Do personality profiles among physicians correlate with their career choices?

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Categories: Medical Education (General), Teachers/Trainers

Received: 21/07/2016
Published: 27/07/2016

Abstract

Purpose
We all recognize that different types of medical doctors may have different ways to interact with patients. Here, we asked how well their personality profiles correlate with their career choice, and discuss how those personality profiles may impact on the quality of healthcare and teaching.

Method
We used Process Communication Model® (PCM) test to assess the prevalence of personality profiles among 161 medical doctors, both general practitioners and specialists, who are either in private practice or engaged in an academic career. The goal was to describe their self-assessed personality profiles and to explore whether these profiles differed according to gender, specialty choice, or private versus academic practice choice.

Findings
We found that most academic doctors envision the world predominantly through their thoughts and logic and are motivated most easily by recognition of their opinion and beliefs. On the other hand, most private practice doctors view the world through their feelings, are people-oriented, and are motivated most easily through recognition of personhood.

Interpretation
We saw a clear correlation between personality traits and career choices. This leaves us with a remaining question: are the correlations indicative of causality? In other words, are trainees with certain personality traits attracted to certain specialties and practice modes, or is it the specialty environment that shapes the trainee’s personality? May academic admission committees select trainees in their own image? We are firmly convinced that knowing how personalities may shape career choices, may offer deeper insights into how medical professionals communicate with their interaction partners, in particular patients and students. Likewise, we believe that such communications could be refined to the benefit of all involved when doctors of any personality types are willing to move into another person's frame of preference.

Keywords: Medical career, Communication, Personality

Introduction
It is our everyday experience that the quality of social interaction depends on our personalities. It is generally easier to interact with people with similar personalities than with people with opposing personalities. Perhaps this is nowhere more important than for interactions between physicians and their patients: shared personalities between the two foster a better mutual understanding and may even hasten a patient's recovery. Neither doctors nor their patients, however, are entirely free to choose with whom to interact, and similar constraints in choice of partners extend to interactions with trainees and many others in our social environment. Therefore, it is critical to strive to minimize potential personality-dependent frictions in our interactions, whether with patients, students, employees, or colleagues.

An important step toward recognizing how personalities shape a doctor's professional interactions is to understand how personality traits guide doctors in their career choices in the first place. The spectrum of career choices available to medical professionals is wide indeed, ranging from no patient contact whatsoever to intensive care for patients and their families, from work of predominantly academic interest to work in administration. Here we show that reliably measurable personality profiles correlate well with the disciplines young doctors choose for their respective careers. Similar studies have been conducted previously but they usually focused on medical students or young residents, while we approach the question retrospectively by assessing the personality profiles of established professionals. Moreover, we focus on personality differences between physicians actively involved in an academic career versus those working in private practice. This focus seems to be of particular importance as the goals of academically oriented physicians may often be in conflict with the needs of patients.

But how can personalities be defined, and how can they be quantified? And how can any type of definition or quantification take into account the dynamic nature of a personality, which can be modulated by individual experiences and change over lifetime? Indeed, personality research has always been a difficult subject, and attempts to classify individuals into different personality types often raise skepticism. Nevertheless, multiple methods have been devised to systematically characterize different personality types. Among them is the Myers-Briggs Type Indicator (MBTI), which assesses personalities based on 16 different personality types and which in two large-scale efforts has previously been applied to medical school participants. Another is the Process Communication Model® (PCM), which to our knowledge has not so far been used in similar studies and which we here employ. This method holds that each of us has a personality that can be depicted as a combination of fundamental personality types arranged on top of each other like the floors of a pagoda where the first floor represents the strongest personality type (the “Base”), and the upper floors other personality types ranked according to their relative strength. This method was first presented in 1978 by Taibi Kahler who, based on Beme’s Transactional Analysis, described six principal, and principally value-free, personality types: Harmonizers, Thinkers, Persisters, Imaginers, Rebels, and Promoters. The Harmonizer trait is emotion- and people-oriented, warm and compassionate, and needs acceptance, as it is motivated by recognition of personhood; the Thinker trait is thought-oriented, displays precision and is focused on accomplishments, motivated by recognition of work and time structure; the Persister trait is opinion-oriented and is focused on dedication, motivated by recognition of work and convictions; the Imaginer trait is introspection-oriented, reflective and enjoys solitude; the Rebel trait is reaction-oriented, spontaneous, and motivated by playful contact with others; and the Promoter trait is action-oriented, adaptable, and motivated by incidence. According to PCM, a person displays a Base personality type, for instance that of Harmonizer, and five additional personality types ranked according to the level they are developed. While generally the Base is observable as early as six months after birth, the order of the remaining five personalities is set only around age 7. Importantly, while the Base personality is constant over lifetime and determines how one perceives the outside world, PCM also identifies a Phase personality that refers to the personality type that determines one’s motivation and that can be changed over lifetime. For about a third of the population, motivation may be described by someone’s Base, and for two thirds by a movement to the next higher floor of the personality structure (Phase change). Such Phase changes can come about as a result of long-term distress, requiring the resolution of an underlying issue, and may occur without one’s awareness.

