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### Saudi Medical Undergraduates' Perceptions of Their Preferred Learning Styles and Assessment Techniques

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#### Abstract

This study investigates Saudi medical undergraduates' perceptions of their preferred learning styles (LS) and assessment techniques (AT). The purpose of this study is to find out the samples' most preferred and least preferred LS and AT. This simple classification will help the teachers of medical undergraduates at Saudi medical colleges to cater to the learning preferences after having a clearer picture of their students' likes and dislikes regarding different classroom activities and assessment methods and tools. Six hundred and thirty six subjects from ten different medical colleges situated in the various regions of the KSA responded to a 40-item Likert-scale questionnaire. The findings report that a) the teachers need to accommodate individual differences of their students by using diverse activities, b) fun activities and relaxed classroom atmosphere need to be ensured, c) audio-visual aids should be used frequently, d) collaborative activities should be emphasized, e) medium of

instruction should be confined to English, f) group/pair work should be emphasized, g) the teachers should move around and help individual students, h) a suitable and comprehensive textbook should be followed, i) teacher should give appropriate feedback after classroom activities and class quizzes, j) MCQ quizzes are preferred to essay-type examinations and k) the teacher should train the students in test-taking strategies.

*Key words:* learning styles; assessment techniques

### Saudi Medical Undergraduates' Perceptions of Their Preferred Learning Styles and Assessment Techniques

English language teaching has undergone a revolution during the last two decades and research has highlighted the significant value of developing learner-based and tailor-made courses to address the specific needs of specific learners. It has been learned that learners have diverse language needs as well as they bear differences in their learning styles (LS) due to their diverse educational, social, ethnic and cultural background. Students' learning preferences play an important role in deciding upon teaching methodologies and classroom activities. English teachers in general and ESP practitioners in particular are assigned this challenging task of addressing to these diverse needs. When language teachers and curriculum specialists get enlightened about their students' preferred LS as well as assessment techniques (AT), this awareness has positive dual bearing on the performance of both the language instructors and their students (Ali, 2005; Sims & Sims, 1995; Smith & Renzulli, 1984; Dunn, Dunn & Price, 1979; Sein & Robey, 1991). This awareness provides the teachers with the opportunities to modify the teaching materials and classroom practices according to the learning preferences of the learners to achieve optimum results (Corder, 1977; Brindley, 1898; Nunan, 1898; Stapa, 2009).

Griggs (1999) has stated that identification and interpretation of learners' LS provides valuable insights as how they respond to learning environment and teaching materials. This study is an attempt to find out the samples' most preferred and least preferred LS and AT. This identification and interpretation will help the teachers of medical undergraduates at Saudi medical colleges to cater to the learning preferences after having a clearer picture of their students' likes and dislikes regarding different classroom activities and assessment techniques.

### Literature Review

Research has reported that human beings learn differently due to their diverse cultural, biological and psychological backgrounds (Reiff, 1992). LS are defined as "an individual's natural, habitual, or preferred way(s) of absorbing, processing, and retaining new information and skills which persist regardless of teaching methods or content area" (Kensella, 1995 cited in Ali, 2005, p. 253). Felder (1995) has stated that "the ways in which an individual characteristically acquires, retains, and retrieves information are collectively termed the individual's learning style" (p. 21).

It has been reported that teaching materials and classroom practices that match learners' LS preferences have a positive impact on their class performance, learning and motivation (Sims & Sims, 1995; Smith & Renzulli, 1984; Dunn, Dunn & Price, 1979; Sein & Robey, 1991). Much research has offered valuable insights into the fact that students can identify their preferred LS and AT that help them decide upon suitable learning strategies (Reid, 1987 cited in Ali, 2005). Richards (2001) has espoused that syllabus design should be based on "needs" and "situations". Needs being a clear term, he has described "situation" as cultural and social background of the learners. Therefore, understanding students' learning situation preferences is highly instrumental for effective teaching because several studies have

reported the pitfalls due to the mismatch of the teachers' and students' LS preferences. Research has suggested that "students whose learning processes resemble the teacher's are more likely to achieve good grades than are students with opposing styles, who may drop the course or even discontinue studying language". (Oxford & Lavine, 1992 cited in Ali, 2005, p. 262).

LS have been extensively discussed in educational psychology in language learning context (Oxford, 1990; Wallace & Oxford, 1992; Oxford & Ehrman, 1993). Guild & Garger (1985) and Jensen (1987) reported that more than 300 LS assessment instruments were developed in the past three decades. Jung (1971) has offered comprehensive insights into *sensation and intuition*: two ways of perceiving the world. Dunn & Dunn (1978) have classified LS as visual and verbal. Visual learners prefer visual presentation of information to verbal explanations and verbal learners prefer otherwise. Another model has classified LS into the following two categories: active experimentation and reflective observation (Kolb, 1984). Inductive and deductive LS have been ascribed similar to much discussed learning/acquisition dichotomy (Ropo, 1987; Felder, 1995). Much research has been done on cognitive LS that have been assigned different terms by different researchers: field-independent and field dependent (Witkin & Goodenough, 1981); analytical and global (Kirby, 1988); serialistic and holistic (Pask, 1988); left-brained and right-brained (Kane, 1984); atomistic and holistic (Marton, 1988); sequential and random (Gregorc, 1982) etc. Kirby (1979) has reported that several models in fact correlated two fundamental orientations in LS. He called them "splitters": the learners who analyze information logically and break it down into smaller parts and "lumpers" are learners who try to watch for patterns and relationships between the parts. These preferences provide necessary insights into deciding upon important pedagogical decisions.

