STAYERS VS. LEAVERS: PRE-SERVICE TEACHER RETENTION

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ABSTRACT

The purpose of this survey study was to test the theory that skill areas and group role preference provide information relevant to student completion of pre-service teacher education programs. Using self-assessments, students self-identified with one of the Multiple Intelligences of Howard Gardner; one of the three categories (creative, analytical, practical) of R.J Sternberg's Triarchic Theory of Human Intelligence, and a group leadership role identifier the self- identified group leadership role and the student's graduation from the education program showed statistically significant (p value .044639 at a significance level of p< .05). While the population size yielded no other statistically significant results, leadership roles combined with the frequency statistics within Gardner and Sternberg and qualitative analysis within group roles gave voice to support the quantitative analysis.

KEYWORDS: teacher retention, leadership roles, preservice teachers

INTRODUCTION

There is, in academia, a focus on student retention in teacher education programs. Across the nation, there exists a need for teachers in all areas of education. Between 2009 and 2014, pre-service program enrollments dropped thirty-five percent (from 691,000 enrollees to 451,000 enrollees) and projections of the Learning Policy Institute Report dated 2016 predicted available teachers would soon reach the lowest point in 10 years. (Sutcher, Darling-Hammond, & Carver-Thomas, 2016) Manuel and Hughes (2006) showed that when asked the question of "What factors influenced your decision to become a teacher?", seventy percent of surveyed students state "personal fulfilment" as a factor. Sixty-five percent of surveyed students stated working with young people (Manuel 2006). Fifty seven percent of surveyed students said teaching was their first career choice (Manuel 2006). Of the forty-three percent of students who stated teaching was not their first choice, the following reasons for choosing teaching as a career were offered (Manuel 2006). No other option, changing their mind after starting something else, family pressure, and unsure career paths. Twenty percent of the forty-three percent of students identifying education as their second choice stated that business related degrees were their first choice (Manuel, 2006). Fifty- eight percent of students surveyed by Manuel and Hughes (2006) stated that a significant mentor influenced them to consider a career in teaching. Thirty four percent of these students saw teaching as a long- term career choice (Manuel 2006).

Students who enter college determined to become a teacher may lose this enthusiasm by their junior or senior year, dropping out of education programs all together. Changing majors can be both expensive and discouraging for the college student often requiring an extra year or two to complete the requirements of another program. According to the National Center for Education Statistics (NCES) (2019), eighty- one percent of college students obtain their degree in four years. NCES (2019) also reports that the overall graduation rate for a first- time undergraduate student who takes six years to obtain a four- year degree was sixty- two percent. The NCES (2019) compared public institutions, private nonprofit institutions and private for-profit institutions. Private for-profit institutions has the lowest retention rate at twenty-five percent and private nonprofit institutions had the highest retention rate at sixty-seven percent (NCES 2019). The six-year graduation rates increased nearly four percent from 2004 to 2018 (NCES 2019)

The decision to become an education major stems from a variety of places and has many factors. Students have traditionally chosen teaching as a career based on previous experience with children such as babysitting, camp counselor jobs, recreational coaching of sports, or church youth experiences (Weinstein, 1988). Students may also perceive the goals of teaching to be similar to those of social work or parenting. These perspectives may diminish the prospective student teacher's value on the overall professionalism of the career (Weinstein,1988) Manuel and Hughes (2006) studied pre-service education majors to determine factors that influenced their choice to become a teacher. Seventy percent of the students surveyed stated "personal fulfilment" as a factor and sixty- five percent of surveyed students stated "working with young people" (Manuel 2006). In the same study, fifty- seven percent of surveyed students said teaching was their first career choice (Manuel 2006). Students for whom teaching was not their first choice had varied reasons for choosing teaching as a career such as no other option, changing their mind after starting something else, family pressure, and unsure career paths (Manuel 2006). In the same study by Manuel and Hughes (2006), students determined which attributes they thought made an effective teacher. Top students' responses were as follows: communication/listening 30.4%, loving/caring 30.4%, passionate/motivated 26.6%, interpersonal skills/able to relate to youth 25.3%, and knowledge/intelligent, understanding, fun all 21.5% (Manuel, 2006).

