



King Saud University
The Saudi Journal for Dental Research

www.ksu.edu.sa
www.sciencedirect.com



ORIGINAL ARTICLE

Learning styles of dental students



Moshabab A. Asiry *

Department of Pediatric Dentistry and Orthodontics, College of Dentistry, King Saud University, Building No 3500, Riyadh 12372-7325, Saudi Arabia

Received 1 December 2014; revised 30 January 2015; accepted 8 February 2015
Available online 18 February 2015

KEYWORDS

Learning style;
Learning preference;
The VARK;
Dental students

Abstract *Aims:* This study was conducted to determine the learning styles of dental students at King Saud University.

Methods and material: The Arabic version of the VARK questionnaire was administered to undergraduate dental male students in first, second, third, fourth and fifth years to determine their learning style preferences. Descriptive statistics were used to identify the learning styles of students.

Results: There were more students who preferred a multimodal learning style (58.4%) than those who preferred a unimodal learning style (41.6%). The quadmodal learning style was the preferred style among multimodal learners in total sample and in each year separately. Of the unimodal learners, 35.1%, 35.1%, 18.1%, and 11.7% of the students were Kinesthetic (K), Aural (A), Visual (V), and Reading/Writing (R) learners, respectively.

Conclusions: 58.4% and 41.6% of the students were found to have multimodal learning preferences and unimodal learning styles, respectively. The distribution of students' learning styles reflects strong kinesthetic and aural preferences. The learning preference does not differ between undergraduate male students from first to final years at College of Dentistry, King Saud University.

© 2015 The Author. Production and hosting by Elsevier B.V. on behalf of King Saud University. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Stewart and Felicetti¹ define learning styles as those educational conditions under which a student is most likely to learn. Efficient transfer of information from the teacher to the student can be complicated by mismatches between teaching strategy and students' learning styles. Further, Kaplan and

Kies² pointed out that learning style is one of the sources of differences in the student's performance. Therefore it is important that dental educators need to understand how students learn and use the appropriate teaching methods in order to improve the quality of learning experience and to match students' preferences.

There are several methods available to measure learning styles. One of the most frequently used methods is VARK questionnaire developed by Neil Fleming.³ He described four sensory modalities: Visual (V), Aural (A), Reading/Writing (R) and Kinesthetic (K), (VARK). Visual learners learn through seeing pictures, graphs, videos, and graphics. Aural learners learn by listening to lectures, discussions, and speaking. Reading/Writing learners learn through reading the text and making their own notes whereas kinesthetic learners learn

* Tel.: +966 1 4679017.

E-mail address: masiry@gmail.com.

Peer review under responsibility of King Saud University.



Production and hosting by Elsevier

through touching and experiences that emphasize doing, physical involvement, and manipulation of objects.⁴

Students' learning styles can be affected by several factors such as gender, age, academic achievement, and culture.⁵ Few studies have been conducted to investigate learning preferences of dental students in Saudi Arabia. ALQahtani and Al-Gahtani⁶ found that the Diverging learning style was the dominant style among Saudi dental students and interns based on Kolb's Learning Style Inventory. While the students preferred the Assimilating style during their early preclinical years, they preferred the Diverging style during their later clinical years. On the other hand, Al-Saud⁷ used VARK questionnaire to determine the preferred mode of learning among Saudi first-year dental students. She reported that more than half of the students were found to have multimodal learning preferences. The most common single learning preferences were aural (20%) followed by kinesthetic (15.2%). The purpose of this descriptive study was to provide further information about the learning styles of undergraduate dental students, from first to final years, in male campus at King Saud University using the Arabic version of the VARK questionnaire.

2. Subjects and methods

The current study was conducted at King Saud University, Saudi Arabia in 2012. The Arabic version of the VARK questionnaire was administered to dental undergraduate students in male campus from first, second, third, fourth and fifth years to determine their learning style preferences. The study was reviewed and approved by the Research Centre at College of Dentistry (CDRC), King Saud University.

