

# Analysis Of Learning Style Preferences Among Junior Girls Volleyball Players

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**Abstract** - In this study, junior volleyball players were imparted with techniques of volleyball game and their learning preferences were analyzed. For this purpose, the investigator selected thirty volleyball players in the age group of 14 – 16 from different schools in Andhra Pradesh. The selected subjects were taught volleyball skills under the following learning style strategies. The learning preferences of the subjects were assessed through VAK questionnaire consisting of 14 statements and scores obtained on their learning preferences. The learning style inventory used in this study was authored by J.A.Beatrice, in Learning to Study through critical thinking. The questionnaire consists of 14 statements with options to select any one of the learning style under given circumstances, whether the subjects preference Visual (V) or Auditory (A) or Kinesthetic (K) and the subject was asked to select any one of the three learning styles statements given as answer for the questions / statements. The filled in questionnaire were collected and scored subjects preferences among three learning styles The collected questionnaire were scored which determines the learning preferences of the subjects. To test statistical significance of the learning preferences, the obtained data were subjected to statistical treatment using ANOVA. The results proved that Visual learning preferences were selected with mean value of 3.93 with standard deviation of + 0.98 and Auditory preference mean value of 3.03 with + 0.718 and Kinesthetic learning preference mean value of 7.03 with standard deviation + 1.129. The obtained F value 144.02 was significant at 0.01 level. The post hoc analysis proved that Visual learning was preferred than auditory learning style, and kinesthetic learning style was preferred by junior volleyball players than visual and auditory learning styles. Thus, it was proved that volleyball junior girls preferred kinesthetic learning style than visual and auditory learning styles. It was concluded that Kinesthetic learning style was preferred by the junior

volleyball girls than visual and auditory learning styles in learning volleyball skills.

**Index Terms** - Junior Volleyball Players, Visual, Auditory, Kinesthetic Learning Styles.

## INTRODUCTION

Richard Polidoro (1975) feels about the status of training physical education in colleges as follows. "Physical Education" today is at a very critical stage of development as a discipline. Calls are continually being made for physical education to become more meaningful and relevant to the individual student. Considerable concern has developed over the failure of many physical education programs to "physically educate" the major portion of 2/3 students.

An examination of our traditional programs would indicate that our greatest emphasis has been with in the psychomotor domain. Our primary objectives are often stated simply in terms of student of physical performance. Example fitness goals are considered to have been reached once the student passes a recognised test. The same applies to our skill objectives.

More recently, the cognitive domain has received increased attention and concern. This is particularly evident by the recent AAHPER publication. "Knowledge and understanding in physical education". Although not denying the importance of either of this psychomotor or cognitive domains at is felt that these approaches were tended to overlook the most important element in learning process, that is the affectivity accrued from the educational process. The importance of this concept cannot be overlooked.

The affective domain (Barrow and Rose Mary, 1971) continuum provides for ordering and relating the different elements of factors of psycho-social behavior the simple kind of behaviour would be achieved before the categories above it could be learned. It is obvious from the continuum that some of the elements ion concurrently while some of them interest and adjustment occupy some spare on the scale alone.

As the individual ascends the social and emotional, continuum through the levels of receiving, responding, valuing, organizing and characterization by value complex, he uses the elements of interest, attitude, appreciations, values and adoptions to achieve psycho-social maturity. This process may be similar to what the sociologist calls socialization or the cultural anthropologist calls enculturation Krathwohl et.al identify the process as internalization. Hence from the original, learning of a psycho-motor skill. There will come as a by-products both cognitive and affective learning, increased psycho-motor learnings and perhaps even some other influences in the areas of fitness, posture and nutrition.

Learning styles refer to a range of competing and contested theories that aim to account for differences in individuals' learning.(Coffield, Frank; Moseley, David; Hall, Elaine; Ecclestone, Kathryn (2004). These theories propose that all people can be classified according to their 'style' of learning, although the various theories present differing views on how the styles should be defined and categorized. A common concept is that individuals differ in how they learn.(Willingham, Hughes, and Dobolyi, (2015).