Once students declare education as their major, what factors influence their desire to finish their teaching licensure program? The purpose of this study was to test the theory that self- declared skill areas and group role preference provide information on student completion of pre-service teacher education programs. We chose as our instrument reflective essay format that allowed students to self-assess their sense of self- efficacy with one of the multiple intelligences of Howard Gardner; one of three categories (creative, analytical, practical) of R.J Sternberg's Triarchic Theory of Human Intelligence, and Azhar, Ikram, Rashid, and Saquib leadership role identifier (motivator, leader, innovator, and organizer). Explanation of these three instruments follows.

Gardner, Sternberg, and Leadership Roles

Howard Gardner's Theory of Multiple Intelligences was part of the curriculum offered to the participants in their Freshman year in Human Development. Gardner's theory presents a "pluralistic view of mind, recognizing many different and discrete facets of cognition, acknowledging that people have different cognitive strengths and contrasting styles." (Gardner, 2006, p.5) According to his theory, people possess many intelligences, talents or mental skills, but some abilities may be more dominant. The theory provides clear descriptions of the multiple intelligences making it possible for students to self- identify and explain their choice of a dominant intelligence. This list of intelligences follows:

- Logical mathematical: sensitivity/capacity to discern logical and number patterns, able to understand long sequences of reasoning.
- Linguistic: sensitive to sounds, rhythms, word meanings, and word functions.
- Musical: ability to produce and appreciate rhythm, appreciates musical expression.
- Spatial: able to perceive world visually and spatially, performs to one's original perceptions.
- Bodily-kinesthetic: able to control one's body and is skillful with object manipulation
- Interpersonal: capable of discerning moods, motivations, and desires of others.
- Intrapersonal: able to use one's own feelings to guide behavior. Is aware of one's own strengths and weaknesses, desires and intelligences.
- Naturalist: able to categorize natural elements such as trees, fish, rocks…. (Gardner, 1989)

Robert Sternberg, a Professor at Cornell University, refuted the idea that intelligence was a "unified capacity" and proposed three forms of intelligence: practical, analytical, and creative. He defined practical intelligence as the ability to apply abilities to problems that arise in daily life by adapting and shaping to the environment; creative intelligence as the ability to cope with relative novelty; and analytical intelligence as how a person analyzes, evaluates, judges, compares and contrasts information abstractly. Sternberg (1997) also stated that he believed practical intelligence was the better predictor of successful academic and occupational outcomes. In an article on the concept of intelligence and its role in lifelong learning. Sternberg's theory, known as the Triarchic Theory of Intelligence, was also part of the curriculum in the Human Development course taken by our freshman participants. Based on Sternberg's theory, participants engaged in activities, textbook reading, and a YouTube lecture on intelligences given by Sternberg. Following coursework, each student identified with one of the intelligences and explain their rationale.

Following identification with a dominant Gardner category and a dominant Sternberg intelligence, the preservice teachers enrolled in Freshman Human Development studied leadership roles to determine their perceived strengths in group situations. The role definitions from Azhar, Ikram, Rashid, and Saqib (2011) of motivator, leader, innovator, and organizer provided the participants with a variety of choice. The definitions of these leadership styles follow:

Motivator: A motivator feels that "it is the responsibility of leadership to motivate the subordinates to understand the need of strategic change and make it possible to achieve…and without motivation people's involvement is less effective" (Azhar, Ikram, Rashid, and Saqib, 2011, p.36).

Leader: "Leader is a person who possesses a clear vision in his/ her mind and also has the power to manage a team of people that can help to translate vision into reality. Leader is someone who can identify the need of situation and understand what is required now and in future" (Azhar, Ikram, Rashid, & Sauib, 2011, pg.34).

Innovator: "Leader as an innovator: ensure innovation within the whole organization is the key task of leadership. It is the duty of leadership to bring innovation in the strategic management process, from strategic thinking to performance evaluation to ensure competitive edge" (Azhar, Ikram, Rashid, & Sauib, 2011, pg.35).

Organizer: "Leader as an organizer: it is the basic function of leadership to organize or streamline the whole organization's working especially the planning and executing of strategies" (Azhar, Ikram, Rashid, & Sauib, 2011, pg.36).