Each year representative was contacted via email and asked to distribute a link for survey to their colleagues. Students can choose more than one option for identifying the preferences for multiple learning styles. The survey results from each student were collected anonymously on SurveyMonkey (www.surveymonkey.com).

The distributions of the VARK preferences were calculated according to the guidelines given in the VARK website.⁸ To determine the percentage of students for each VARK modality (V, A, R, and K) and for all possible combinations of modalities (e.g., VA, VRK, etc.), the number of students who preferred each learning style modality was divided by the total number of students.

3. Results

Among the 350 students, 269 students completed the questionnaire. This represents a response rate of 76.85%. The distribution of students was 17 (6.3%) first year students, 68 (25.3%) second year students, 42 (15.6%) third year students, 89 (33.1%) fourth year students, and 53 (19.7%) fifth year students.

Fig. 1 shows the prevalence of the different learning preferences. The dominant learning preference among dental students was VARK learning preference (22.7%), followed by A and K as single learning preferences (14.5% for each). This was followed by a combination of V, A, and K learning preference (8.6%).

On the basis of the present study, 58.4% and 41.6% of the students preferred multimodal learning and unimodal learning

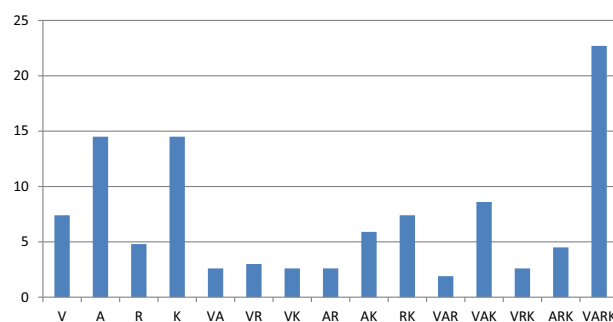


Figure 1 Prevalence of different learning styles.

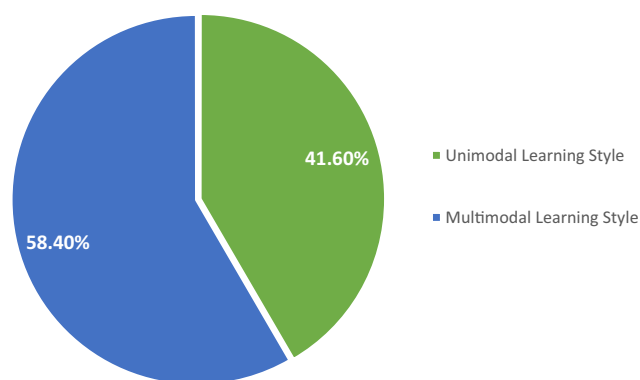


Figure 2 Distribution of unimodal and multimodal learning styles.

styles, respectively (Fig. 2). Of the students who preferred a multimodal learning style, 31.2%, 30.6% and 38.2% were bimodal, trimodal and quadmodal, respectively (Fig. 3). This indicates that quadmodal was the preferred style among multimodal students. Of the unimodal learners, 35.1% of the students preferred K, 35.1% of the students preferred A, 18.1% of the students preferred V, and 11.7% of the students preferred R (Fig. 4). Thus, the kinesthetic and aural learning preferences were dominant among unimodal students.

A further analysis showed that the dominant learning preferences of the bimodal students were AK preference (32%)

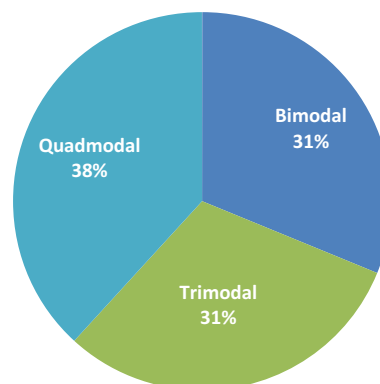


Figure 3 Distribution of multimodal learning styles.

Download English Version:

<https://daneshyari.com/en/article/3175214>

Download Persian Version:

<https://daneshyari.com/article/3175214>

[Daneshyari.com](https://daneshyari.com)