Assessment is probably the only major means of evaluating the students' performance in the language. Talking about students' preferences regarding assessment tools, Dhaoudi (2006) has reported that "assessment enhances instruction in many ways by informing teachers about the learning processes and difficulties of their students" and to "set program goals and instructional objectives" (p. 101). Shohamy (2001) has advocated alternative assessment strategies because they "take into account students' different LS and abilities, ----- ensuring fairness and equity" (p. 4). Research has offered valuable insights into the needs of students' active role in assessment process (Coombe & Hubley, 2004; Tannenbaum, 1996; Black & William, 1998; McGlinchey, 2004). This involvement results in introduction of unconventional assessment tools and Dhaoudi (2006) has concluded that "a multiplicity of assessment tools has shown that learning is becoming more open to different LS and to learners' diverse linguistic and cultural background" (p. 101). Many research studies have highlighted the significance of identifying distinct LS of students for optimum results (Oxford, 1990; wyss, 2002; Ellis, 1985; Nunan, 1988).

Ali (2005) carried out a project at United Arab Emirates University and tried to determine learners' preferred LS and suggested a new Multidimensional Learning Style Assessment Instrument (MLSAI) to "help students and teachers better understand the ways students usually learn" (p. 235). The researcher developed a questionnaire that contained 42 statements. It was divided into five sections: each section represented one group of LS statements. The Arabic translation of the questionnaire was administered to 88 students. The study offered deep insights into the fact that those students whose LS resembled those of the teachers' performed better. The findings reported that no single teaching methodology can fulfill diverse LS of heterogeneous group of students.

Kikuchi (2005) conducted a research at Nihon University in Japan that included both teachers and students and interpreted the data to show the differences in the perceptions of

both sample groups regarding their preferred LS and AT. The researcher distributed questionnaires to 706 freshmen students of College of International Relations and 434 students completed the questionnaire. The study included 27 native English language instructors and 26 Japanese English teachers as well. The questionnaire attempted to elicit samples' responses regarding students' preferred LS, their attitudes towards assessment tools/procedures and students' expectations of the English language teachers. The samples were also enquired to report about how well native and non-native English instructors cater for students' learning needs. The results highlighted the strengths and weaknesses of English language syllabus. The data provided deep insights into the ways English language curriculum could be altered to satisfy learning needs of the students.

Byrne et al. (2009) conducted a comparative study to identify the learning approaches of freshmen accounting students from an American and an Irish university. The students responded to the Approaches and Study Skills Inventory for Students (ASSIST, 1997) to record their answers at the end of their accounting course. The samples were 204 accounting students from an American University and 304 from an Irish University. The study elicited students' responses regarding intrinsic interest, time management and fear of failure. The study revealed that both sample groups exhibited significant differences in the learning approaches within the field of accounting.

Boyle & Dunn (1998) conducted LS identification project at St. John's University School of Law. The study used the Dunn and Dunn Learning Style Model to determine the learning preferences of the students at the School of Law. The data were scientifically analyzed and the results showed that the samples carried vast individual differences as far as their LS were concerned. The researchers reported that the teachers needed to employ different teaching methodologies to effectively approach students' diverse learning preferences.

Cools et al. (2009) detailed selected papers presented at 13<sup>th</sup> annual European Learning Styles Information Network (ELSIN) to highlight the importance of identifying individual LS of students to adapt teaching methodologies accordingly. They discussed three research projects in detail that were conducted to determine the influence of culture on LS as well as on teaching methodologies. They discussed the difficulties in identifying individual LS. The study reported that all three articles declared LS assessment necessary for effective language teaching.

Stapa (2009) conducted a study at the Faculty of Language Studies, National University of Malaysia to investigate the English for academic purposes learners' preferred LS and whether their teachers were aware of the learners' preferred LS. 53 students and three faculty members participated in the study. Both populations were administered a 13-item questionnaire, bearing slight difference, based on Brindley (1984) that elicited subjects' responses regarding learning, error analysis and assessment techniques. Results revealed that both populations reported that learners preferred working in pairs and small groups, productive skills should be emphasized along with the receptive skills, learners learn new vocabulary by using them in sentences and television programs were liked more than blackboards and tape recorders.