Students determined how the self- declared Gardner and Sternberg intelligences contributed to their sense of self- efficacy in their chosen leadership role. Self- efficacy was defined during lecture in the Human Development class as "people's judgement of their abilities to organize and execute courses of action required to attain designated types of performance." (Bandura, 1986, pg. 391) Self - efficacy is not concerned with skills and strategies but focusses on the student's estimation of their ability to apply their skills to a task of personal importance.

At the end of their Human Development coursework, Freshman preservice teaching students identified their sense of self efficacy with one of the multiple intelligences of Howard Gardner; one of the three categories (creative, analytical, practical) of R.J Sternberg's Triarchic Theory of Human Intelligence, and a group leadership role identifier (motivator, leader, innovator, analyzer).

METHODOLOGY

Sixty-eight Freshman students at a Mid- Western private university were asked, at the end of a semester course in Human Development, to write an essay in which they explained their dominant intelligence according to the theories of Gardner and Sternberg and related these choices to their chosen leadership role and sense of self efficacy. Throughout the semester, lecture and class activities defined Gardner's Intelligences, Sternberg's Triarchic Theory, and the variation in leadership roles. As part of a final paper, students identified and explained their chosen role in a group as either Motivator, Innovator, Leader, or Organizer according to parameters established by to Azhar, Ikram, Rashid, and Saquid (2011). Students also chose their Sternberg (1997) area of intelligence as Creative, Analytical, or Practical and their choice between Gardner's Multiple Intelligence (1989). Student's perception of the

influence of the Multiple Intelligences and the Triarchic Theory on their sense of self-efficacy in a leadership role contributed to by their rich descriptive dialogues. After four years, the same students, categorized by graduation records, were labeled as a Stayer (n=47) in the education field or a Leaver (n=21).

A Chi Square analysis of the Gardner Multiple Intelligence, Sternberg's Triarchic Intelligence categories, and self- determined group role determined the significant difference in whether a preservice teacher participant decided to stay or leave the education program (p<.05) was their choice of leadership category. A chi-square statistic shows the relationship between two categorical variables as "a single number that tells you how much difference exists between your observed counts and the counts you would expect if there were no relationship at all in the population." (Glenn, 2020, online). Based on significant results, frequencies within all the variables provided a richer description of a relationship between Stayers and Leavers.

In order to explain better the quantitative results a qualitative follow up data collection and analysis accompanies each category. Qualitative bring details of the views of the participants and augments the statistical findings. Creswell refers to this as explanatory sequential design. (Creswell & Creswell, 2018). Selected and put into bold type sections of the participant's dialogue that indicates their sense of self- efficacy. Self- efficacy, in the dialogue, presented specifically or as a description that matched the previously determined definition of self- efficacy. Within each leadership role, Stayers and Leavers describe their sense of self-efficacy as it relates to their perception of strength within the definition of intelligence of Sternberg and Gardner.

ANALYSIS

The Chi Square analysis found no significance in student preservice teacher retention in their choice of their dominant Gardner intelligence or their choice of Sternberg's three areas within the Triarchic Theory of Intelligence (Gardner $p < .63$ and Sternberg $p<.608$). The Chi Square analysis produced only statistically significant results using retention in program and self-chosen group role preferences.

Chi Square Analysis- Stayers vs Leaver in Leadership Categories

	Leader	Motivator	Innovator	Organizer	Total
Stayers	14 (11.75)(0.43)	17(17.97)(0.05)	3(6.22)(1.67)	13(11.06)(0.34)	47
Leavers	3(5.25)(0.96)	9(8.04)(0.12)	6(2.78)(3.73)	3(4.94)(0.76)	21
Total	17	26	9	16	68

The chi-square statistic is 8.0674. The p-value is .044639. The result is significant at $p < .05$

Whole Group Analysis

While frequencies do not indicate any statistical significance, they can show trends that occur within the significant data. The following statistics, guided by the statistically significant group role selection, for the whole group appear in the chart below.

Group Role-Whole group Stayers and Leavers

Group Role (N=68)	Stayers (n=47)	Leavers (n=21)
Motivator	36.1% (n=17)	42.9% (n=9)
Leader	29.8% (n=14)	14.3% (n=3)
Innovator	6.4% (n=3)	28.6% (n=6)
Organizer	27.7% (n=13)	14.3% (n=3)

The largest number of preservice teachers (n=26,) identified their group leadership role as Motivator. The smallest number of preservice teachers (n=9) identified their group leadership role as Innovator.