The concept of Phase is unique to PCM and adds to the model’s comprehensiveness. It refers to the part of the personality structure that determines motivation under normal circumstances. Experiencing a phase change means that one’s motivators change. If someone is a Base Harmonizer in Persister Phase, then this person is most easily motivated by recognition for work and conviction, the psychological needs of Persisters. However, this person still experiences the world most easily through emotions (the perceptual preferences of Harmonizers).

PCM was first used by the National Aeronautics and Space Administration (NASA) to select future astronauts and has since been applied widely in politics, education, leadership programs, and commerce, not the least in marketing of drugs and other products to physicians. Hundreds of medical doctors are trained in PCM in Australia and New Zealand, but in the rest of the world, few doctors, including psychiatrists, seem to be aware of it, perhaps because it is not extensively covered in the literature or because its web-based tests incur costs over tests that utilize other methods.

Methods

To obtain the PCM personality profile, we used the Kahler Personality Pattern Inventory (PPI) as a valid and reliable measure of
someone’s personality structure and behavioral preferences. The PPI (shown in the appendices section) is a questionnaire comprised of 45 items that were originally selected from 204 items administered to 180 people representing each of the identified personality types. Only items with a correlation greater than 0.60 (p < 0.01) in face, concurrent, and predictive validity were included in the final inventory. The 45 item-PPI has been validated for purposes of determining the personality structure of individuals, what their psychological motivators are, how they take in (learn) and give out (teach/share) information, and to predict the negative behaviors a person will manifest when in distress.14

Between January 2014 and October 2015, we distributed the PPI electronically to 104 private practice physicians (72 females, 32 males) involved in the PCM continuing medical education program organized by AFML (Association de Formation des Médecins Libéraux) and to 330 academic doctors (119 females, 211 males) not engaged in private practice who participated between 2010 and 2014 in the Medical Pedagogy Course jointly supervised by the Paris Universities 5, 6, 11, and 12. Participants were asked to choose at least one and up to 5 of 6 possible responses to each item on the survey, ranking each from most-to-least preferred. The lasts approximately 45 minutes, was voluntary and could be done online, and the collected information was kept confidential. As expected, the 104 PCM continuing medical education program participants had a very high response rate (97%) while the response rate of the remaining 330 was low (18%). After submission and evaluation, participants received a report of their personality structure and relevant behavioral characteristics. Each report included separate scores ranging from 0-100 for each of the six personality types. We then reviewed this data retrospectively and analyzed it according to gender, site, medical specialty, and career choices. Comparisons of the six scores between groups were tested independently by using the Wilcoxon rank-sum test, as the normality assumption could not be verified. All statistical analyses were conducted using the R statistical software, version 3.2.2.15 A two-tailed P value of less than 0.05 was considered to indicate statistical significance.

Results

The demographic profile of the 161 respondents (83 general practitioners and 78 specialists) is shown in Table 1.

<table>
<thead>
<tr>
<th>Respondents' characteristics</th>
<th>Total (n=161), n(%)</th>
<th>Private practice doctors (n=101), n(%)</th>
<th>Academic doctors (n=60), n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>64 (40%)</td>
<td>31 (31%)</td>
<td>33 (55%)</td>
</tr>
<tr>
<td>Female</td>
<td>97 (60%)</td>
<td>70 (69%)</td>
<td>27 (45%)</td>
</tr>
<tr>
<td>Specialty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Medicine</td>
<td>78 (48%)</td>
<td>75 (74%)</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>Specialists</td>
<td>83 (52%)</td>
<td>26 (26%)</td>
<td>57 (95%)</td>
</tr>
<tr>
<td>Medicine type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>144 (89%)</td>
<td>84 (83%)</td>
<td>60 (100%)</td>
</tr>
<tr>
<td>Alternative</td>
<td>17 (11%)</td>
<td>17 (17%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

