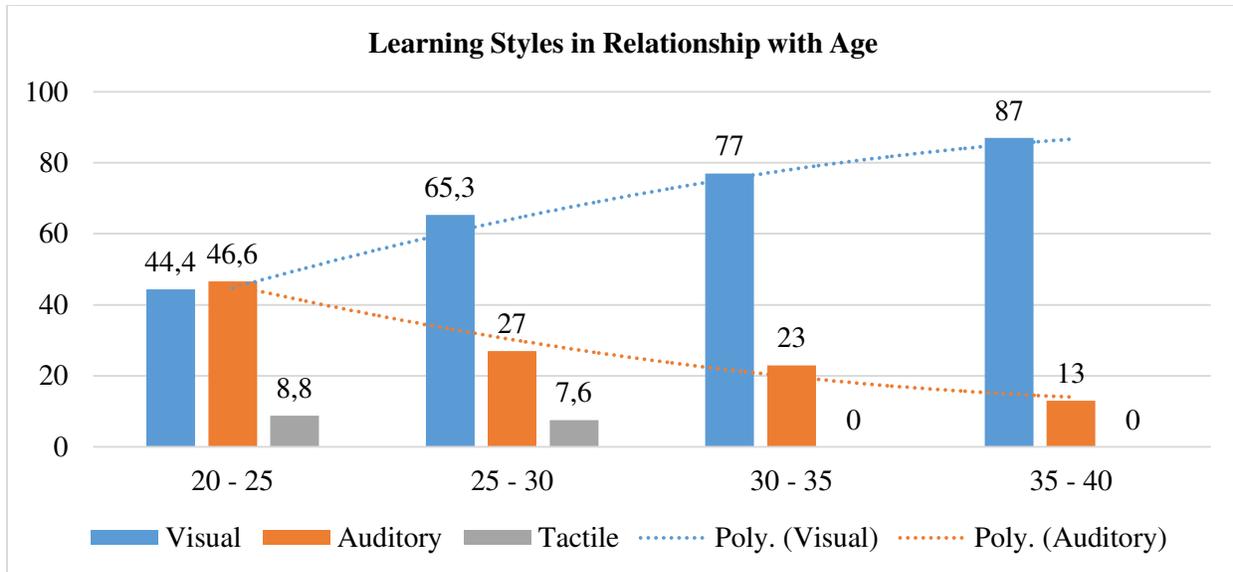
Style	Percentage
Visual	61
Auditory	33
Tactile	6



Age-wise learning style distribution of various age limits and ranges have been shown in Table – II.

**Table – II:** Learning Styles in Relationship with Age

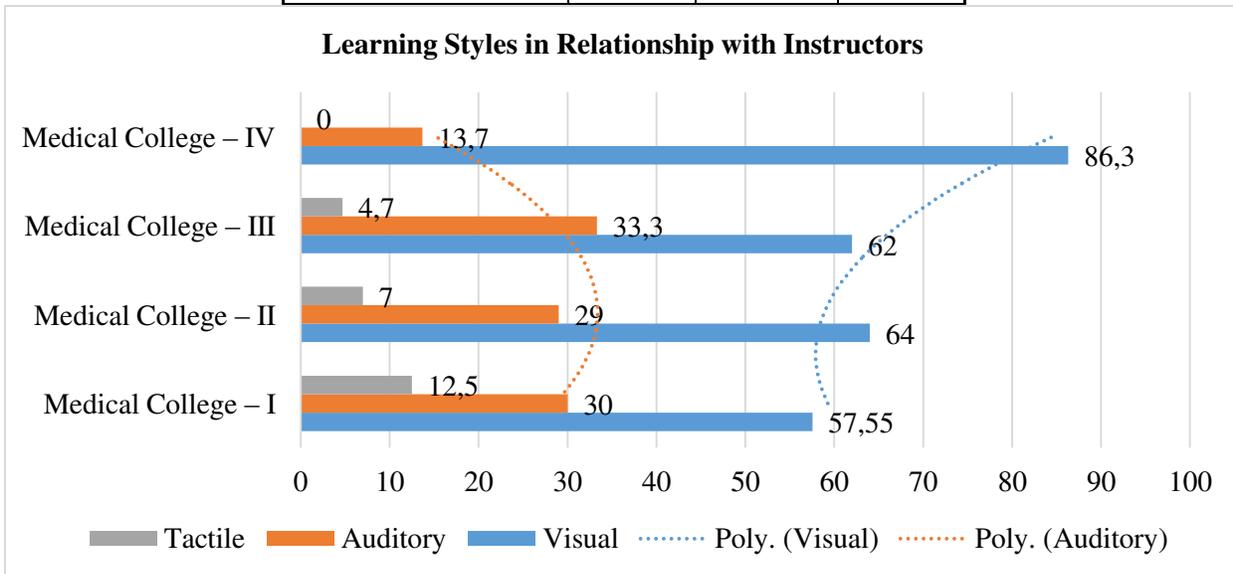
Age (Years)	Visual	Auditory	Tactile
20 – 25	44.4	46.6	8.8
25 – 30	65.3	27	7.6
30 – 35	77	23	0
35 – 40	87	13	0