Motivator

Overall Motivators (N=26), the dominant group of Stayers and Leavers, determined Sternberg's category of creative thinking as important to their sense of self -efficacy.

Motivators (N=26) and Sternberg's Triarchic Intelligence - Stayers vs Leavers

Sternberg Motivators (N=26)	Stayers (n=17)	Leavers (n=9)
Creative	64.7% (n=11)	55.5% (n=5)
Analytical	5.9% (n=1)	0% (n=0)
Practical	29.4% (n=5)	44.4% (n=4)

Motivator stayers (41%) selected Gardner's Interpersonal Intelligence as the source of their sense of self- efficacy. Motivator leavers (33%) selected Kinesthetic Intelligence

Motivators (N=26) and Gardner's Multiple Intelligences- Stayers vs Leavers

Gardner's Motivators N=26	Stayed in Education program (n=17)	Left Education program (n=9)
Interpersonal	41.2% (n=7)	11% (n=1)
Intrapersonal	5.9% (n=1)	11% (n=1)
Musical	17.6% (n=3)	22% (n=2)
Visual Spatial	5.9% (n=1)	11% (n=1)
Linguistic	5.9% (n=1)	0% (n=0)
Logical Mathematical	11.8% (n=2)	11% (n=1)
Kinesthetic	11.8% (n=2)	33%(n=3)

Naturalist	0% (n=0)	0% (n=0)

For the Motivator Stayer, opportunity for creativity and interpersonal relationships was important to a sense of self- efficacy. The following student participant speaks to these determinants:

> Out of Sternberg's three formative intelligences, I have the most strength in the creative since I am able to create games and activities out- of- the blue. I love being able to incorporate music into learning. Last year, for my capstone project, I wrote and illustrated a children's book. The storytelling was immensely fun and creating the images to go along with the story was even better. I love to find new ways to teach and learn other than textbooks and lectures

For the Motivator Leaver, creativity and the opportunity to display their kinesthetic intelligence was essential to their leadership role and sense of self-efficacy as seen in the following student participant dialogue.

> I'm a motivator and a leader which give me a strong sense of self efficacy. In a group setting, I get people excited and get the job done. I got to exercise my leadership qualities when I was in charge of entertainment at the African Student Association Gala. I got the models and dancers where they needed to be and to my surprise, my firm authority was respected and looked up to. I also motivated my dancers to do what they needed to do, when they were down. I was able to settle disputes and handle the responsibility really well. I overall was able to put some of the tools I never thought I had to good use.

Leaders

Leaders divideto Stayers (n=14) and Leavers (n=3). Within the group of Leader both Stayers, 50% (n=7,) and Leavers ,66% (n=2), identified their self -efficacy as dependent upon Sternberg's creative thinking.

Leaders (N=17) and Sternberg's Triarchic Intelligence - Stayers vs Leavers

Sternberg's - Leaders N=17	Stayed in Education program (n=14)	Left Education program (n=3)
Creative	50% (n=7)	66% (n=2)
Analytical	21.4% (n=3)	0% (n=0)

Practical	28.6% (n=4)	33% (n=1)

Leader Stayers predominantly selected Gardner's Interpersonal Intelligence, 42.8% (n=6,), as important to their sense of self efficacy. Leader Leavers 66% (n=2) also selected Interpersonal Intelligence as important to their sense of self efficacy.

Leaders (N=17) and Gardner's Multiple Intelligences- Stayers vs Leavers

Gardner Intelligences-Leaders N=17	Stayed in Education program (n=14)	Left Education program (n=3)
Interpersonal	42.8% (n=6)	66% (n=2)
Intrapersonal	14.2% (n=2)	0% (n=0)
Musical	7.1% (n=1)	0% (n=0)
Visual Spatial	0% (n=0)	0% (n=0)
Linguistic	14.3% (n=2)	0% (n=0)
Logical Mathematical	7.1% (n=1)	0% (n=0)
Kinesthetic	7.1% (n=1)	33% (n=1)
Naturalist	7.1% (n=1)	0% (n=0)

The Leader Stayer selected the same priorities as the Leader Leaver. Both groups related to the importance of creativity and interpersonal intelligence as factors in their sense of self- efficacy. An example of the rationale of the Leader Stayer who related to the importance of Creativity and Interpersonal relationships follows:

> When looking at Gardner's Multiple Intelligence theory, the most important strength is interpersonal, because I am extraverted and learn best from interacting with other individuals…I am extraverted which allows me to feel comfortable sharing my ideas with

others, in hopes to benefit my own personal goals, as well as theirs… I enjoy being the catalyst when it comes to motivating people to go out and do things.