Among the 60 academic doctors who responded, 27 were women (response rate 23%) and 33 were men (response rate 16%). Of the 101 private practitioners who responded, 70 were women and 31 were men (response rate 97% for both male and females). Hence, as female academic doctors tended to answer the survey more readily than male academic doctors, we cannot exclude the possibility of self-selection based on some hidden preferences for the relevance of the survey. Likewise, we do not claim that the private practice doctors are truly representative of this group of doctors, as they had been recruited from physicians who had voluntarily subscribed to a PCM education program.
The distribution of Base, Phase and subsequent personalities among academic and private practice doctors is depicted graphically in Figure 1. Regardless of career choice, it appears that Thinker, Persister and Harmonizer personalities together make up the majority of the personality energy of the respondents. This is not surprising as these personality types may have been the guiding force for choosing medicine as a profession. Those in Thinker personality are logical, responsible, and organized and can structure diagnosis and treatments in sequence, in a timely fashion, and in rational ways. Those in Persister personality are conscientious, dedicated, and observant and understand what they believe is valuable and important to teach and to be learned, and those in Harmonizer personality are compassionate, sensitive and warm and want to help others. All these are traits commonly seen as positive attributes of doctors.

The further stratification of the respondents into academic doctors and private practitioners shows a preponderance of the Base Thinker personality among the academics and the Base Harmonizer personality among the private practitioners. The typical academic doctor can be described as a Base Thinker in Persister Phase. This typical academic doctor envisions the world predominantly through his or her thoughts and logic (the perception of the Base Thinker) and is motivated most easily by recognition of his or her convictions (the needs of the Phase Persister). On the other hand, the typical private practice doctor is best described as a Base Harmonizer in a Harmonizer Phase. This doctor views the world through his or her emotions, is people-oriented, and is motivated most easily through recognition of personhood.

By comparison, the Promoter, Rebel and Imaginer personality as Base or Phase are less-well represented among medical doctors. In fact, these personality types are mostly found among the least-used traits. Unfortunately, we do not know at present how their distribution compares to that in the general population in France. Nevertheless, based on data from the United States, the biggest difference to medical doctors is in the proportion of Base or Phase Rebels, which account for a respectable 20 and 24% in the population at large. Hence, as a characteristic common to those strong in Harmonizer, Thinker and Persister personalities, doctors seem to be much more intrinsically motivated than the general population.

As shown in Figure 2, however, we observed significant differences in the personality distributions between general practitioners and specialists who showed higher scores in the Thinker and Persister personality and lower scores in the Harmonizer personality. But even more prominent were the differences when the respondents were separated into academic doctors and private practice doctors (Figure 3). Here, academic doctors outscored private practice doctors in the Thinker and Persister personality, while private practice doctors outscored the academic doctors in the Harmonizer, Rebel and Imaginer personality. The only commonality between the two groups was seen in the relatively low average score in the Promoter personality, as is also seen in the general population.

In addition, we assessed the personality profiles according to gender. As shown in Figure 4, in general, female doctors had significantly higher scores in the Harmonizer personality (as is also known for the general population), while male doctors had significantly higher scores in the Thinker and Persister personality. As shown in Figure 5, however, this gender-related difference was reduced within the academic group. We further stratified the private practitioners with respect to whether they pursue holistic/alternative or conventional medicine. As shown in Figure 6, compared to doctors engaged in conventional medicine, those practicing alternative medicine showed lower scores in the Thinker and Persister personality but higher scores in the Harmonizer, Rebel and Imaginer personality. In fact, Base Imaginers represented 41% of doctors practicing alternative approaches compared to only 6% of doctors practicing conventional medicine. These numbers have to be interpreted with caution, though, as the total number of doctors representing alternative medicine was relatively low (17 of 161).
Figure 1: Stacked bar charts showing the prevalence of Base, Phase and lower score personalities among academic doctors (left, n=60) and private practice doctors (right, n=101).

