# Personality / Learning Styles Among Dental Hygiene Students

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#### Abstract

One hundred eighteen dental hygiene students were surveyed to determine their personality / learning styles. It was found that they varied significantly from the general population on three of the four measures. Using the Paragon Learning Styles Inventory <sup>1</sup>, the students showed high trends toward sensate (concrete thinkers as opposed to conceptual), feeler as opposed to thinker, and judger (having definite opinions) as opposed to perceiver (curious). The implications of this study could be helpful for dental hygiene educators as well as dental office communication and team building.

## BACKGROUND

The purpose of this research was to determine if there is a dominant personality / learning style among dental hygiene students and if so how can we as instructors do a better job teaching them. Everyone has had the experience of an instructor, boss, or co-worker that they just clicked with and others that they just could not seem to connect with no matter how hard they tried. How our students, patients, and co-workers perceive us and how we perceive them colors our ability to connect. Often connections can be enhanced with a deeper understanding of ourselves and those we teach, mentor, serve, or share office space with.

One hundred eighteen dental hygiene students (N = 118) were surveyed over a 3-year period. All the participants were female and ranged in ages from the traditional college student to the mid-forty something coming back to school. All were enrolled in the dental hygiene program at East Tennessee State University in northeast Tennessee. The 118 participants represent 5 graduating classes for ETSU's oncampus dental hygiene program (2004 - 2008). The survey tool used was the Paragon Learning Style Inventory which is an adaptation of the Myers-Briggs Personality Survey. <sup>1</sup> The inventory is typically used as an exercise in our teaching strategies course with the dental hygiene students during their first semester. The students must take the survey, write a paper about their self-discoveries, and present their findings to their fellow classmates. Many students figure out for the first time what particular type of learners they are. Some also see more clearly why they struggle so profoundly

giving presentations and prefer to work one on one.

The Paragon Learning Styles Inventory (PLSI) is a series of questions designed to determine where one's traits fall among 4 dichotomies. The categories include: Introvert vs. Extrovert; Sensate vs. Intuitive; Feeler vs. Thinker; and Perceiver vs. Judger. In contrasting each of the pairs of traits according to Paragon Education Consulting (1999) extroverts are more at ease and confident socially, learn best from doing, are likely to be ready volunteers, and get energy from being around others; they make up 60% of the population. On the other hand Introverts like quiet space, prefer working alone or with one other, are not as at ease socially, and often find being in a group takes energy rather than replenishes it; they make up 40% of the population.<sup>1</sup> Sensates who make up 65% of the population like routine and order and are realistic and practical. <sup>1</sup> While Sensates are more concrete thinkers who like clear-cut instructions, Intuitives are imaginative and abstract. They like challenges and dislike routine and detail. Rather than looking for what is actual and real, Intuitives are more interested in possibilities; Intuitives make up 35% of the population. Feelers are more interested in people than ideas and dislike conflict; they are tuned in to others' feelings and are often concerned about relationships; they are warm and naturally initiate enthusiasm; 65% of females are feelers. <sup>1</sup> Thinkers on the other hand are more concerned about ideas and standing up for what they think than caring about others' feelings. The thinker is tuned into logic and is impartial in conflict; they want things to be fair and reasonable and will

confront others to make it so. <sup>1</sup> As opposed to the feeler who often makes decisions with their heart, the Thinker makes decisions based on rational thought. <sup>1</sup> Only 35% of females are thinkers. <sup>1</sup> The Judger is more decisive than curious, likes planned activities, order, and organization, and has very set opinions while the Perceiver is more curious than decisive, like spontaneity and is flexible and open. <sup>1</sup> The Perceiver may have trouble making up her/his mind and is more interested in understanding than in managing things. <sup>1</sup> Judgers and Perceivers are more evenly distributed within the population with Judgers being 45% and Perceivers making up 55%. <sup>1</sup>

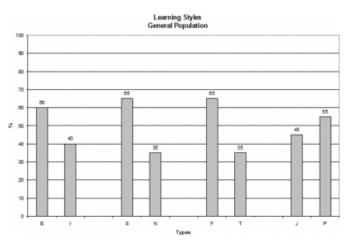
The research question as to whether there might be a predominant dental hygiene student type surfaced when the first group completing the survey seemed to have many traits in common and there was a skewed distribution of these traits as compared to the general population. Three years of data collection provided strong support for the thesis that the profession of dental hygiene does appear to attract students who are more alike than different.