The idea of individualized learning styles became popular in the 1970s and has greatly influenced education despite the criticism that the idea has received from some researchers. Proponents recommend that teachers assess the learning styles of their students and adapt their classroom methods to best fit each student's learning style. Although there is ample evidence that individuals express preferences for how they prefer to receive information, few studies have found any validity in using learning styles in education. Critics say there is no consistent evidence that identifying an individual student's learning style, and teaching for specific learning styles, produces better student outcomes. There is evidence of empirical and pedagogical problems related to forcing learning tasks to "correspond to differences in a one-to-one fashion". Well-designed studies contradict the

widespread "meshing hypothesis" that a student will learn best if taught in a method deemed appropriate for the student's learning style. They further show that teachers cannot assess the learning style of their students accurately.(Papadatou, Marietta; and Maria (2018)

The VAK learning style uses the three main sensory receivers: Visual, Auditory, and Kinesthetic (movement) to determine the dominant learning style. It is sometimes known as VAKT (Visual, Auditory, Kinesthetic, & Tactile). It is based on modalities—channels by which human expression can take place and is composed of a combination of perception and memory.

VAK is derived from the accelerated learning world and seems to be about the most popular model nowadays due to its simplicity. While the research has shown a connection with modalities and learning styles (University of Pennsylvania, 2009) , the research has so far been unable to prove the using one's learning style provides the best means for learning a task or subject. This is probably because it is more of a preference, rather than a style.

Learners use all three modalities to receive and learn new information and experiences. However, according to the VAK or modality theory, one or two of these receiving styles is normally dominant. This dominant style defines the best way for a person to learn new information by filtering what is to be learned. This style may not always to be the same for some tasks. The learner may prefer one style of learning for one task, and a combination of others for a different task. This study is aimed at finding out the differences in learning styles, namely, visual, auditory and kinesthetic, preferences among junior girls volleyball players.

## METHODOLOGY

In this study the investigator selected thirty volleyball players in the age group of 14 – 16 from different schools in Andhra Pradesh. Only girl volleyball players who had participated in inter school level competitions were selected for the study. The selected subjects were taught volleyball skills under the following learning style strategies.

## LEARNING STYLE STRATEGIES

The learning preferences the subjects asked to select were within the three styles of visual learner, auditory learner and kinesthetic learner and the strategies for these learning styles are explained below:

#### VISUAL LEARNER

- Organize work and living space to avoid distractions.
- Sit in the front of the room to avoid distraction and away from doors or windows where action takes place. Sit away from wall maps or bulletin boards.
- Use neatly organized or typed material.
- Use visual association, visual imagery, written repetition, flash cards, and clustering strategies for improved memory.
- Reconstruct images in different ways try different spatial arrangements and take advantage of blank spaces on the page.
- Use note pads, PostIts, todo lists, and other forms of reminders.
- Use organizational format outlining for recording notes. Use underlining, highlighting in different colors, symbols, flow charts, graphs or pictures in your notes.
- Practice turning visual cues back into words as you prepare for exams.
- Allow sufficient time for planning and recording thoughts when doing problem solving tasks.
- Use test preparation strategies that emphasize organization of information and visual encoding and recall.
- Participate actively in class or group activities.
- Develop written or pictorial outlines of responses before answering essay questions.

#### AUDITORY LEARNER

- Work in quiet areas to reduce distractions, avoiding areas with conversation, music, and television.
- Sit away from doors or windows where noises may enter the classroom.
- Rehearse information orally.
- Attend lectures and tutorials regularly.
- Discuss topics with other students, professors and GTAs. Ask others to hear your understanding of the material.

- Use mnemonics, rhymes, jingles, and auditory repetition through tape recording to improve memory.
- Practice verbal interaction to improve motivation and selfmonitoring.
- Use tape recorders to document lectures and for reading materials.
- Remember to examine illustrations in textbooks and convert them into verbal descriptions.
- Read the directions for tests or assignments aloud, or have someone read them to you, especially if the directions are long and complicated.
- Remind yourself to review details.
- Use time managers and translate written appointment reminders into verbal cues.
- Use verbal brainstorming and tape recording writing and proofing.
- Leave spaces in your lecture notes for later recall and 'filing'. Expand your notes by talking with others and collecting notes from the textbook.
- Read your notes aloud.
- Practice writing your answers using old exams and speak your answers.