Figure 2: Tukey’s boxplots showing PPI scores obtained by doctors within each personality types for general practitioners compared to specialists (The information was missing for one practitioner). Box plots represent the upper and lower quartiles (boxes), the median (middle horizontal line), and measurements that are 1.5 times beyond the interquartile range (whiskers), above or below the 75th/25th percentile, respectively (points). P values were calculated with the use of the Wilcoxon rank-sum test. *p<0.05; **p<0.01; ***p<0.001; ****p<0.0001.

Figure 3: Tukey’s boxplots showing PPI scores obtained by doctors within each personality types for private practice doctors as opposed to academic doctors. Box plot representations correspond to those described in the legend to Figure 2.
Figure 4: Tukey’s box plots showing PPI scores (0-100) obtained by doctors within each personality type for each gender group. Box plot representations as described in the legend to Figure 2.

Figure 5: Tukey’s boxplots showing PPI scores obtained by academic doctors within each personality types for each gender group. Box plot representations as described in the legend to Figure 2.
Figure 6: Tukey’s boxplots showing PPI scores obtained by doctors within each personality type for conventional medicine doctors as opposed to alternative medicine doctors. Box plot representations as described in the legend to Figure 2.

Discussion

Although the aim of the above study was similar to that of previous studies — to correlate personalities with career choices — it is novel in two ways. First, we sampled medical professionals with established careers years after board certification, and second, we used PCM as the method of choice to characterize personalities. PCM is quite refined as a method to assess personalities as it allows for vastly more varieties compared to other methods and takes into account their changing nature. We saw a clear correlation between personality traits and career choices but are aware that self-assessment, the choice of target populations and different response rates for academic doctors and private practitioners, are inherent limitations of our study. In general, physicians have long been recognized as a professional group from which high response rates are difficult to obtain\(^1\), which is likely one of the reasons why most previous studies have targeted medical students and young residents. Nevertheless, this potential shortcoming does not necessarily reduce the validity of our findings as they are consistent with previous findings based on different populations and methodologies.

Our focus on precisely this distinction between private practitioners and academic medical professionals merits a deeper discussion. The successful completion of the study of medicine offers an enormous variety of specialty and career choices, and the decision to pursue an academic versus private practice career may be one of the most complex and difficult to make for young professionals with a leaning toward science. One is usually informed of the positive and negative aspects of either choice through conversations with doctors who have already established themselves on one or the other path. The opportunity to subspecialize and become an expert in a particular area is a compelling reason for an academic career. Part of the motivation for such a career (and common to becoming a non-academic specialist) may be the desire not to be confronted with every possible disorder to which patients are afflicted. Another part (and different from becoming a non-academic specialist) may be the desire to understand the roots of a distinct disorder across all afflicted patients, not just the individual one stepping into the office, and in this way to perhaps be able to find avenues of therapies that might eventually benefit all patients with a given disorder. One would predict, therefore, that Thinker-Persisters, as defined by PCM, are naturally drawn to medical research because their personality-specific needs are well satisfied by exactly this career choice: the desire to dig deep and the opportunity to teach the next generation of doctors in the art and science of medicine. Academic teachers are, by way of their status, naturally asked for their opinion, and so it can be extremely fulfilling for those stronger in Persister personality to mentor trainees and students in clinical and research work because of the inherent satisfaction derived from serving in this capacity.

But what are the downsides of choosing the academic path? One aspect not to be neglected is the fact that academic doctors may be seen as cold and unfriendly by patients, students, or colleagues. Also, academic teachers, who are typically neither strong in Imaginer nor Rebel personality, need to take into account that some patients and students are stronger in these personalities. For example, in the context of cancer treatment, the patient in Imaginer personality may need to isolate himself and may occasionally need a small window of escape from therapy that is hard to grant by an academic doctor in pursuit of a particular medical protocol. Not offering such small interruptions of treatment to such a patient may, however, lead this patient to strongly reject conventional medicine and switch to alternative medicine, much to the dismay of the academic doctor. Similarly, the academic doctor may occasionally have to adopt a playful and spontaneous attitude to improve the relationship with Base-Rebel patients or students, an attitude admittedly difficult to assume by a Thinker-Persister personality. That one of the rare Base-Rebel doctors found in our study had chosen to be a sexologist may illustrate this point. It is in this
context that we believe that understanding what personality traits drive young professionals into an academic career should also help such professionals in recognizing their strengths and overcoming their weaknesses.