## FINDINGS

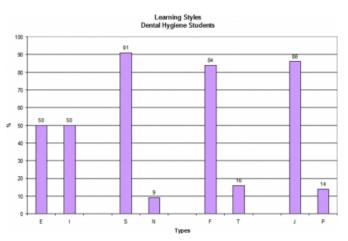
Although introverts and extroverts were not equally distributed among each class, the 118 study participants were equally divided as introverts and extroverts (59 of each). And that is where the even divide ends. Ninety-one percent of the students are sensates, 84% are feelers, and 86% are judgers. For these 118 dental hygiene students a personality/ learning style of ISFJ or ESFJ was predominant. So the overwhelming majority of these dental hygiene students prefer concrete, sequential instructions as opposed to concepts. They might clash with faculty (or employers) who are thinkers who tend to speak from the head rather than the heart and they thrive in an orderly, organized environment, having definite ideas about how things should be. Disorganization or their perception of it is very upsetting in their world. As a faculty we at East Tennessee State University were already aware of these characteristics in our students, but were not totally cognizant of the reasons why they behave as they do. We knew year after year we were teaching high-energy, over-achieving, talented students who demanded a lot of energy from us and really hated it whenever we changed our minds about anything or whenever we were less detailed, organized, or calibrated than they thought we should be. Now we know why. A comparison of our students to the general population provides a stunning contrast.

# COMPARISON OF DENTAL HYGIENE STUDENTS TO THE GENERAL POPULATION

## Figure 1







Note that the F/T category represents females only offering a truer comparison to our students.

# CONCLUSIONS

The implications of these findings could be helpful for dental hygiene educators as well as dental hygienists struggling to find the dental office that fits just right. For example on our faculty we have three intuitives and three sensates. The sensates like our students are detail oriented instructors. The intuitives however, must strive to include sequential, organized instructions and to provide clear-cut assignments keeping in mind that our students are more interested in what is rather than what could be. Concepts and possibilities while exciting to the intuitive are vague and unappealing to the overwhelming majority of our students. Four of our six instructors are thinkers. Thinkers sometimes tend to be more concerned with getting the point across than how it is being received. So they must remember to allow students to see the feeling side of their personality and work to create warmth and caring, especially as they offer constructive criticism in the environment of clinical instruction. The 84% of our students who are feelers are often more concerned with how things are said rather than what is being said. There is also great potential for conflict in that all of our faculty are judgers having clear ideas of how things should be and 86% of our students as judgers also have clear ideas of how things should be.

Knowing what perspective our students, bosses, or coworkers are coming from has the potential benefit of helping us be more effective in our work with them. When we realize that our students are not able to (nor particularly want to) wrap their minds around a complex concept even though they are very bright, then we know it is not just resistance on their part and we can assist their thinking process by offering more detailed, sequential steps in order to tie the parts of the concept together for them. Working hygienists may need to ask for the same type of "cut to the chase" information from their bosses but might have to work a bit to include enough theoretical or conceptual detail when presenting a new idea to their boss or co-workers. It gives us all an advantage if we understand our own style and that of those with whom we work. One thing that often surprises our introverted students is that they might be perceived as cold or uncaring. They are shocked that anyone could think that of them as cold and vow to work hard to make their patients know they care. Our students' attentiveness to details and potential for caring and empathy will serve them well as oral health care providers. Instructors and working hygienists who may someday transition to clinical or classroom instruction should help students develop these attributes further and not curb them just because they force us to come out of our own comfort zone for teaching and learning.

# LIMITATIONS / NEED FOR FURTHER RESEARCH

A literature review yielded very little on the subject of dental hygiene students and learning styles. Only two articles were found, implying that this is a field rich with research possibilities. 2, 3 Although the findings of this study should not be generalized to dental hygiene students in other schools, a better use of this study would be to motivate dental hygiene educators to do this type of research. The practical application could help instructors better know their students, as well as their own teaching styles. We tend to teach the way we learn but it should not be assumed that because dental hygiene instructors were once dental hygienists and students themselves that we automatically have the insight to be effective instructors. For working dental teams insight and understanding of each other's personality types can be empowering and perhaps a way to prevent or resolve conflict.

Further research is needed to determine if the dental hygiene profession attracts students like ours or if these particular students happen to have the learning styles that best succeed in American classrooms and thus get them the good grades they need in order to be considered for our program or both. Additional research is also needed to determine if our students are truly representative of dental hygiene students nationally. It might also be helpful to know if dental students (future employers) have a predominant learning / personality type and how dental students might compare to dental hygiene students and dental assisting students.

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