The Myers-Briggs Type Indicator and Medicine

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Personality
Dimensions of Personality

- Activities that give you satisfaction
- Activities or situations you find stressful
- How do you cope with stress
- How you interact with peers
- How do you interact with residents, attendings, other professionals
Tools to assist with the self-evaluation process

Important to identify your preferences

Why

In order to find a “good” natural or real fit between you and a medical specialty

Myers-Briggs is one such tool
What is the Myers-Briggs Type Indicator?

- Psychometric questionnaire
- Forced choice
- Based on Jungian personality types
- Focuses on normal populations
Myers-Briggs Type Indicator

- Grown to be the most widely used personality type instrument in the world
- One of its uses is career development of health professionals including medical specialty choice for physicians
Psychological Type

- Measures preference not aptitude
- MBTI sorts people into 4 opposite pairs
- 16 possible combinations
Four dimensions of the Meyers-Briggs Type Indicator

- Extraversion (E) – Introversion (I)
- Sensing (S) – Intuition (N)
- Thinking (T) – Feeling (F)
- Judging (J) – Perceiving (P)
Four dichotomies - with descriptions of each

Your reported type
- E, N, F, J

Raw score ranges circled

Preference
- Slight, moderate, clear and very clear

Score value of non-dominant type
- Extraversion is the clear preference (20) with Introversion = 1
Equal preference

- E-I both = 11
- S-I both = 13
- T-J both = 12
- J-P both = 11

Coding is then INFP
Where you like to focus your attention

- **Extraversion (E)**
  - Focus on outer world of action, objects and persons
  - Draw energy from people-contacts
  - If inactive motivation declines
  - An “E” person is not necessarily a party animal or show off

- **Introversion (I)**
  - Focus on internal world of ideas and reflection
  - Prefers to reflect
  - Need time out to rebuild energy
  - “quiet-recharging”
  - An “I” person is not necessarily shy or unsociable.
The way you like to look at things

**Sensing (S)**
- Trust information that is present
- Look at detail and facts
- Lean toward tangible
- May minimize importance of intangible

**Intuition (N)**
- Trust information that is abstract/theoretical
- Look for patterns/interrelationships
- Look at how data relates to theory
- Don’t ignore senses but may also pay attention to “hunches”
The way you like to go about deciding things

**Thinking (T)**
- Attempts to see things by using logic or principles
- Organize, sum up or categorize the information
- Lean toward measurable or objective
- May minimize the importance of human values and feelings

**Feeling (F)**
- Attempts to see things from the perspective of the other
- Compelled to look for relational harmony as they perceive it
- Focus on people-skills, warmth and friendliness
- May minimize the importance of “facts”
How you deal with the outer world

- **Judging (J)**
  - Prefer matters to be decided
  - Start tasks on time
  - Have clear plans
  - May seem inflexible

- **Perceiving (P)**
  - Prefer to leave matters open-ended for further input
  - Wants to keep listening
  - Put off tasks until close to deadline
  - May seem too flexible
Typical Work Stressors and preferred learning style

Extraverts (60%)
- Working alone
- Communicate by e-mail only
- Lengthy work periods with no interruptions
- Having to reflect before acting

Learn best through direct experience
- Enjoys working in a group
- Gathers ideas from outside sources
- Willing to lead, participate and offer opinions
- Jumps right in without guidance from others
Typical Work Stressors and preferred learning style

- **Introverts (40%)**
  - Working with others
  - Talking often on the phone
  - Having to act quickly without reflection
  - Numerous concurrent tasks and demands

- **Prefers to work alone**
- **Enjoys quiet solitary work**
- **Often generates ideas from internal sources (creative)**
- **Prefers to listen, watch and reflect**
Possible Clinical Issues for Extroverts

Extroverts
- Too quickly to speak up during rounds or surgery
- May appear too dependent on team

Tips:
- Use energy to advocate for patients
- Be careful to not interrupt patients or team members
Possible Clinical Issues for Introverts

- Introverts
  - May be perceived as disinterested during rounds
  - May not seem like a team player

- Tips:
  - Smile if you’re on an extroverted team
  - Engage one or two members of the team
  - Volunteer to help and share thoughts through formal presentations
Typical Work Stressors and preferred learning style

Sensing Types (65%)
- Attending to own and others’ insights
- Giving overview without details
- Focusing on possibilities
- Too many complexities

Focuses on the present
- Practical and reasonable
- Utilizes experience and common sense to solve problems
- Keenly observes the surrounding world
- Likes to observe others before attempting skill
Typical Work Stressors and preferred learning style

