FIRST YEAR MEDICAL AND DENTISTRY STUDENTS’ DOMINANT LEARNING STYLE IN UDAYANA UNIVERSITY

Background
(Shifting Paradigm)
Background
(Learning Style Honey & Mumford, 1986)

ACTIVIST

REFLECTOR

THEORIST

PRAGMATIST
Background

IPEC in Udayana University

Better delivery

Better Assessment
Method

- Cross-sectional study at the Faculty of Medicine, Udayana University, Bali
- First year undergraduate medical and dentistry students
- Voluntary and as a part of lecture which given by primary investigator in Block Studium Generale
- Students who provided informed consent were included.
- Students who were absent were excluded
- A questionnaire was given during lecture and be discussed at plenary session. Every student knew their learning style preference later.
**Method**  
*(The Honey and Mumford’s Learning Styles Questionnaire)*

<table>
<thead>
<tr>
<th>Learning Styles and Preference</th>
<th>Very Low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVIST</td>
<td>0-6</td>
<td>7-8</td>
<td>9-12</td>
<td>13-14</td>
<td>15-20</td>
</tr>
<tr>
<td>REFLECTOR</td>
<td>0-10</td>
<td>11-13</td>
<td>14-17</td>
<td>18-19</td>
<td>20</td>
</tr>
<tr>
<td>THEORIST</td>
<td>0-6</td>
<td>7-9</td>
<td>10-13</td>
<td>14-15</td>
<td>16-20</td>
</tr>
<tr>
<td>PRAGMATIST</td>
<td>0-8</td>
<td>9-10</td>
<td>11-13</td>
<td>14-15</td>
<td>16-20</td>
</tr>
</tbody>
</table>
Riset Road Map (cohort)

- Learning style preference and study outcome (CBT and OSCE) → UKMPPD (national exit examination) and “survival rate”.
- Learning style predominant (medical, dentistry, nursing) → IPEC in Udayana University.
- Learning style changes within self (periodic).
- Student selection and admission.
RESULT

• Total 283 participants,
  – 235 (83%) medical students
  – 48 (17%) were dentistry students.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Activist</th>
<th>Reflector</th>
<th>Theorist</th>
<th>Pragmatist</th>
</tr>
</thead>
<tbody>
<tr>
<td>medical students</td>
<td>11 (2-18)</td>
<td>16 (7-20)</td>
<td>14 (6-20)</td>
<td>14 (8-20)</td>
</tr>
<tr>
<td>dentistry students</td>
<td>11.25 (± 0.472)</td>
<td>17 (11-20)</td>
<td>14 (8-18)</td>
<td>15 (8-18)</td>
</tr>
</tbody>
</table>
The Mann-Whitney test showed similarities in among subgroup learning preference tested in both medical and dentistry group of students (p > 0.05).

<table>
<thead>
<tr>
<th></th>
<th>Activist</th>
<th>Reflector</th>
<th>Theorist</th>
<th>Pragmatist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>5138.500</td>
<td>4708.500</td>
<td>5515.500</td>
<td>5224.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>32868.500</td>
<td>32438.500</td>
<td>33245.500</td>
<td>32954.000</td>
</tr>
<tr>
<td>Z</td>
<td>-0.976</td>
<td>-1.823</td>
<td>-0.243</td>
<td>-0.812</td>
</tr>
<tr>
<td>Asymp. Sig (2-tailed)</td>
<td>0.329</td>
<td>0.068</td>
<td>0.808</td>
<td>0.417</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Program Studi
DISCUSSION

• Low students’ awareness on their own learning preferences.
• Majority of both group students showed strong preferences toward pragmatist and theorist learning style. The less preferred was activist learning style.
• Being a student in medicine, depend highly to role model (doctors or professors).
CONCLUSION

Learning Style Preference

None (observational study)

Medical Students VS Dentistry Students

The dominant learning style preference in both groups were high preference pragmatist and theorist. The comparison of learning style preferences in both groups were similliar.
Potential Project

- Multicentre study Indonesia - Philippine
ABSTRACT

Background: Learning style is the way learners perceive, interact, and give responses toward their specific learning environment. New university students are being exposed into a newer and more specific learning environment compared to high school.

Aim: This research aims to explore and compare first year medical and dentistry students’ dominant learning style in Faculty of Medicine Udayana University.

Method: A descriptive research with cross-sectional study using Honey and Mumford Learning Style Questionnaire in Indonesian language was done to both medical and dentistry students in their first days of college. The questionnaire consists of 80 random questions for each type of learning styles (activist, reflector, theorist, and pragmatist) and divided into five preferences (very low, low, moderate, high, and very high). The Mann-Whitney method was used for statistical analysis.

Results: There were 283 students which consisted of 235 (83%) medical students and 48 (17%) dentistry students who responded to this research. The median data of activist, reflector, theorist, and pragmatist learning style in medical students respectively were 11 (2-18), 16 (7-20), 14 (6-20), and 14 (8-20). Among dentistry students, the mean and median data of activist, reflector, theorist, and pragmatist learning style preferences respectively were 11.25 (+ 0.472), 17 (11-20), 14 (8-18), and 15 (8-18). The Mann-Whitney test showed similarities in among subgroup tested (20 subgroup learning preference) in both medical and dentistry group of students (p > 0.05).

Conclusion: The dominant learning style preference in both medical and dentistry groups were high preference pragmatist and theorist. The comparison of learning style preferences in both medical and dentistry students were similar.

Keywords: learning style preference, medical students, dentistry students

Correspondence: sudira.putugede@unud.ac.id