Makoni (1999) conducted a comprehensive study that attempted to identify the students learning styles by using Cognitive Styles Analysis Tests (CSA) as well as teaching styles by classroom observations. The study included both the qualitative as well quantitative research tools. Observations, CSA test and Michigan Language test were three tools used in this study. The students as well as the teachers of seven South African schools were the population of this study. The data regarding the teaching styles were gathered by observing 119 classes and administering CSA test and Michigan Language test to 202 students. The results reported that teachers had a vast variety of pedagogical orientations but those teaching

practices were found more effective that resembled students' LS. The study also found out that the students who belonged to different cultural backgrounds also exhibited uniform language learning preferences that indicated that LS are not cultural bound.

Willing (1987) carried out an exploratory study that included 517 adult ESL learners in Australia to identify their LS. The findings of the study reported that the differences in the cognitive learning styles had an effect on ESL adult learners' preferences in different kinds of classrooms activities, specific kinds of teacher behavior, various grouping arrangements, specific aspects of language, different modes of learning outside the classes and particular sensory modes: visual, auditory, tactile learning etc.

The studies mentioned above along with so many others conducted in the various regions of the world to identify and explore learners' specific LS and AT due to their diverse cultural, educational and social background strongly suggest that this understanding has a fundamental role in educational psychology in ELT. Furthermore, development of more than 300 LS assessment instruments to understand students' learning situation preferences during the last three decades is yet another irrefutable proof of its significance and effectiveness (Guild & Garger, 1985). Teaching practices and assessment procedures form an integral part of effective ELT and they are complementary to each other and therefore, the researcher incorporated some basic assessment techniques in this study to enrich its scope.

There seems a paucity of LS studies in the Arab world that may be one of the causes of ineffective ELT in these countries. Although Arab countries in general and Saudi Arabia in particular are spending huge budget on education, yet the students enrolling themselves in the different faculties of Arab universities seem inefficient in their English language proficiency. It is reported that one major hindrance in the academic and professional career of Arab students is their English language deficiencies (El-Fadil, 1985 Tushyeh, 1992; Reymond, 2008; Rababa, 2003). This study is an attempt to fill-in this gap and set the stage for other

researchers to investigate this much sought-after educational psychology component in Arab context.

## Methodology

### *Research Questions*

This study investigated the following research questions:

1. What are Saudi medical undergraduates' most preferred learning styles?
2. What are Saudi medical undergraduates' least preferred learning styles?
3. What are Saudi medical undergraduates preferred assessment techniques?

### *Method*

Descriptive method of data collection, i.e., introspective technique of questionnaires was used in this study. The description of the subjects, instrumentation and the procedure used for this study is given below:

### *Subjects*

A sample of convenience was chosen for the study (n = 636) that represents the whole population of medical undergraduates studying in the medical colleges situated in the various regions of the KSA.

The whole population studying at College of Medicine and Medical Sciences, Taif University (n=250) by the end of academic year 2008 functioned as the sample for this study. The researcher distributed the questionnaires to the freshman students during the English classes taught by the researcher. Other content subject teachers were asked to get the questionnaires filled by the 2<sup>nd</sup> and 3<sup>rd</sup> year students during their lectures. The researcher was able to collect 84% of the questionnaires distributed (n= 209). The researcher sent requests letters to the deans of the following nine medical colleges situated in the various regions of the KSA (See appendix # 3) for the data collection:

1. King Saud University for Health Sciences, Riyadh

2. College of Medicine (King Saud University, Riyadh)
3. Faculty of Medicine and Allied Health Sciences (King Abdul Aziz University, Jeddah)
4. Ibn-Sena National College for Medical Studies, Jeddah
5. College of Medicine (Umm Al-Qura University, Makkah Mukarrama)
6. College of Medicine (King Faisal University, Dammam)
7. College of Medicine (Qasim University, Qasim)
8. College of Medicine and Medical Sciences (King Khalid University, Abha)
9. College of Medicine (Al-Jouf University, Jouf)

All the letters were provided with return-postage envelopes. Seventy five questionnaires were posted to every medical college. The researcher was able to collect 63% (n = 427) of the total copies distributed. The total rate of return remains as follows:

Table 1.

*Rate of return of the questionnaire*

Subjects	Given	Returned	% of return
Medical undergraduates from the above-mentioned medical colleges in the KSA	925	636	69%

*Instrumentation and Data Collection*

The samples' preferences regarding their preferred LS and AT were self-reported on a 5-point Likert-scale questionnaire adapted from Busch et al. (1992). These survey items were indigenized: a few items were excluded and several others included according to the context of the study. The questionnaire initially included 45 items and it was presented to an expert panel of two senior professors of linguistics of Taif University. Some items were suggested to be rephrased and five items to be deleted. The researcher recognized all the suggestions and made necessary changes in the language of the questionnaire according to their

recommendations. The final questionnaire had 40 items (See appendix # 1) instead of its initial 45 items. This final version was given to the panel once again to review it to ensure face validity. Both experts approved the final version. The items of this structured questionnaire were grouped into one uniform section. All questionnaire items had 5-point Likert-type scale:

- |                   |                      |            |
|-------------------|----------------------|------------|
| 1. strongly agree | 2. agree             | 3. neutral |
| 4. disagree       | 5. strongly disagree |            |

The items targeted in this questionnaire were the students' attitudes towards classroom dynamics, motivations, their expectation of the teachers, their preferred LS and preferred modes of assessment. Items numbers 31, 37, 38, 39 and 40 were developed to elicit subjects' preferred AT whereas all other items were dedicated to gather data regarding the above-mentioned factors. Arabic translation of the questionnaire (See appendix #2) was administered for data collection.

