Use of Myers-Briggs Personality Types in the Distribution of Students to Team-Based Learning Groups

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TBL TEAMS

• In a TBL course, students are strategically organized into groups for the term
  – Little data indicating how to best organize teams
• To maximize effectiveness teams should be comprised of diverse student characteristics that:
  – Have balanced student experience
  – Differing demographic characteristics
    • Evidence has shown gender distribution affects the collective intelligence of groups

Michaelsen & Sweet, 2008; Woolley, Chabris, Pentland, Hashmi, & Malone, 2010
PERSONALITY AND TEAMS

• Knowledge of team member’s personality types helps with:
  – Understanding team member behavior
  – Managing the dynamics of the team
  – How they and their team members best work and interact
• Personality traits most positively related to team player disposition:
  – Agreeableness
  – Extraversion
• Students with considerable group experience prefer diverse personality groups

OBJECTIVE

• To determine student perceptions of team-based learning in first professional year courses based on personality type.
METHODS

• Prior to their first professional year, students completed the:
  • Myers-Briggs M form (93 items)
  • Perceptions of Teams instrument (22 items, Likert-type, 1=SD, 7=SA)
• Students were assigned to teams:
  • 2 classes: Self-Care and Biochemistry
  • 8 teams of 5-6 students
    • At least 2 males/team
    • At least 2 extroverts/team
• Post survey:
  • Perceptions of the role of personality (9 items, Likert-type, 1=SD, 7=SA)
  • Perceptions of Teams instrument (Likert-type)
• Analysis: descriptive statistics, paired t-test in SPSS
• Approved by IRB at both Universities

DEMOGRAPHICS

• N= 53
• 12 of the 16 MBTI® personality types were present

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>41.5</td>
</tr>
<tr>
<td>Caucasian</td>
<td>45</td>
<td>84.9</td>
</tr>
<tr>
<td>Age &gt;24 years old</td>
<td>12</td>
<td>22.6</td>
</tr>
<tr>
<td>GPA on admission to pharmacy school ≥3.25</td>
<td>40</td>
<td>75.5</td>
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<tr>
<td>Previous TBL experience</td>
<td>34</td>
<td>64.2</td>
</tr>
<tr>
<td>Extroverts</td>
<td>26</td>
<td>49.1</td>
</tr>
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</table>
RESULTS - PERSONALITY SURVEY

Mean of Individual Responses

- **Team had diverse personality types**
- **Found it difficult to work with other members of my team**
- **Connected on a personal level with my teammates**
- **Connected on an intellectual level with my teammates**

**Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Strongly Agree**

- Will be beneficial to future career, now know how to work with other personality types
- As semester progressed, easier to connect on personal level
- As semester progressed, easier to connect on intellectual level
- Challenging to learn how to work with other personality types

**Strongly Disagree** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | **Strongly Agree**
DISCUSSION

• Statistically significant result from pre-post survey that teams should consist of differing personalities (p<0.001)
  — Important because diversity is good for complex problem-solving
• Students learned how to connect on a personal and intellectual level with different personality types as the semester progressed.
  — Healthcare teams often consist of different personality types.
  — Collaborative focus currently – essential to be able to work together
  — Students viewed this skill as beneficial to their career
• Some students still face challenges working with different personality types, so it is important for faculty to help them learn to work as a team.

LIMITATIONS

• More in-depth questions on personality types and teams
• Previous TBL experience
• No control group
FUTURE DIRECTION

• Randomize the students next fall and re-administer the survey to determine whether students:
  – Recognize different personalities among teammates
  – Benefit to future career of differing personalities

• Assess student perception of team members based on learning styles

QUESTIONS?

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