When looking at Sternberg's three formative intelligences, I am creative. I have an ability to use my imagination to overcome situations or create things. I enjoy taking different approaches to life, rather than taking basic routes to complete things or go about my life. Creativity is an intelligence strength of mine that allows me to use my mind for benefiting myself, and others around me, which has allowed me to obtain a strong sense of self-efficacy and self-esteem…

In a group enterprise, I am most likely to take on a leadership position. Based on my personal strengths, it is evident that I am strong when it comes to sharing my ideas, pointing out the strengths of others around me, and guiding people when they are not sure what route to take. My creativity, extraverted personality, and strategic thinking skills would allow me to be a strong role model and leader for those around me. In addition, my plans for the future include obtaining a degree in education administration, and eventually becoming a high school principle. For this position, I feel my strengths would make me a good candidate when it comes to leadership

An example of the rationale of the Leader Leaver who selected Creativity and Interpersonal follows:

Interpersonal- this intelligence makes it very easy in talk to other people. It means I really enjoy talking to others. I am good with expressing myself in from of them. My strength is creative. Creative is my strength because I am able to think outside the box. I enjoy coming up with new ways to help people or make things run smoothly. Also, I like coming up with different ways to do things by relating things together. I tend to solve and deal with things in a creative way, whether that be how I interact with people, help people, or solve something. I see these measurements interacting with my concept of self- efficacy very well. They will interact well because I have the ability to solve problems, while being good with people. I with be able to think in a creative way to help all different types of situations. I would be a good leader because I know how to solve problems in a creative way.

Organizers

Of the 68 preservice teachers surveyed, 23.5% identified their group roles as Organizers. Organizer divided into Stayers (n=13) and Leavers (n=3). Within the group of Organizer Stayers, 38.5 % (n=5) identified their self- efficacy as dependent upon Sternberg's practical intelligence.

Organizers (N=16) and Sternberg's Triarchic Intelligence - Stayers vs Leaver

Sternberg's -Organizers N=16	Stayed in Education program (n=13)	Left Education program (n=3)
Creative	30.8% (n=4)	33.3% (n=1)
Analytical	30.8% (n=4)	33.3% (n=1)
Practical	38.5% (n=5)	33.3% (n=1)

Within Gardner's Multiple Intelligences Stayers were dominantly intrapersonal (30.7%) and Leavers were predominantly interpersonal (66%).

Organizers (N=16) and Gardner's Multiple Intelligences- Stayers vs Leavers

Gardner Intelligences- Organizers N=16	Stayed in Education program (n=13)	Left Education program (n=3)
Interpersonal	23.1% (n=3)	66% (n=2)
Intrapersonal	30.7% (n=4)	0% (n=0)
musical	7.7% (n=1)	0% (n=0)
visual spatial	0% (n=0)	0% (n=0)
Linguistic	0% (n=0)	0% (n=0)
logical mathematical	23.1% (n=3)	33% (n=1)
Kinesthetic	15.4% (n=2)	0% (n=0)

Naturalist	0% (n=0)	0% (n=0)

Organizers stayer practical and intrapersonal –since no choice of Sternberg's Intelligence dominated the Organizers practical is the example dialogue for both Stayers and Leavers. An example of a Stayer Organizer who relates to practical intelligence and interpersonal intelligence for their sense of self - efficacy in a leadership role follows.

> My organization in most of the facets of my life is a strong suit of mine, and it is something I consider a blessing because I know others struggle to find this manner of organization in their own lives. I really believe that this strength of discipline will propel me forward in my future endeavors in nothing but a positive way.