#### *Data Analysis*

Descriptive statistics, the means ( $\bar{x}$ ), standard deviations (SD) and percentages (%) were used for this study. All calculations were processed by using version 10 of Statistical Package for Social Sciences (SPSS 10) program.

#### Results

Questionnaire data were tabulated and analyzed using SPSS version 10. Descriptive analyses generated the following data. Five points were assigned to "strongly agree" and one point to "strongly disagree". Higher values on the scale would indicate that the samples preferred those items more as compared to the ones that were assigned lower values. Missing responses were assigned "9" that were not calculated and the number of valid responses (n) have been mentioned in table 2 for all items.

Table 2.

*Descriptive analysis of Samples' responses*

No	Labels	n	Mean	SD
1	I learn best when the class follows a textbook closely.	629	4.5246	.6945
2	If I don't know the answer to a question. I like to try to guess the answer.	629	3.7377	1.0601
3	I learn best when there is a friendly atmosphere.	620	4.3113	.8497
4	I learn best when the teacher makes learning fun.	633	4.7141	.5809
5	I like to learn grammar rules.	633	4.1896	.9524
6	When I read I like to find the meaning of words in a dictionary.	633	4.0016	1.0487
7	When I read I like to guess the meaning of words in context.	635	4.0441	.9098
8	I like watching videos and movies.	631	4.2330	1.0148
9	I like to hear information to help me learn.	628	4.4968	.6598
10	I like to get oral explanations of new words, grammar etc.	629	4.2099	.9310
11	I like to engage in discussions.	636	4.0031	.9849
12	I like to learn by doing activities.	634	3.7587	1.1015
13	I like frequent breaks in activities.	636	4.3585	.8858
14	I like games that let me get out of my chair and move.	634	3.8628	1.2010
15	I like cooperative activities.	633	4.1611	.9642
16	I learn best when I work alone in class.	629	3.6852	1.2193
17	I learn best when the teacher is strict and controls the class.	631	3.6513	2.4120
18	I like to learn by interacting with other people.	634	4.2098	.8272
19	I like using pictures to learn.	636	4.5566	.7043
20	I like competing against others.	633	4.3033	.8323
21	I like working in pairs.	634	4.2571	.8609
22	I like group work.	628	4.1051	.9824
23	When I work with others, I feel frustrated and confused.	635	2.5937	1.1922
24	I learn best when the teacher gives frequent assignments.	624	3.2324	1.2227
25	I learn best when the teacher explains in Arabic.	628	3.4602	1.3245
26	I like the teacher to correct my mistakes immediately.	626	4.5256	.6906
27	I learn best when the teacher moves around the class and helps individual students.	634	4.4132	.8162
28	I like to answer questions quickly.	633	3.8847	1.0115
29	I like to pause before answering questions.	630	3.6889	1.0985
30	I like to get feedback on tests from my teacher.	632	4.3592	.8861
31	* I like my teacher to assess me in various skills.	614	4.1515	.9950
32	I feel more comfortable when my teacher corrects me.	634	4.3533	.8096
33	I prefer to correct my own errors.	632	3.3892	1.2024

34	I feel more comfortable when my peers assess me.	627	3.4003	1.2192
35	I accept criticism more from my peers than my teacher.	635	3.1039	1.3649
36	I use the comments my peers give me to improve.	635	3.8079	1.0779
37	* I prefer taking a series of small quizzes rather than one large test.	629	2.7631	1.2904
38	* I learn best when the teacher gives frequent tests.	633	3.5608	1.2234
39	* I prefer multiple-choice examinations to essay-type questions.	636	4.3884	.9145
40	* I would like to know more about test taking strategies.	635	4.4315	.9089

Table 2 details the descriptive analysis for all 40 items that elicited samples' responses regarding their preferred LS and AT. Eight items (1, 4, 9, 13, 19, 20, 27 & 40) have been assigned extremely high values of more than 4.40. A vast majority of items i.e., sixteen have been given high values between 4 - 4.4 (3, 5, 6, 7, 8, 10, 11, 15, 18, 20, 21, 22, 30, 31, 32 & 39). Ten questionnaire items (2, 12, 14, 16, 17, 25, 28, 29, 36 & 38) were assigned mean values ranging from 3.5 to 3.99. Low mean values of 3 to 3.49 were calculated for four items (24, 33, 34 & 35) whereas the remaining two items, 23 & 37) were given extremely low mean values by the samples.