Beyond the reasons mentioned above, a number of additional factors exist that influence a fellow's likelihood to pursue an academic career. For instance, it has been reported among doctors interested in gastroenterology, that Asian heritage, older age, desire for advanced training, the ability of obtaining graduate study positions, and desire for reduced work hours favor the choice of an academic career.\(^{17,18}\) Another study of residents of otolaryngology-head and neck surgery indicated, however, that residents interested in pursuing a fellowship in academics reported working two hours/week more than those interested in no fellowship or in private practice.\(^{19}\)

One additional factor influencing career choices outside the strict focus on personalities is gender. According to a number of studies done in the UK, USA, Australia, Norway and the Netherlands, women show a strong preference for community-based careers, whereas men tend to prefer hospital-based ones.\(^{20,21,22}\) Men are also more likely to choose technical challenge, earning potential, and prestige as the guiding principles in their choices, while women consider work conditions, part-time work and liberal parental leave policies more important. In this context, high scores on biosocial orientation and avoidance of role strain correlate positively with interest in primary care and have been shown to be typical for female medical students.\(^{23}\) In the above-cited study of residents of otolaryngology-head and neck surgery, women were initially more interested in academics. At the end of training, however, this gender difference was reversed. This career preference shift over time underscores the need for studies not only of residents but also of professionals at later stages of their careers. Our study shows that female doctors having chosen an academic career, although not as numerous, are not significantly different in their personalities from their male colleagues. Nevertheless, despite all these considerations, upon examining the literature in 2010 to identify research-based factors influencing physicians to choose academic careers, Borges et al.\(^{23}\) concluded that the larger question, "How, when, and why do physicians choose an academic career in medicine?" remains essentially unanswered.

All of the above discussion leaves us with a remaining problem: are the correlations indicative of causality? In other words, are trainees with certain personality traits attracted to certain specialties and practice modes, or is it the specialty environment that shapes the trainee’s personality? Do academic admission committees in fact select trainees in their own image?\(^{24}\) Or are career choices even based on constraints that lie entirely outside the primary determinants for a medical career, such as on financial constraints? Pedersen and Reynolds\(^{25}\) claim that environmental effects can change behavior as persuasively as genetic factors can. Heller et al.\(^{26}\) found strong correspondences between the demands of a social or a work role and one's personality profile. Evidently, our study cannot address these questions, nor was it designed to address them. Also, a need exists for further work to evaluate whether self-assessment and assessment by outsiders would yield concordant results. These problems notwithstanding, we are firmly convinced that personality assessments as provided by PCM, and the knowledge of how personalities may shape career choices, offer deeper insights into how medical professionals communicate with their interaction partners, in particular patients and students. Likewise, we believe that such communications could be refined to the benefit of all involved when doctors of any personality types are willing to move into another person's frame of preference.

**Take Home Messages**

We saw a clear correlation between personality traits and career choices.

We are firmly convinced that knowing how personalities may shape career choices, may offer deeper insights into how medical professionals communicate with their interaction partners, in particular patients and students.

Likewise, we believe that such communications could be refined to the benefit of all involved when doctors of any personality types are willing to move into another person's frame of preference.

**Notes On Contributors**

Lise Boussemart is a dermatologist specialized in melanoma and other skin cancers. She also holds a PhD in oncology and a BA in Psychology. She is currently an assistant professor at University of Rennes 1 and teaches dermatology to medical students.

Guillaume Bouzillé is a medical doctor specialized in public health.

Alain Boyer is a medical doctor, he is a general practioner working in a private office, and he also regularly teaches PCM to medical doctors.

Heinz Arnheiter is a medical doctor who led a brilliant international career as a researcher in pigmentation and melanocytes at the NIH. He
is currently the editor of the Pigment Cell and Melanoma Research journal.

Alain Dupuy is a professor in dermatology, and he is the head of the Dermatology Department in Rennes Hospital and University. He is specialized in epidemiology.

Acknowledgements

The authors would like to thank the medical doctors for enabling them to present their personality profiles to a scientific audience in the form of an article. We also want to thank, Dr Ryan Dolan and Dr Mark Weinert for their comments that improved the manuscript, and Dr Taibi Kahler and Mr. Gérard Collignon for allowing us to publish the Process Communication Model® test.

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Appendices
PPI Test

1. The most valuable parts of my personality are those that
   1. give and take information and organize it.
   2. have flexibility, creativity, and a joy for life.
   3. allow me to be calm and introspective.
   4. show sensitivity and respond to the feelings of others.
   5. have high ideals, morals and expectations.
   6. I can use to survive and adapt.