Intuitive Types (35%)
- Attending to realities
- Focusing on details
- Focus on past experience
- Required to be practical

Prefers to work in short sessions, rather than finishing a task all at once
- Enjoys new challenges, experiences and situations
- More likely to look at the big picture rather than details
- Likes theories and abstract ideas
Possible Clinical Issues for Sensing Types

- Sensing
  - Difficulty integrating lab values and physical exam into overall assessment and treatment plan

- Tips:
  - Alert team members to new findings
  - Don’t get discouraged if details aren’t relevant for an acute issue
Possible Clinical Issues for Intuitive Types

- Intuitive
  - May overlook findings when coming up with a plan

- Tips:
  - Double-check that your assessment fits with findings
  - Organize your findings so that you don’t miss anything
Typical Work Stressors and preferred learning style

**Thinking** (55% males and 35% females)
- Using personal experiences to assess situations
- Using empathy and personal values to make decisions
- Having others react to questioning as divisive

**Interested in logic and patterns**
- Dislike basing decisions on emotions
- Bases decision on reason and logic
Typical Work Stressors and preferred learning style

- Feeling (45% males and 65% females)
  - Analyzing situations objectively
  - Focusing on tasks only
  - Using logic alone to make decisions

- Interested in people and their feelings
  - In tune with their own emotions and those of other people
  - Base decisions on immediate feelings
  - Generates excitement and enthusiasm in group settings
Possible Clinical Issues for Thinking types

Thinking

May be perceived as less empathetic especially if interaction style is impatient

Tips:

Don’t be dismissive of feelings even if they don’t make sense

Make an effort to understand patients’ and team member values
Possible Clinical Issues for Feeling Types

Feeling

- May get too emotionally involved in a patient’s care

Tips:

- Talk with other people if you are too emotionally involved with a patient’s case
- This helps with perspective
Typical Work Stressors and preferred learning style

Judging (45%)
- Waiting for structure to emerge from the process
- Too much flexibility around time frames and deadlines
- Dealing with surprises

Do not like mystery or ambiguity
- Tend to be firm in their decisions
- Very organized and structured
- Strong opinions
- Generally follows the rules
Typical Work Stressors and preferred learning style

**Perceiving (55%)**
- Having to organize selves’ and others’ planning
- Having to finish and move on
- Being required to plan ahead

**Often make impulsive decisions**
- Change decisions based on new information
- Dislike structure and organization
- Tend to be very flexible and adaptable
- Sometimes have trouble making decisions
Potential Clinical Issues for Judging Types

Judging
- May feel frustrated with constant change of teams, expectations, etc

Tips:
- Ask what expectations are early on
Potential Clinical Issues for Perceiving Types

Perceiving
- If you are tardy to rounds or don’t complete notes on time, it can be interpreted as unprofessional

Tips:
- Make lists and set deadlines
- Prioritize what your resident and attending deem as important
## Leadership Styles

<table>
<thead>
<tr>
<th>ESFJ/ENFJ</th>
<th>ISFP/INFP</th>
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</thead>
<tbody>
<tr>
<td><strong>Participative Leadership</strong></td>
<td><strong>Ideological Leadership</strong></td>
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<tr>
<td>People-oriented</td>
<td>Value-driven</td>
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<tr>
<td>Build personal relationships</td>
<td>Passion for key issues</td>
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<tr>
<td><strong>Useful when:</strong></td>
<td><strong>Useful when:</strong></td>
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<tr>
<td>Commitment from others is needed</td>
<td>Problem needs to be solved with dispassionate objectivity</td>
</tr>
<tr>
<td>Situation is sensitive</td>
<td>Groups needs to be refocused on important activities</td>
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</tbody>
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Leadership Styles

**ENTP/ENFP**
- Change-oriented leadership
- Tries new things
- Looks for unexpected outcomes
- Experiments

**Useful when:**
- Group is stuck
- Group needs to challenge status quo

**INTJ/INFJ**
- Visionary Leadership
- Develops long-term vision
- Anticipates what is outside current knowledge

**Useful when:**
- Radical change is needed
Leadership Styles

ESTP/ESFP
- Action-oriented leadership
- Takes action and produces results
- Sets an example
- Useful when:
  - There is lack of achievement
  - Low group motivation

ISTJ/ISFJ
- Goal-oriented
- Observes, listens
- Clarifies goal
- Establishes realistic expectations
- Useful when:
  - Direction is vague
  - Expectations have not been articulated
Leadership Styles