### Discussion

Scientific analysis of the data generated through the introspective questionnaire revealed that considering the variety of learners in the classes, the teachers need to accommodate individual differences of their learners by using diverse activities but the following LS and AT should be emphasized as they were perceived very important: 1) fun activities and relaxed classroom atmosphere need to be ensured; 2) audio-visual aids should be used frequently; 3) collaborative activities should be emphasized; 4) medium of instruction should be confined to English; 5) group/pair work should be used more frequently; 6) the teachers should move around and help individual students; 7) a suitable and comprehensive textbook should be followed; 8) the teachers should give appropriate feedback after classroom

activities and class quizzes, 9) MCQ quizzes should be preferred to essay-type examinations and 10) the teacher should train the students in test-taking strategies.

Highest mean value has been calculated for item 4 (I learn best when teacher makes learning fun, 4.71) confirming the findings of Kikuchi (2005) who reported that Japanese university students learn best when teachers make learning fun. High values for two other related items (I learn best when there is a friendly atmosphere, 4.31; I like frequent breaks in activities, 4.43) reveal that Saudi students learn best when they have relaxed and lively atmosphere in the classes that is in line with the findings of Kikuchi (2005). The samples ranked the item low (3.65) that sought their responses regarding strict teachers who maintain strict discipline in the classes. The findings are similar to that of Kikuchi (2005) who found out that Japanese university also assigned extremely low mean value (2.95) to the item that elicited their perception of strict teachers. This trend seems helpful as far as their language classes are concerned because research has suggested that relaxed classroom atmosphere enhances language learning. The samples ranked the first and fifth items high on the Likert-scale that offers valuable insights into the fact that the samples appear to be deductive learners because they want to learn grammar rules and follow textbooks strictly. The three items that elicited samples' responses regarding the use of pictures, videos and audio facilities in teaching were also given high values (4.55, 4.01 and 4.49 respectively). The results reported above indicate that audio visual aids make these samples learn better and effectively confirming the findings of Stapa (2009) who also reported that the subjects strongly agreed to the items that sought their responses regarding the use of videos. The results are partially similar to that of Renaldi & Gurung (2008) who found that majority of the samples were visual learner (56%) whereas the percentage of auditory learners was quite low (19%). Results of items 26, 27, 30 and 32 (I like the teacher to correct my mistakes immediately, 4.52; I learn best when the teacher moves around the class and helps individual students, 4.41;

I like to get feedback on tests from my teacher, 4.35 and I feel more comfortable when my teacher corrects me, 4.35) offer significant insights into the fact that Arab learners, represented by the samples of this study, like their teachers to help and correct their mistakes immediately. Low mean values of items 2, 12 and 33 (If I don't know the answer to a question, I like to try to guess the answer, 3.73; I like to learn by doing activities, 3.75 and I prefer to correct my own errors, 3.38) also confirm this finding. The results indicate that Saudi medical undergraduates want expert teachers who provide them with correct information. They do not want to figure out their mistakes or attempt to reach the answers/solutions themselves but expect their teachers to provide them with immediate help. The results are consistent with the findings of Kikuchi (2005) but partially contradicted the findings of Cox et al. (1988). Results of items "I feel more comfortable when my peers assess me" (3.4), "I accept criticism more from my peers than my teacher" (3.1) and "I use the comments my peers give me to improve" (3.8) seem to suggest that Saudi medical undergraduates do not like their peers to know their mistakes and correct them.

Item number 22 and 23 elicited samples responses regarding group and pair work and moderately high values (4.1 and 4.25 respectively) reveal that though their preference for these two important language learning techniques was reasonably favorable yet English language teachers should exploit these techniques to increase learners' talking time and it would also help them minimize their cultural inhibitions of talking in front of their peers. Pair/group work provides even the weaker students with the opportunity to actively participate in classroom proceedings. A low mean value of 3.46 was assigned by the samples to the questionnaire item that sought their response regarding the use of Arabic by their teachers in the classes. This finding strongly suggests that medical undergraduates studying in the KSA do not like their teachers to use Arabic in the classes. Moderate high mean values were assigned to the questionnaire items 11, 15, 18 and 20 (4.01; 4.16; 4.2 & 4.3 respectively)

that captured the samples' perceptions of various class activities based on mutual interaction and cooperation. The results for "When I work with others, I feel frustrated and confused" (2.59) and "I learn best when I work alone in class" (3.68) also reinforced the findings that the samples liked to actively communicate and interact with other instead of working alone. This psychological underpinning reveals that activities that need them to work together would be extremely instrumental in enhancing language learning instead of traditional method of teacher-dominant classes. The results report that samples prefer to use dictionaries as well as context clue method to understand the meaning of new words. The respondents did not positively respond to the item that was meant to seek their opinion about having learning games that let them go out of their chairs and move. The results are consistent with the finding of Rinaldi & Gurung (2008) who found that this activity was not favored by the samples. The results of this study also suggested that Saudi medical undergraduates do not prefer to have frequent assignments as revealed by the low mean value of item 24.