2. I prefer to be with friends who
   1. respect my beliefs and principles.
   2. like excitement and taking chances.
   3. provide a lively exchange of interesting ideas.
   4. are creative, fun and do their own things.
   5. are warm and accepting.
   6. respect my privacy.

3. I am often
   1. nurturing.
   2. responsible.
   3. dedicated.
   4. playful.
   5. adaptable.
   6. reflective.

4. When upset, I am likely to experience
   1. the other person still not accepting my opinions.
   2. "I'll show you."
   3. feeling hurt or rejected.
   4. frustrated at someone else's stupidity.
   5. "who needs you."
   6. myself withdrawing and being alone.

5. An ideal relationship for me would be to have a friend who
   1. likes to do fun, spontaneous, playful things with me.
   2. recognises the hard work I do, how responsible I am, and how I plan my time.
   3. respects my opinions and believes in me and my values.
   4. allows me my own space, pace and privacy.
   5. is warm, nurturing, and caring - someone who cares about me and how I feel.
   6. can handle being on the 'fast track' and who likes excitement; who'll follow my lead.

6. When things go badly, I
   1. feel hurt and then vengeful.
   2. go off by myself and seem not to feel much.
   3. feel unloved or rejected.
   4. dig in and hold firm with my beliefs.
   5. think that others "can't be that stupid."
   6. look out for number one.

7. I prefer
   1. excitement.
   2. people.
   3. ideas.
   4. values.
   5. privacy.
   6. fun things.
8. As a child, I
1. liked learning facts and information.
2. was withdrawn and shy. I discovered I could use my imagination and daydreams.
3. wanted to belong . . . Friendships and caring people were important to me.
4. had a parent who instilled in me strong beliefs and convictions. I learned how to value integrity and honour.
5. liked animals, loved to play and have fun and got bored easily.
6. took risks and liked lots of action.

9. The part of my personality that I seem to use a lot is
1. a concerned, nurturing, taking-care-of-others part.
2. a clear thinking, logical one.
3. one with emphasis on values, opinions, and beliefs.
4. an imaginative one. I tend to let my mind drift in time and space.
5. a fun, playful, sometimes very active one.
6. a direct, bottom-line, cut to the chase approach.

10. When in distress, with which of the following do you most closely identify?
1. "I feel awful when I let others down."
2. "I try to be responsible. I even take on more than my share."
3. "Without morals and ethics, people are dangerous."
4. "I seem to be the one always left out."
5. "I'll show you; it's not always my fault."
6. P.T. Barnum was right, there are "fools, and people who make fools of fools."

11. Often I
1. try but it's really hard sometimes.
2. am convinced a person is either a leader or a follower.
3. try to please almost everyone.
4. have high expectations for other people.
5. experience myself in a shell-like world.
6. am driven to excel and achieve.

12. People know that I like them by my
1. respecting their privacy and alone time.
2. playing and having fun with them.
3. trusting them to do something 'big' and exciting with me.
4. being warm, close and caring.
5. planning, thinking and working hard.
6. having values and being loyal and devoted.

13. In general, I have preferred
1. being alone with my fantasies, daydreams or using my imagination. Sometimes, I prefer doing things that do not require lots of energy thinking all the time.
2. being with my friends and doing our thing, even though others may not approve or understand.
3. to take the initiative and capitalise on opportunities when they present themselves.
4. being with people and especially feeling wanted, accepted, and important when I am in a group.
5. either being alone and thinking or planning, or being with one other person in a stimulating, intellectual, or thought-provoking discussion.
6. either being alone and thinking, organising, or philosophising, or being with one other person, sharing beliefs, opinions, or views on politics, religion, or current events.

14. My strengths are my abilities to
1. receive and process information to solve problems.
2. play, have fun and be creative.
3. nurture and care about others.
4. do tasks others might find boring.
5. adapt, survive, and make things happen.
6. stick with my beliefs, even under pressure.

15. Some of my friends might say I am too
1. sentimental.
2. much of a free spirit.
3. work oriented.
4. manipulative.
5. set in my beliefs.
6. shy.

16. At work (or when involved in a project or task) I would rather be
1. involved in the creative, less structured part of a project.
2. involved in an exciting, short-term project.
3. surrounded by friends.
4. requested to structure and organise projects.
5. given a project that requires perseverance and that will be important.
6. given a task to do alone, but with lots of directions.