#### KINESTHETIC LEARNER

- Keep verbal discourse short and to the point.
- Actively participate in discussions.
- Use all of your senses sight, touch, taste, smell, hearing.
- Use direct involvement, physical manipulation, imagery, and "hands on" activities to improve motivation, interest, and memory.
- Organize information into the steps that were used to physically complete a task.
- Seek out courses that have laboratories, field trips, etc. and lecturers who give real life examples.
- Use case studies and applications (example) to help with principles and abstract concepts.
- Allow for physical action in solving problems.
- Read or summarize directions, especially if they are lengthy and complicated, to discourage starting a task without instructions.
- Use taped reading materials.
- Use practice, play acting, and modeling to prepare for tests.

- Allow for physical movement and periodic breaks during tests, while reading, or while composing written assignments.
- Role play the exam situation.
- Teach the material to someone else.
- Write practice answers, paragraphs or essays.

After imparting volleyball skills to junior level girls, their learning preferences were measured using VAK questionnaire consisting of 14 statements and scores obtained on their learning preferences. The learning style inventory used in this study was authored by J.A.Beatrice, in Learning to Study through critical thinking. The questionnaire consists of 14 statements

with options to select any one of the learning style under given circumstances, whether the subjects preference Visual (V) or Auditory (A) or Kinesthetic (K) and the subject was asked to select any one of the three learning styles statements given as answer for the questions / statements. The filled in questionnaire were collected and scored subjects preferences among three learning styles The collected questionnaire were scored which determines the learning preferences of the subjects. To test statistical significance of the learning preferences, the obtained data were subjected to statistical treatment using ANOVA.

RESULTS

Tab 1: ANALYSIS OF VARIANCE RESULTS ON LEARNING PREFERENCES OF JUNIOR GIRLS VOLLEYBALL PLAYERS

	Visual Learning Style	Auditory Learning Style	Kinesthetic Learning Style	Source of Variance	Sum of Squares	Df	Mean Square	F
Mean	3.93	3.03	7.03	Between	264.20	2	132.10	144.02*
Std Dev	0.980	0.718	1.129	Within	79.80	87	0.92	

\* Significant at 0.05 level

Since significant differences were recorded with obtained F value of 144.02, the results were further subjected to post hoc analysis using Scheffe’s confidence interval test.

Tab 2: Post hoc analysis of Learning Preferences of Junior Girls Volleyball Players

Visual	Auditory	Kinesthetic	MD	C I
3.93	3.03		0.90*	0.62
3.93		7.03	-3.10*	0.62
	3.03	7.03	-4.00*	0.62

\* Significant at 0.05 level

DISCUSSIONS

According to the VAK or modality theory, one or two of these receiving styles is normally dominant. This dominant style defines the best way for a person to learn new information by filtering what is to be learned. This style may not always to be the same for some tasks. The learner may prefer one style of learning for one task, and a combination of others for a different task. In this study, junior volleyball players were imparted with techniques of volleyball game and their learning preferences were analysed the results presented in Table I. The results proved that Visual learning preferences were selected with mean value of 3.93 with standard deviation of + 0.98 and Auditory preference mean value of 3.03 with + 0.718 and Kinesthetic learning preference mean value of 7.03

with standard deviation + 1.129. The obtained F value 144.02 was significant at 0.01 level. The post hoc analysis proved that Visual learning was preferred than auditory learning style, and kinesthetic learning style was preferred by junior volleyball players than visual and auditory learning styles. Thus, it was proved that volleyball junior girls preferred kinesthetic learning style than visual and auditory learning styles.

CONCLUSIONS

It was concluded that Kinesthetic learning style was preferred by the junior volleyball girls than visual and auditory learning styles in learning volleyball skills.

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