The questionnaire items 31, 37, 38, 39 and 40 secured samples' preferences of their preferred AT. The samples assigned a considerably higher value of 4.43 to the item that asked the samples whether they wanted to know more about test taking strategies. The results offer valuable insights into the fact that Saudi medical undergraduates, represented by this sample, want their English teachers to explain more about the techniques to attempt their examinations in an efficient manner. This finding contradicts Kikuchi's (2005) findings that Japanese college students did not respond positively to this item. The samples assigned quite low values to the items 37 and 38 (I prefer taking a series of small quizzes rather than one large test, 2.76; I learn best when the teacher gives frequent tests, 3.56) which transpired that they preferred one final test in the end instead of taking frequent quizzes during the course. The results are consistent with the findings of Kikuchi (2005) who reported that Japanese samples too did not like to have frequent quizzes. High mean value of 4.38 indicates that the

samples prefer taking multiple-choice examinations as compared to essay-type questions confirming the findings of Kikuchi (2005). The samples prefer that their teachers assess them on various language skills as item 31 results indicate.

For the sake of having rather a clearer picture, the data were organized in the form of ten most and ten least preferred LS and AT and the following results were produced.

Table 3:

*Means and SD of the ten most favored items*

No	Labels	n	Mean	SD
1	I learn best when the teacher makes learning fun.	633	4.7141	.5809
2	I like using pictures to learn.	636	4.5566	.7043
3	I like the teacher to correct my mistakes immediately.	626	4.5256	.6906
4	I learn best when the class follows a textbook closely.	629	4.5246	.6945
5	I like to hear information to help me learn.	628	4.4968	.6598
6	I would like to know more about test taking strategies.	635	4.4315	.9089
7	I learn best when the teacher moves around the class and helps individual students.	634	4.4132	.8162
8	I prefer multiple-choice examinations to essay-type questions.	636	4.3884	.9145
9	I like to get feedback on tests from my teacher.	632	4.3592	.8861
10	I like frequent breaks in activities.	636	4.3585	.8858

The most favored item on this questionnaire remained learning through fun activities. The standard deviation of only 0.58 for this item indicates that there have been no significant differences among the sample for this mode of learning. The analysis of the data suggests that Saudi students of medicine learn better through audio visual aids. The items that elicited samples responses regarding their preference for visual and audio facilities were ranked second and fourth with high mean values of 4.55 and 4.49 respectively. The results highlight another very obvious learning preference that the samples do not like to correct their own mistakes through deliberation and persistent efforts. Rather they prefer to have their teachers

monitor them closely and correct their mistakes. The data offer valuable insights into the fact that they want their teachers to help individual students immediately. Item numbers 3, 7 and 9 verify this trend. It also transpires that the samples like to have frequent breaks during their study sessions. "I learn best when class follows a textbook closely" got 4<sup>th</sup> position among the ten most favored learning styles. The data seems to report another academic trend among Saudi medical undergraduates that they want to avoid writing and the samples assigned 8<sup>th</sup> position to the item that sought their preference regarding having multiple-type questions instead of essay-type questions on the examinations.

Table 4.

*Means and SD of the ten least favored items*

No	Labels	n	Mean	SD
1	When I work with others, I feel frustrated and confused.	635	2.5937	1.1922
2	I prefer taking a series of small quizzes rather than one large test.	629	2.7631	1.2904
3	I accept criticism more from my peers than my teacher.	635	3.1039	1.3649
4	I learn best when the teacher gives frequent assignments.	624	3.2324	1.2227
5	I prefer to correct my own errors.	632	3.3892	1.2024
6	I feel more comfortable when my peers assess me.	627	3.4003	1.2192
7	I learn best when the teacher explains in Arabic.	628	3.4602	1.3245
8	I learn best when the teacher gives frequent tests.	633	3.5608	1.2234
9	I learn best when the teacher is strict and controls the class.	631	3.6513	2.4120
10	I learn best when I work alone in class.	629	3.6852	1.2193

The analysis of the least preferred items exhibits the same trend which has been identified in the ten most favored items on this questionnaire. The samples have shown their disliking for strict teachers and strict discipline in the classrooms. The results reveal that the samples assigned low mean value (3.38) to the item "I prefer to correct my own mistakes" that indicates the same psychological underpinnings that the samples did not like to deliberate to reach the answers. Rather they expected ready-made answers provided by their teachers. The

data provides deep insights into the fact that the samples preferred to hide their mistakes and weaknesses from their class fellows. They stated that they wanted to have their teachers correct their mistakes rather than their peers. The least preferred option on this list remains the item, "I feel frustrated when I work with other", which suggests that they had a positive attitude towards collaborative activities. This findings supports that group/pair work is a preference for the samples. Item number 2 and 8 were meant to seek samples' responses about AT and the results strongly indicate that the samples did not like to have frequent quizzes and assignments. Rather they preferred to be evaluated through one major multiple-choice question paper. A careful analysis of the above tables (3 & 4) details valuable insights that the questionnaire items generated dependable data because both the tables given above are approximately mirror reflection of each other.

