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POSITIVE INTELLIGENCE EDUCATION FOR UNLEASHING STUDENT POTENTIAL

Pawan Tyagi

Mechanical Engineering
University of the District of Columbia
Washington, DC, 20008, USA
Email:ptyagi@udc.edu

ABSTRACT

Student attitude towards learning is strongly dependent on the hidden traits and habits they develop during the growing up period. Based on circumstances many students live in an individualistic mindset and perceive rather permanent misconceptions about the surrounding and opportunities. This paper focuses on providing positive intelligence training to college student to equip them with the necessary knowledge to not only unleash their talent but also to enable other students to give the highest performance. This paper focuses on an experiment under which 22 students in the senior level design of energy system course were exposed to the fundamental aspects of positive intelligence. Every student was tasked to demonstrate the depth of understanding about the positive intelligence and then apply it to group members to understand the strength and weakness. Most of the students expressed satisfaction that they were able to understand their attitude and behavior that they found as an impediment in their progress. After positive intelligence training, several students exhibited an increased maturity level and many students expressed higher degree of empathy towards their team members.

INTRODUCTION

The learning potential of a student is strongly dependent on their mental habits. Students' learning style is found to be a strong predictor of the level of their emotional intelligence [1-5]. Hence, it becomes utmost important for the educator and learner to be cognizant about the evolution and application of factors that govern the mental state of a human. In a large number of studies, it has been found that the success of a professional is strongly dependent on their skills to manage themselves and associated responsibilities in a demanding environment and challenging situations involving other peoples [6]. These days many industries who hire new college graduates conduct specialized training to enhance the soft skills, mainly the interpersonal skills to make their employees perform at their

highest potential [7]. In 2018, author of this paper attended MSIPP TECH (Atlanta, Georgia, USA) meeting organized by the Department of Energy, where it was mentioned that soft skills governs ~85% success of an engineer or scientist and ~15% depends on the technical skills. One can maximize the gain from soft skills if they are well aware of state of the human psychology developed in the form of emotional intelligence and positive intelligence. In the last two decades, the concept of emotional intelligence was developed by professional personality coaching groups. These trainings are heavily attended by professionals engaged in marketing and organization leaders to enhance their capability in the workplace [8, 9]. However, emotional intelligence is mainly about being aware of mental state maintaining control on one's actions during various mental states, such as anger, happy, sad, remorse, etc.

Recently, a much more useful concept was initiated as a personality development tool termed as positive intelligence (PI) [10]. The PI, in fact, enlightens us about the root cause behind many automatic mental attitudes and habits that we developed from the past experience. Knowing about the evolution process of limiting behaviors enable a person to know their limiting traits and correct them. Most importantly, PI also enable us to understand the mental habits and traits people around us may have. In the wake of the increasing importance of an employee's ability to work with others congenially, it becomes extremely important that specialized training is provided to college students.

PI basically provide knowledge about the two states of mind-known as sage mode and saboteur mode [10]. While in sage mode a person focusses on thriving from the problems around them. However, in saboteur mode, one mainly focusses on survival and miss the opportunity to make good use of their talents and training by finding opportunities in challenging situations and setbacks. If a person is forced to face survival problems for a long duration, then as a coping mechanism, they

start acquiring several saboteurs in their personalities. There is one head saboteur known as a judge. The primary role of the judge is to distinguish any potential harmful scenario. However, if one becomes a habitual judge to get some sense of security, they start judging everyone and everything, eventually leading to difficulty in mixing up or working with others. According to the PI, along with the judge, nine other saboteurs arise when we adopt a certain type of coping mechanism (assert, earn, avoid) to face an emotional or physical survival challenge (independence, acceptance, and security). An in-depth discussion is presented under results and discussion about the saboteurs. We hypothesize that exposing college students to PI can be extremely important to unleash their learning potential and also to provide them strong foundation for their growth in a chosen career. This paper discusses the method of exposing college students to the knowledge of PI [10].