17. Often I
1. find my private place to be alone.
2. get bored with routines, and have to get some stimulation.
3. take on more responsibility and want to achieve.
4. have a desire to give to others love and affection and to be given to.
5. crave excitement and quick rewards.
6. am driven by a mission and a desire to convince others of what they should believe in.

18. I sometimes experience
1. myself withdrawing into a shy, shell-like appearance. It is as if I am in a world all by myself.
2. myself wanting to please others in hopes of being accepted. Sometimes I have a hard time saying 'no' or putting myself first.
3. others being upset with me. It is difficult for me to accept that things 'be done so perfectly' or that there have to be so many 'rules'.
4. putting lots of pressure on myself to be perfect in order not to make mistakes, or in order that others will understand me just right, I often over qualify or need to explain myself.
5. myself taking care of 'me' and expecting others either to get behind me or get out of the way.
6. myself finding imperfections in others or noticing what they have done wrong.

19. A saying for me could be
1. “Stick to it and trust in your beliefs.”
2. “Do your own thing.”
3. “Look out for number one.”
4. “It's better to give than to receive.”
5. “Work now, play later.”
6. “Don't make waves.”

20. Of the following animals, friends would see me as
1. a turtle.
2. a 'mother hen'.
3. a cat.
4. a beaver.
5. an owl.
6. a fox.

21. The last thing that I would give up would be my
1. beliefs.
2. warmth.
3. clear thinking.
4. charm and ability to influence others.
5. alone time.
6. knack for fun.

22. A great fantasy for me would be to
   1. win at high stakes gambling.
   2. have all people believe the right way.
   3. have all the alone time I want.
   4. have everyone love one another.
   5. have all the fun I want.
   6. know every word in the dictionary.

23. In important friendships in the past when there was an unpleasant ending, I
   1. just wanted to please my friend, but it seemed the more I gave, the less I got. I ended up feeling rejected and unloved.
   2. tried to make things fun. The more I tried, the more I got criticised. I felt hurt and angry at being rejected and ignored.
   3. got tired of the demands on me and my time after I had worked hard all day and been responsible enough to meet my obligations. I would get frustrated and even lose my temper occasionally.
   4. couldn't seem to convince my friend how important some things in life are... having goals, commitments, or strong beliefs by which to live. I'd even find myself 'preaching' sometimes.
   5. couldn't seem to express what was going on inside of me. I have had difficulty even with closest friends making lively conversation. The more my friends expected me to be involved and outgoing, the more I seemed to withdraw.
   6. knew when to cut my losses and move on.

24. I see myself sometimes
   1. having people criticise or reject me.
   2. giving people advice, or even preaching at them.
   3. frustrated that people won't look at the facts.
   4. egging people on just to see them boil at me.
   5. shutting down and pulling away.
   6. pitting people against each other to see them argue or fight.

25. Most all of my life I have been interested in
   1. solitude and/or seclusion.
   2. religion and/or politics.
   3. deals and/or risks.
   4. video games and/or art.
   5. fashion and/or decorating.
   6. trivia and/or puzzles.

26. In high school, I was probably seen as
   1. Mr/Miss Beliefs.
   2. Mr/Miss Information.
   3. Mr./Miss Nice.
   4. Mr/Miss Clown
   5. Mr/Miss Quiet.
   6. Mr/Miss Make it Happen.

27. I would agree that the secret to life is
   1. to chill out. Have fun, be yourself and let the creative juices flow.
   2. to have strong values and beliefs and be committed to your mission in life.
   3. keeping calm and having an active imagination.
   4. "I did it my way."
   5. to be logical, think clearly and work hard.
   6. to be compassionate, caring and loving to everyone.

28. When I have physical pain, I am most likely to feel it in my
1. chest.
2. back.
3. neck and shoulders.
4. all over.
5. bottom.
6. stomach.

29. I am more likely to listen to a salesperson who
   1. knows his/her product and can answer my questions accurately.
   2. is a bottom liner like me who cuts through the red tape and cuts me a deal.
   3. is trustworthy and appreciates the value of things.
   4. has a lighter approach and makes purchasing more fun and less work.
   5. takes initiative, tells me what I need to do and leads me through the sale.
   6. is genuinely friendly and concerned about my needs.