From moderate to significant differences in SD values seems to suggest that though the data has offered significant insights into Saudi medical undergraduates' preferences for LS and AT yet the samples carried considerable individual differences in their responses. Thus it is not probable to have a group of learners with common learning habits and learning preferences. Research has reported that each human being is "unique as a signature. Each signature appears to be influenced by nature and nurture." (Kensella, 1995 cited in Ali, 2005, p. 253). Thus instead of classifying the learners into categories, this study tries to find out samples' most preferred and least preferred LS and AT. This simple classification will help the teachers of medical undergraduates at Saudi medical colleges to cater for their students' learning preferences after having a clearer picture of their students' likes and dislikes regarding different classroom activities and evaluation methods and tools.

### Conclusions and Recommendations

The findings of the study provide valuable insights about Saudi medical undergraduates' preferences of LS and AT. It is recommended that the teachers should try to

find out the learning preferences of their students that are vital in learner-centered pedagogy (Nunan, 1989). They also need to accommodate individual differences of their students by using diverse classroom activities and teaching techniques to ensure efficient and effective teaching. The teachers should try to have friendly and relaxed classroom atmosphere to encourage the students to involve themselves in various activities. It is recommended to emphasize collaborative activities instead of letting the students work alone. Group/pair work should be exercised frequently to increase student talking time and help them overcome their shyness of using English in front of the whole class. Use of appropriate audio-visual aids should also be a regular teaching technique. It is strongly recommended that medium of instruction should be confined to English as much as possible. Use of Arabic should be limited to only those situations where it becomes unavoidable. The teacher should move around and help individual students. This practice will enable the teachers to know their students' weaknesses and to motivate the ones who usually do not take active part in various classroom activities. Results have revealed a significant tendency in the sample of the study that they want to follow a suitable and comprehensive textbook. The teachers should provide the students with clear-cut course outlines as well as the prescribed teaching materials right in the beginning of the course.

The findings of the study suggest that Saudi medical undergraduates prefer multiple-choice questions more than essay-type examinations. It is advised to keep the number of class quizzes and assignments limited but if it is important to give them frequent quizzes or assignments, the teachers should take the students into confidence by discussing the significance and advantage of quizzes and assignments in effective learning. It is also recommended that these assignments and quizzes should be supplemented with appropriate feedback by the teachers. The findings suggest that the teacher should train the students in

test-taking strategies and to ensure maximum benefit these sessions should be conducted before the final examinations.

This study has dealt with the samples' preferences and provided preliminary information for the teachers and educationists to investigate the learners from other disciplines as well to identify their specific learning preferences. This understanding will certainly help them to pick and exercise the most feasible and appropriate teaching techniques and thus help to evolve a teaching style that will enhance their students learning capacity.

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## Appendix # 1

## Questionnaire (LS)

## I- PERSONAL

Name:

Mobile:

Date:

Email:

II- Tick in the most appropriate box.

No	Statement	strongly agree	agree	neutral	disagree	strongly disagree
1	I learn best when the class follows a textbook closely.					

2	If I don't know the answer to a question. I like to try to guess the answer.					
3	I learn best when there is a friendly atmosphere.					
4	I learn best when the teacher makes learning fun.					
5	I like to learn grammar rules.					
6	When I read I like to find the meaning of words in a dictionary.					
7	When I read I like to guess the meaning of words in context.					
8	I like watching videos and movies.					
9	I like to hear information to help me learn.					
10	I like to get oral explanations of new words, grammar etc.					
11	I like to engage in discussions.					
12	I like to learn by doing activities.					
13	I like frequent breaks in activities.					
14	I like games that let me get out of my chair and move.					
15	I like cooperative activities.					
16	I learn best when I work alone in class.					
17	I learn best when the teacher is strict and controls the class.					
18	I like to learn by interacting with other people.					
19	I like using pictures to learn.					
20	I like competing against others.					
21	I like working in pairs.					
22	I like group work.					
23	When I work with others, I feel frustrated and confused.					
24	I learn best when the teacher gives frequent assignments.					
25	I learn best when the teacher explains in Arabic.					
26	I like the teacher to correct my mistakes immediately.					
27	I learn best when the teacher moves around the class and helps individual students.					
28	I like to answer questions quickly.					
29	I like to pause before answering questions.					
30	I like to get feedback on tests from my teacher.					
31	I like my teacher to assess me in various skills.					

32	I feel more comfortable when my teacher corrects me.					
33	I prefer to correct my own errors.					
34	I feel more comfortable when my peers assess me.					
35	I accept criticism more from my peers than my teacher.					
36	I use the comments my peers give me to improve.					
37	I prefer taking a series of small quizzes rather than one large test.					
38	I learn best when the teacher gives frequent tests.					
39	I prefer multiple-choice examinations to essay-type questions.					
40	I would like to know more about test taking strategies.					