METHODOLOGY

Twenty-two students enrolled in MECH 462 course were exposed to the PI knowledge. This course was chosen because students were supposed to work in group. PI was discussed with the students to see if this knowledge makes them aware about their own nature and habits so that they can be aware of their hidden inhibiting factors. We also thought that PI can help students understand the group members' nature and utilize their understanding to learn course content by working together. In the beginning of the course the instructor gave a lecture on basic concepts of PI. Instructor begin discussion about the Maslow chart of hierarchy of human motivation. This discussion was necessary to make them aware of their current focus and future area to focus on. Subsequently, students were engaged in the discussion about sage and saboteur modes. We discussed several examples to exemplify the PI's components. Instructor realize that lecturing and simple discussion was not enough to engage students and develop desired mastery level.

Eventually students were asked to do an assignment on PI and Maslow chart of hierarchy of needs. The timing for this assignment was chosen around the mid semester by when students had opportunity to work with their group members and experience the group dynamics. Students were also asked to take a PI assessment test to analyze their behavior and hidden traits and reflect on it. Students were given the following assignment to learn about PI while answering the assignment questions.

Positive Intelligence for Design of Energy System:

Goal: Utilizing knowledge of positive intelligence to understand group members to get the highest possible performance in group assignments.

Rational for the assignment: Saboteurs are your invisible auto-response or split personalities that sabotage your work and relations. Our saboteurs have very limiting beliefs and assumptions about how to deal with life's challenges in personal and professional life. These saboteurs are named as the Judge, Controller, Stickler, Avoider, Hyper-achiever, Pleaser, Victim, Restless, Hyper-vigilant, and Hyper-rational. These

saboteurs are a source of all your anxieties. These saboteurs related anxieties produce unhappiness and negative feelings. Saboteurs, frequently take control of brain and you listen to what they say about someone and something (not what your wise sage will say). You can learn to identify saboteur voices to avoid any loss of opportunities, and by activating a different voice in your brain known as sage voice. By acquiring sage mode, one performs far better while producing positive feelings like curiosity, empathy, creativity, and peace, with a laser focus on action.

Self-learning expectations: Students were first instructed to familiarize with Maslow chart of hierarchy of needs to understand variety of source of motivation and to prepare for understanding the PI concepts. Students were expected to learn PI concepts, and associated terms and then answer the questions.

Step-1: Understand what positive intelligence is by seeing the videos and ted talks.

<https://www.youtube.com/watch?v=ta5IkSsc8qk>

Step-2 Learn about definitions of positive intelligence terms (e.g. sage, saboteurs) from the website

<https://www.positiveintelligence.com/>

Step-3: Answer the following 12 PI specific questions.

Question-1 What is Maslow chart of hierarchy of need? Briefly explain each level of Maslow pyramid and give 1 or 2 example of people (may be imaginary) whose description/ activities correspond to individual levels.

Question-2: What is sage mode? What are the main signs (nature of a human) that indicates if a person is living in sage mode? Give three examples of people you know live in the sage mode (or sage mentality)

Question-3: How knowing about the "sage mode" can help you make best out of your skills and talents?

Question-4: What is judge mode (or judge mentality)? What is the historical (evolutionary) reason every human has a judge character?

Question-5: How does knowing about "judge mode" can help you when not to judge? Give three situations when you should judge? Give three situations when you should not judge other?

Question-6: What are saboteurs? How many types of saboteurs are there? What is the process of making saboteurs in a human?

Question-7: How to strengthen your "SAGE" brain and weaken your "SABOTEURE".

Question-8: How does knowing about saboteurs can help you make best of your skills and talent?

Question-9: How does knowing about saboteurs can help you make best out of OTHERs skill and talents?

Question-10: How will you deal with a team member who is living under saboteur effects and not doing his part/section?

Question 11: Identify sage characteristics in your teammates. Please give rating on 0 to 9 scale to each member for 1-7 sage traits. 0 mean no trait is there. 9 means trait is very strongly and consistently observable.