30. I am more likely to buy a product that
   1. is first offered to me that meets my needs.
   2. has eye appeal and looks pricier than it really is.
   3. is unique, fun or has a whimsical quality that I think is peculiar or fun.
   4. I feel comfortable with and fits me best.
   5. dependably serves the purpose for which it was made.
   6. has good workmanship and quality.

31. People I like the least are
   1. unprincipled.
   2. clingy.
   3. insensitive.
   4. unreasonable.
   5. intrusive.
   6. boring.

32. If I were in charge of an office, I would make work a place to
   1. build relationships and encourage and support others.
   2. create few waves while seeing or conceptualizing things in unusual ways.
   3. gather information, analyse data and plan a consistent approach.
   4. observe closely, compare to an internal standard or ideal and then identify problems.
   5. impact our bottom line - profit.
   6. stay loose, generate energy and use my creativity to overcome obstacles.

33. When disagreements arise I am most likely to
   1. be confounded that others won't listen to my opinions.
   2. feel myself withdrawing and needing to be alone.
   3. get the one who tried to get me.
   4. feel hurt, rejected or personally unappreciated.
   5. frustrated that others are too emotional and not trying to solve a problem like I am.
   6. feel misunderstood, judged and get vengefully angry.

34. Which of the following statements ring 'true' for you?
   1. “Everyone should have a mission in life.”
   2. “Still waters run deep.”
   3. “There is no friend like an old friend.”
   4. “Just the facts, please.”
   5. “Strike while the iron is hot.”
   6. “Either I like it, or I don't.”

35. A prominent part of my personality is that which
   1. invites others to have fun, be spontaneous and express their individuality.
2. makes things happen.
3. likes to give to others, encouraging and building them up.
4. identifies a goal, gathers information and then proceeds in a logical way.
5. knows what is right and sticks to it.
6. tends to hold back unless asked to join in and share.

36. Most recently in my life I seem to be more concerned with
   1. how I structure my time.
   2. politics and/or religion.
   3. my privacy.
   4. whether or not people like me.
   5. doing things that give me an adrenaline rush.
   6. if I am really being myself and having fun.

37. The way others know I love them is by my
   1. open physical affection and verbal expressions of love and caring.
   2. providing for them in reliable and responsible ways.
   3. being dependable, trustworthy and someone in whom they can place their trust.
   4. making few demands and giving them their space.
   5. buying them nice things, going on exciting vacations and providing other experiences.
   6. spending time with them doing activities, sports, arts and crafts or just hanging out.

38. I come to know others by
   1. what they imagine.
   2. how they react.
   3. what they do.
   4. what they feel.
   5. how they think.
   6. what they believe in.

39. I seek
   1. respect.
   2. privacy.
   3. excitement.
   4. acceptance.
   5. accomplishment.
   6. fun.

40. An effective leader knows that people need
   1. more responsibility, education and fair treatment.
   2. quick rewards.
   3. to be spontaneous, express themselves in an atmosphere of acceptance and appreciation for their creative gifts.
   4. a moral and ethical structure in which they can trust.
   5. some alone time.
   6. to be loved and cared for.

41. I have appreciated my
   1. imagination.
   2. compassion.
   3. charm.
   4. logic.
   5. values.
   6. humour.

42. If I were to be praised, I'd prefer to hear someone say
   1. that I'd done a good job.
2. that they admired my commitment.
3. that I deserve some time to myself.
4. that I really made things happen.
5. that they like me as a person.
6. that I was creative and fun to be with.

43. I would vote for a president or political leader who was able to
   1. recognise people for who they are inside, not for what they do. Such a leader unconditionally cares about people and lets them know that they are appreciated and accepted.
   2. schedule time efficiently and recognise hard work, performance and task completion abilities in people.
   3. make it happen, call the shots, and when the going is the roughest show who is the toughest!
   4. recognise dedication, loyalty, perseverance and commitment in people, as well as rewarding them for believing in and accomplishing their duties and tasks.
   5. be spontaneous, playful, joking, fun and humorous with people.
   6. respect that some people need their own space and privacy – a time to be alone and reflective.

44. An effective leader is
   1. calm.
   2. charming.
   3. playful.
   4. compassionate.
   5. logical.
   6. dedicated.

45. To me money means
   1. privacy.
   2. a way to chill out (more 'toys' or fun things).
   3. the means to care for others.
   4. excitement.
   5. reward for hard work.
   6. security.

Declaration of Interest

The author has declared that there are no conflicts of interest.