## Appendix # 2

## Arabic translation of the questionnaire

## استبيان

## 1) معلومات شخصية: (اختياري)

الاسم:	رقم الجوال:
البريد الإلكتروني:	التاريخ:

## ضع علامة ( صح ) في الحقل المناسب :

معرفة اسلوب الطالب في الدراسة	موافق جدا	موافق	غير متأكد	رافض	رافض جدا
1 أتعلم بطريقة أفضل عندما يتابع الطلبة المدرس باهتمام					
2 عندما لا اعرف جواب السؤال احاول معرفة الجواب عن طريقة التخمين					
3 أتعلم بطريقة أفضل عندما يكون الجو وديا في الفصل					

				4	اتعلم بطريقة افضل عندما يقوم المدرس بالتدريس بطريقة فكاوية
				5	احب ان اتعلم قواعد اللغة
				6	عندما أقرأ أحب ان ابحث عن معاني الكلمات في القاموس
				7	عندما أقرأ احب ان اخمن معاني الكلمات من الجملة
				8	احب مشاهدة فيديو و افلام
				9	احب ان اسمع المعلومات حتى تساعدني على التعلم
				10	احب ان احصل على شرح شفوي لكلمات جديدة و قواعد الخ
				11	احب ان اشارك في مناقشات
				12	احب ان اتعلم عن طريق القيام بالانشطة تعليمية
				13	احب اخذ فترات راحة خلال الانشطة
				14	احب الالعاب التي تتطلب القيام من مقعدي و الحركة
				15	احب الانشطة التعاونية
				16	اتعلم بطريقة افضل عندما اكون وحيدا في الفصل
				17	اتعلم بطريقة افضل عندما يكون المدرس حازما و مسيطرا على الفصل
				18	احب ان اتعلم عن طريق المحادثة مع الاخرين
				19	احب استخدام الصور عند التعلم
				20	احب المنافسة مع الاخرين
				21	احب الاشتراك الأزواجي مع احد اخر
				22	احب العمل في مجموعات
				23	اشعر بالغضب و اللخبطة عندما اشترك مع اخرين في الصف
				24	اتعلم بطريقة افضل عندما يعطي المدرس و اجبات مركزة
				25	اتعلم بطريقة افضل عندما يشرح المدرس باللغة العربية
				26	احب ان يصحح المدرس الاخطاء حالا
				27	اتعلم بطريقة افضل عندما يتحرك المدرس في الفصل و يساعد الطلاب كل على انفراد
				28	احب ان اجيب على الاسئلة بسرعة
				29	احب ان انتظر قبل أن أجيب على الاسئلة
				30	احب ان احصل على تعليق من المدرس على اختبراتي
				31	احب ان تقوم مدرستي بتقييمي في وسائل التعليم المختلفة
				32	اشعر بارتياح عندما تقوم مدرستي بتصحيح اخطائي
				33	افضل ان اصلح اخطائي بنفسي
				34	اشعر بارتياح عندما يقيمني زملائي الافضل مني
				35	اتقبل النقد في عملي من زملائي الافضل من اكثر من مدرستي
				36	استخدم التعليقات التي يقدمها لي زملائي في تحسين مستواي
				37	افضل اخذ عددا من الاختبارات القصيره على ان اخذ اختبار واحد طويلا
				38	اتعلم بطريقة افضل عندما يعطي المدرس في اختبارات دسمه
				39	افضل اختبارات متعددة الخيارات على اختبارات المقال
				40	ارغب في معرفة الكثير عن طرق اخذ الاختبارات

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Kingdom of Saudi Arabia

Ministry of Higher Education

Taif University



المملكة العربية السعودية  
وزارة التعليم العالي  
جامعة الطائف

سَلِّمَهُ اللهُ

سعادة عميد كلية الطب بجامعة الملك سعود

افيد سعادتكم بأن الباحث د/شودري زاهد جاند/استاذ اللغة الانجليزية بكلية الطب والعلوم الطبية بجامعة الطائف ، يعتزم اقامة بحث علمي حول محتوى مقرر اللغة الانجليزية بكليات الطب والاحتياجات اللغوية للطـلاب حسب استمارات الاستبيان المرفقة .

نأمل من سعادتكم تسهيل مهمة الباحث لما يخدم المصلحة العامة.

وتقبلوا فائق التحية والاحترام، ، ،

عادل بركلوي  
١٤٣٠/٤/٢٩

عميد كلية الطب والعلوم الطبية  
د/طالبان بن عبد الله الكبي

الرقم : ١٧٧٧ التاريخ : ٢٠/٤/١٤٣٠ هـ المشفوعات : ٥

الطائف - الحوية ص.ب (٨٨٨) هاتف (٧٢٧٤٢٩٩) فاكس (٧٢٥٥٥٢٩) تلكس (٧٥٠٤١٤)