Question 12: Identify judge and saboteur characteristics in your teammates. Please give rating on 0 to 9 scale to each member

for 1-7 sage traits. 0 mean no trait is there (trait absent). 9 means traits are very strongly and consistently observable.

All the students completed the assignment on positive intelligence.

RESULTS AND DISCUSSION:

Analysis of the student performance in this assignment suggest that students made significant effort to learn the PI's element and attempted to utilize it for understanding their own nature and their group members. Following are the representative response of the few important questions from the assignment. Assignment was designed to bring student attention on the (a) wide categories of motivations behind every action we do. (b) What are traits and sign of human performing at the highest level and consider themselves happy and content. (c) What are the major saboteurs within individuals preventing them from using their talents and skills.

The first question focused on understanding the Maslow chart of hierarchy of need. They were specifically asked the following question.

Question-1 What is Maslow chart of hierarchy of need? Briefly explain each level of Maslow pyramid and give 1 or 2 example of people (may be imaginary) whose description/ activities correspond to individual levels.

Student response to question-1: Most of the students answer this question correctly. Almost everyone mentioned that Maslow's hierarchy of needs is a motivational theory in psychology comprising a five-tier model of human needs. There are five levels in the pyramid. In the response of this question one student answered the following.

1. **Physiological needs** - Biological requirements for human survival. For instance, air, food, drink, shelter, clothing, warmth, sex, sleep. If these needs are not satisfied the human body cannot function optimally. Maslow considered physiological needs the most important as all the other needs become secondary until these needs are met.

2. **Safety needs** - protection from elements, security, order, law, stability, freedom from fear.

3. **Love and belongingness needs** - after physiological and safety needs have been fulfilled, the third level of human needs is social and involves feelings of belongingness. The need for interpersonal relationships motivates individuals to seek companionship.

4. **Esteem needs** - Maslow classified this need into two categories. The first category relates to individual's dignity, achievement, mastery, and independence to act. However, the second category focus on the desire for reputation and respect from others. Maslow indicated that the need for respect or

reputation is most important for children and adolescents and precedes real self-esteem or dignity.

5. **Self-actualization needs** - realizing personal potential, self-fulfillment, seeking personal growth and peak experiences. As Maslow said a desire to become everything one can become in professional and personnel life.

- An example of this is willing to help the team or group in order to reach a certain goal by utilizing the individual skills without craving for attention and appreciation.
- A poet writing poem without expecting any financial gain or outer motivation. Though, it may latter be published and bring funding and recognition.

We discussed in the class several exemplary people and accomplished professionals. It was apparent that highly successful people have significantly different mental attitude and habits. According to the core theme of positive intelligence in order to be happy and successful it is most critical to be able to utilize every setback and unpleasant event for one's growth and overall advancement. It means in the event of failure people who recover from the disappointment and emotional downtown time quickly are innately happy and tend to be successful in the chosen career path. This kind of mental habits and attitude indicate sage mode.

To check student's ability to understand the meaning of sage mode and its characteristics they were asked the question 2.

Question-2: What is sage mode? What are the main signs (nature of a human) that indicates if a person is living in sage mode? Give three examples of people you know live in the sage mode (or sage mentality)

Student response to question-2: Almost 50% of the students misunderstood the meaning of the sage word in the context of PI. Many students referred to the characteristics of monks. However, almost 30% of the class understood the correct meaning and explained the sage mode appropriately. These ~30% students expressed that a sage mode is the mental state when a human is joyful, empathetic, curious, innovating, and problem solver, etc.

Students were also asked about the application of Sage mode knowledge by raising the following question.

Question-3: How knowing about the "sage mode" can help you make best out of your skills and talents?

Student response to question-3: Again nearly 50% of the class gave generic and tangentially connected answers. We could have understood the reason was improper understanding of the sage mode. However, some students described how living in sage mode can help them learn more, enable them to do innovation, be a better human with empathy towards others, and becoming a problem solver.

The opposite of sage mode is the survival mode. Under survival mode a human is gripped by a judge who always seems to look out for danger in day to day life activities and interaction with others. To make student self-learn about judge mode they were asked the following question.