Medical College-wise students’ distribution and relationship with the respective learning style have been shown in Table – III.

**Table – III: Learning Styles in Relationship with Instructors**

Institution	Visual	Auditory	Tactile
Medical College – I	57.55	30	12.5
Medical College – II	64	29	7
Medical College – III	62	33.3	4.7
Medical College – IV	86.3	13.7	0



**DISCUSSION:**

Visual learning style was preferred by 61% of the students; whereas, auditory (33%) and kinesthetic (6%). Outcomes suggest that visual style is more preferred than the other two in order to learn the concepts by the majority of the participants. These visual aids included images, videos, animations,

PowerPoint presentations, symbols and diagrams which excited the learning behaviour [1]. Visual aids are best remembered as a Chinese proverb says “If I hear, I forget; I see, I remember; If I do it by myself, I understand it”.

Auditory learners were 33% of the total strength which preferred lectures over visual aids and

recommended audio tapes, storytelling and reading aloud. Various learning styles have been observed in various students. Auditory students were less as compared to the mixed and visual learning style [2].

Learning by doing involves demonstrations and role plays and only 6% of the nurses recommended kinesthetic learning style and felt comfortable for them. On the contrary, another research proposed kinesthetic learning style as the most preferred learning style. As nurses preferred presentation and demonstration over lectures. The kinesthetic approach is more hands-on job and learning by self-involvement which is physical in nature. Practical sessions are very helpful for these nurses and simulations may also add into it. Information is processed through recalling past experiences and pre-text about the certain concept and linking it with the practical experience at hand. Lots of examples and keynotes are involved in this type of learning. These sessions prefer active participation over listening and reading. Doing is prior than appreciating and discussing [3]. As learning is a permanent change in behaviour and a complex process so the context of the concept is prime. Visual mode effectivity has been proved with the context of this particular research. Automation, speed, accuracy and consistency can be secured while performing the tasks again and again. Skill is polished and retained for a long time if things are learned in a concrete way instead of an abstract way. Higher order thinking and critical thinking can also be improved through visual aids. Theory needs the practical handling for mastery of the subject in hand. Find hands skills are mandatory in the art of healing by the nurses. It is more scientific as well. Automation is a hallmark for the professionalism. Practical sessions, no doubt pose financial and resources burden on the institutes but without active learning, we cannot benefit the field of healthcare. We need to encourage all other teaching strategies in addition to lecturing only.

### CONCLUSION:

The diversity of the student's perception was observed about learning styles in this research. No single method of the teaching and learning can be set as a final and perfect method. We need to amalgamate the methods according to the context of the contents. Variety of approaches can be consulted to disseminate the knowledge of this scientific field. Teacher needs to accommodate and master various modern instructional techniques. Skill-based teaching need promotion by the instructors. Skill can better be learned through kinesthetic approach as well, which is also suggested by various other research studies. Tailoring of the teaching strategies is to be made

through various teacher training sessions including latest varieties such as questioning techniques, interactive teaching and reflective practices.

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