**ESTJ/ENTJ**

- Executive Leadership
- Organizes
- Set measurable goals
- Coordinates work of different people
- Manages resources

**Useful when:**
- There is chaos/lack of organization
- No measure of achievement

**ISTP/INTP**

- Leadership Theorist
- Provides analyses
- Engages in intellectual debate

**Useful when:**
- Situation is complex
## 2009: MS 1 CLASS
Meyers Briggs Type (N =200)

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<th>Percentage</th>
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# Females (N=105)

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Females (N=105)
Preference type and medical students

Myers collected type data on 5,355 students in the 1950’s
- All types admitted in roughly equal numbers

Composite of 7,190 medical students during 60’s and 70’s found
- More intuitive (N), more feeling (F) and more judging (J)
- Small difference between E-I
Three types of medical careers

- Surgical
- Primary care (family practice, internal medicine and pediatrics)
- Controllable lifestyle specialties
  - Anesthesiology, dermatology, emergency medicine, neurology, ophthalmology, pathology, psychiatry and radiology
Results

- Stereotype of surgeons
  - Dominant, uninhibited and aggressive

- Results of MBTI
  - Surgeons more extroverted, practical, social, competitive and structured than colleagues in controllable lifestyle specialties
  - Surgeons less creative
  - Lifestyle colleagues more introverted and less conforming than surgeons
  - More diversity in primary care
MB and specialty choice

Stillwell et. al. (2000)

Study: 3,987 students from 12 medical schools

- MBI taken during first year of medical school
- Study looked at MBI type, gender and medical specialty at time of match
Results: gender and type

Gender
- Women chose primary care more often than non-primary care residencies
- Men chose primary care at almost the same rate as non-primary care residencies

Type
- Thinking types chose primary care at same rate as non-primary care
- Feeling types more likely to choose primary care; more likely to choose Family Medicine
Gender and type: surgical vs non-surgical choices

- Men chose surgical residencies at a significantly higher rate than did women.
- Feeling types selected surgical residencies at a lower rate than did thinking types.
- Introvert types chose surgery at a lower rate than did extravert types.
Generalizations

- Internal Medicine and Neurology attract more IN types
- Psychiatry attracts IS types
- Surgical specialties attract more ES types
- OB/GYN attract sensing types
- Pediatrics attracts ESFJs and ISFJs
Generalizations continued

- **Extroverts**
  - More attracted to surgical residencies

- **Sensing**
  - Obstetrics-General Practice and Anesthesiology

- **Introverts**
  - More attracted to academic settings

- **Intuition**
  - Psychiatry, Pathology, Research
## Type NF - intuition plus feeling

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<tr>
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<td>Psychiatry</td>
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MBTI types, gender and residency selection

Katz et. al. (2007)

1999-2004 medical students from Temple University School of Medicine

Compared MBTI with residency selection
Katz et. al. (2007)-results

Non primary care (lifestyle controllable)
- Thinking preference (65%)
- Feeling preference (55%)

Primary Care specialties
- Thinking (35%)
- Feeling (45%)
Katz et. al. (2007)-results continued

- Students who favor introversion choose
  - psychiatry (similar to Myers results)
  - surgery
    - departure from previous studies
    - N= 85 (30 E’s and 55 I’s) –very small number of students chose surgery

- Students who favor Extraversion chose OB/GYN

- All other specialties mixed on E/I scale

- Students choosing a specialty that requires attention to detail (radiology, anesthesiology) have a preference for Sensing
Katz et. al. (2007)-limitations

- Correlated MBTI types completed during first or second year with residency choice
- Did not obtain MBTI rating after third or fourth year for all students
- (sample data shows students can change types)
- Specialty choice does not indicate specialty success
MB preference and intent to practice rural medicine

Royston et. al. 2012

Extroverts had higher odds for intent to practice in a rural setting

- Preference to try new experiences

Judging types had higher intent than Perceivers but not statistically significant
MB and OB/GYN student clinical evals

- Extroversion had a positive correlation with clinical evaluations.
- However, NBME shelf exams do not have a significant statistical correlation with clinical evaluations and have no significant correlation with MBTI extroversion.
Sources

- Clinical tips from Dr. Amanda Scott (psychiatry resident) who has extensive work with consult liaison service at UHS
- Stilwell, N., Wallick, M., Thal, S. & Burleson, J. (2000). Myers-Briggs Type and Medical Specialty choice: A New look at an Old Question. Teaching and Learning in Medicine, 12 (1), 14-20