Question-4: What is judge mode (or judge mentality)? What is the historical (evolutionary) reason every human has a judge character ?

Student response to question-4: Nearly 80% students provided correct definition of the and reason of its existence in every human. However, some students referred to judge term in legal systems. It was apparent that many students did not prepare and watch the suggested video.

Students were asked about the application of knowledge about the judge mode. They were asked the following question.

Question-5: How does knowing about “judge mode” can help you when not to judge? Give three situations when you should judge? Give three situations when you should not judge other?

Student response to question-4: Almost every student attempted this question. Many students used their prior experience, and some students used the knowledge of PI and common sense to provide response. Almost whole class answered this question satisfactorily.

When a judge mode remains prominent due to some specific types of survival challenges during childhood, adolescent, and adulthood a human start getting a number of defensive attitudes which are called saboteurs. These saboteurs start living within us as our help in the beginning, but they do not leave when the survival challenge is gone. These saboteurs are like army that one employ to fight with a long-term survival challenge. However, this army remains within us for rest of the life and keep reacting to even friends and family who intend to benefit us but saboteurs recognized them as a threat. Table 1 List the number of saboteurs that originate in a human due to particular type of reaction method we adopt to survive under a long-term motivation (physical and emotional survival questions).

Table 1: Origination of saboteurs due to a specific long term reaction style to three categories of survival questions.

		Motivation		
		Independence	Acceptance	Security
Reaction	Assert	Controller	Hyper-Achiever	Restless
	Earn	Stickler	Pleaser	Hyper-vigilant
	Avoid	Avoider	Victim	Hyper-

				Rational
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To investigate students’ level of understanding about the evolution of saboteurs’ students were asked the following question.

Question-6: What are saboteurs? How many types of saboteurs are there? What is the process of making saboteurs in a human?

Student response to question-6: Nearly 50% of the class provided clear answer to this question and demonstrated mastery in understanding from where saboteurs come. However, remaining 50% provide partial or unclear answers. Students interpreted the definitions and meanings in very different manners. Students were asked the following question. A sample response from one student participant is the following.

“A saboteur is a person who makes a mess of a situation on purpose. You might call your little brother a *saboteur* for letting the air out of your bicycle tires, but you could be a *saboteur* in return by filling his shoes with cold spaghetti. There are 10 types of saboteurs described in the Table 2.”

Table 2: List of saboteurs, their description, and the lie they tell to keep controlling a human.

Saboteur	Description	Lie
Judge	Focus on negative in self, others, or circumstances	Unless I constantly point to what's wrong, nothing will improve
Controller	Need to always control and dominate	Controlling always ensures best outcome
Stickler	Need for order and perfection taken too far	Perfectionism is always the preferred way
Avoider	Avoid difficult or unpleasant tasks and conflicts. Procrastinate	I am just being positive. No good comes out of dealing with conflict
Hyper-Achiever	Narrow focus on achievement to the detriment of relationships, balance and perspective	Greatest success comes from achievement-at-all-cost
Pleaser	Constantly helping, pleasing, or rescuing others, hoping to be liked	I do this to help and expect nothing in return
Victim	Continuous focus on painful and deflating emotions	This is my best way to attract attention and affection
Restless	Constant need for busyness. Rarely at peace with current activity	This is the way to accomplish and experience the most

Hyper-Vigilant	Continuous intense anxiety about dangers and what could go wrong	Best way to protect self and others is through hyper-vigilance
Hyper-Rational	Over-application of the rational function in dealing with people	Emotions are useless distractions. Greatest leader strength is logic

It seems that student got superficial understanding about the saboteurs. This student also appears to make effort to understand the content from the web resources. However, moving forward it seems necessary to discuss positive intelligence in the class. Students were asked the following three questions specifically focusing on saboteur for enabling self, other, and teams.

Question-8: How does knowing about saboteurs can help you make best of your skills and talent?

Question-9: How does knowing about saboteurs can help you make best out of OTHERs skill and talents?

Question-10: How will you deal with a team member who is living under saboteur effects and not doing his part/section?

Student answers suggested that many of them had superficial knowledge. However, ~30% students exhibited good mastery and correlated with their own life experience.

To check students' ability to understand the positive attributes of other teammates, they were asked to grade the sage attributes in the teammates. They were asked the following question.

Question 11: Identify sage characteristics in your teammates. Please give rating on 0 to 9 scale to each member for 1-7 sage traits. 0 mean no trait is there. 9 means trait is very strongly and consistently observable.

Student Response to question-11 Following is the representative response of one of the students.

Table 3: Students rating the presence of different sage modes among teammate on 1-10 grading.

	Sage traits (Thriving brain)	Member				
		A	B	C	D	E
1	See positive message and opportunity in every good or bad news	7	8	9	9	6
2	Curiosity (want to know more)	6	6	6	6	6
3	Creativity (coming up with new ideas)	8	8	8	8	8
4	Resolve (Focus on finding solution not problems)	9	7	6	8	6
5	Calm (when dealing with other members)	9	9	9	9	9

6	Joy (Group member is joyful and pleasing to me)	9	9	9	9	9
7	Peace (member seems satisfied and at peace)	9	9	9	9	9

Similarly, students were asked to identify the presence of saboteurs' mode among teammates.

Question 12: Identify judge and saboteur characteristics in your teammates. Please give rating on 0 to 9 scale to each member for 1-7 sage traits. 0 mean no trait is there (trait absent). 9 means traits are very strongly and consistently observable.

Student Response to question-12 They appear to list major saboteurs. However, their rating does not seem to be realistic. It was presumably due to the reservation that if other team members see their score then their relation may get affected. The following Table 4 is the representative response from one participating student.

Table 4: Rating the intensities of different saboteur modes/traits among the team members.

		Member				
		A	B	C	D	E
0	Judge (judging everything as good or bad)	2	0	0	0	0
1	Controller	0	0	0	0	0
2	Stickler	1	1	1	1	1
3	Avoider	3	5	8	7	6
4	Hyper-achiever	5	5	4	5	5
5	Pleaser	9	9	8	7	7
6	Victim	0	0	0	0	5
7	Restless	0	0	0	0	0
8	Hyper-vigilant	1	0	0	2	1
9	Hyper-rational	3	1	0	2	1

Most of the class student demonstrated their understanding of the PI via assignment. Students were surveyed about their views toward PI education and their mastery level. They were asked the following questions.

Survey question-1: Do you think teaching "Positive Intelligence" is important for college students. Rate your agreement 1-5

Response: 3.4±1

This rating was suggestive that many students were still struggling to have the full grasp of the PI. Many of them happen to perceive that it was professionals working in industries and businesses.

Survey question-2 Rate your confidence in explaining the difference in "sage" and "saboteurs".

Response: 3.9±0.85

Many students appear to show a great level of mastery however; some students were still developing the competence.

Survey question-3 Did this survey help you know the judge and saboteurs hidden inside you? Rate your confidence

Response: 4.0 ± 0.92

Many students happen to appreciate the fact that they could define their negative mental habits with well defined terms.

Survey question-4 Rate your willingness to apply the positive intelligence/ similar knowledge in your self-improvement

Response: 3.8 ± 1.2

This response was cumulative response of students who became highly enthusiastic about PI and other student who were still in the developmental stage. It was noted that several students became deeply interested on the topic of positive intelligence. However, many students completed the assignment for grading purpose.

CONCLUSION

This paper discusses the method of exposing students to the core concepts of the PI. Many students demonstrated their skills via their response to the assignment questions. A follow up survey clarified student outlook toward the PI and its future applicability. We are expecting to initiate PI education in the freshman level ME courses and continue to reinforce PI training each year via well thought activity. PI education is expected to provide much needed personality development to be a successful student and professional upon graduation. In the future, author plan to collaborate with other course instructor and infuse the positive intelligence from freshman to senior level. A modified version of this positive intelligence training will also be included in the MCH 500 Research Method and Technical Communication course for the graduate students.

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