> In terms of Gardner's Multiple Intelligences- is the notion of intrapersonal intelligence the most out of any other component. This did not surprise me very much as I consider myself to be an exceptionally intuitive and occasionally a very introverted person. When it comes to listening to my own feelings, motivations, beliefs, convictions, and goals, I am very in-tune with my inner workings. I really know myself and who I am at this point in my life. Because of this, I am able to make better decisions based on my own individual needs and wants.

> In terms of Sternberg's Triarchic Theory, I believe I am most aligned with practical intelligence. I am able to recognize and identify problems within my life, put them into real-world contexts and personal schemas, and find solutions to solve them with relative ease. (sense of self efficacy) I have always been this way, as I am always apt to think very practically (i.e. applying prior knowledge) when faced with an issue or conflict. I do not tend to be very analytical when I am trying to make decisions, so practicality, for me at least, is key.

An example of a Leaver Organizer who relates to practical intelligence and interpersonal intelligence for their sense of self -efficacy in a leadership role follows:

> I realized that most of my traits are in the executing category and I think that makes more sense. I like to make lists so that I can make things happen in the future. I do everything for a reason, I am deliberate in my actions and I am usually pretty consistent with that plan. All of my strengths in some way point to my need to be slightly in control of my life and to not have unpredictable things happen if I can help it. I like to make lists so that I am organized and ready to complete tasks and keeping a small close group of friends makes it more likely for everyone to understand my personality. Sternberg would say that I am stronger with Practical intelligence. I may not be a strong critical or analytical thinker, but I am good with the everyday things. I notice this at work with my boss who obviously knows a lot more about the business than I do cannot solve a simple driving issue. I am good at thinking ahead and figuring out how to quickly solve our driving issues. I do not get stressed about a co-worker being sick because

I am always ready to redistribute jobs and time to make more sense. I am not the first one to think of a new lesson and I do not excel at tests but I can create an environment where people are happy. Gardner strengths are harder to decide …I am very in tune with my personal feelings. This can sometimes help me with my interpersonal skills. I can relate my inner feelings to those who seem to be having a hard time.

Self-efficacy is the ability to rise or fall in a situation based on what you believe you are capable of accomplishing. All of my strengths put together will decide if I am going to rise or fall. Since I am stronger in problem solving and more everyday issues, I will likely fall in more academic scenarios. But because I know how to get around places, I would do well exploring a new city. As a practical thinker, I will tend to give up when it comes to problems that seem ridiculous and my self-efficacy will be lower. Self-efficacy comes up more frequently in school when I am taking classes that are required but not really my favorite. I am at a higher or rising level of self-efficacy at work, since that is when I am typically helping others solve every day issues or scheduling problems. This is something that will be different for everyone and is based on their abilities to respond well to situations and learn from others.

Innovators

The smallest group of participants (n=9; 13%) identified their group roles as Innovator. Innovators divided into Stayers 33%. (n=3) and Leavers 66.7% (n=6). Of this group of leavers, 50% (n=3) identified their self- efficacy as dependent upon creative intelligence.

Innovators (N=9) and Sternberg's Triarchic Intelligence - Stayers vs Leaver

Sternberg's =Innovators-N=9	Stayed in Education program (n=3)	Left Education program (n=6)
Creative	0% (n=0)	50% (n=3)
Analytical	33.3% (n=1)	16.7% (n=1)
Practical	66.7% (n=2)	33.3% (n=2)

For Innovators Stayers Gardner's in our study each had a separate intelligence. They were interpersonal, visual-spatial, or linguistic. For Innovator Leavers they self- identified more as logical mathematical (n=3) which was 50% of those who left education programs.

Innovators (N=9) and Gardner's Multiple Intelligences- Stayers vs Leavers

Gardner Intelligences = Innovators (N=9)	Stayed in Education program (n=3)	Left Education program (n=6)
Interpersonal	33% (n=1)	33.3% (n=2)
Intrapersonal	0% (n=0)	16.7% (n=1)
musical	0% (n=0)	0% (n=0)
visual spatial	33% (n=1)	0% (n=0)
Linguistic	33% (n=1)	0% (n=0)
logical mathematical	0% (n=0)	50% (n=3)
Kinesthetic	0% (n=0)	0% (n=0)
Naturalist	0% (n=0)	0% (n=0)

An example of the self-reflection essay of an Innovator Stayer who identified as practical and interpersonal follows:

> My three major strengths according to Gardner's Multiple Intelligence are interpersonal, body movement (kinesthetic), and linguistic. My most major strength is social (interpersonal) I am a very social person and I like to hear others stories and problems. I have always been an extremely social person. My biggest strength according to Sternberg's Intelligence Theory is practical intelligence. Practical intelligence is defined as someone with street smarts and embraces the ability to apply knowledge to the real world and the ability to shape one's environment. Identify with this theory of intelligence because of my ability to change the feeling of a room when I walk into it. I see these measurements affecting my self-efficacy because of the way each one affects my personality and the way they each present themselves through me.When I participate in group projects, I am usually an innovator. I could handle the leader position if I wanted to but I like to allow others to take the lead. I am also not the best at

organization because sometimes I can be a bit scatter brained. Motivation is something that I am also good at, I can motivate people well and usually do.

The dialogue of an Innovator Leaver who identified with Sternberg's creative intelligence and Gardner's logical mathematical follows:

The choice of group role indicated that 65% of the Motivators, 33% of the Innovators, 81% of the Organizers and 82% of the Leaders stayed in education (Stayers). Looking within groups the dominant choice for Stayers was Motivators (n=17) and the dominant choice for Leavers (n=9) was also Motivators. A noticeable difference occurred in the choice of Innovators. Only 6% of the Stayers chose Innovator while 29% of the Leavers chose Innovator.

What is important to the self-efficacy of Stayer and the Leaver? The dialogue was deconstructed to isolate statements of self- efficacy within each group to open voice as to group choice. These isolated statements grouped into Leaders and Stayers and key words for each statement presented as follows:

Stayer 1: I have the most strength in the creative since I am able to create games and activities out-of- the blue. I love being able to incorporate music into learning

Key words: create, incorporate, learning

Stayer 2: Creativity is an intelligence strength of mine that allows me to use my mind for benefiting myself, and others around me, which has allowed me to obtain a strong sense of self-efficacy and self-esteem… My creativity, extraverted personality, and strategic thinking skills would allow me to be a strong role model and leader for those around me.

Key words: benefit, creativity, extravert

Stayer 3: I really know myself and who I am at this point in my life. Because of this, I am able to make better decisions based on my own individual needs and wants… I am most aligned with practical intelligence. I am able to recognize and identify problems within my life, put them into real-world contexts and personal schemas, and find solutions to solve them with relative ease… I have always been this way, as I am always apt to think very practically (i.e. applying prior knowledge) when faced with an issue or conflict. I do not tend to be very analytical when I am trying to make decisions, so practicality, for me at least, is key.

Key words: decisions, solutions, problems

Stayer 4: My most major strength is social (interpersonal) I am a very social person and I like to hear others stories and problems. I have always been an extremely social person. My biggest strength according to Sternberg's Intelligence Theory is practical intelligence. Practical intelligence is defined as someone with street smarts and embraces the ability to apply knowledge to the real world and the ability to shape one's environment. I identify with this theory of intelligence because of my ability to change the feeling of a room when I walk into it. I see these measurements affecting my self-efficacy

because of the way each one affects my personality and the way they each present themselves through me

Key words: social, apply, shape

Summation of Analysis

As an aggregate group, the key words for the Stayers dialogues selected as representative of their group combined with the Chi Square determination of group roles paints the following picture: The candidate that is a Stayers is a Motivator, a social person who incorporates creative decisions into solutions for problems, and as a Leader applies these to shape learning.

While the aggregate group, keywords for the Leavers selected as representative of their group combined with ChiSquare determinant of group roles paints the following picture: The candidate that is a Leaver is a Motivator, comfortable with a position of respect and authority, who helps others to solve problems and as an Innovator explores exciting and creative solutions.

CONCLUSIONS

Pre-service teaching programs must meet certain accreditation requirements (Mansfield, et.al, 2016,). Within the field of education in the United States, students take a variety of classes focusing on teaching theory, child development and academic content. These preservice teachers are required to participate in a several practicum experiences ranging from once a week per semester to five days a week per semester. Student teachers may be vulnerable to negative emotional experiences triggered by perceptions of self-doubt, or bullying. Chaplain (2008) reported that student teacher's optimism dampened during their training, and they commonly anticipated their levels of psychological distress would further increase when they began teaching.

The Chi Square determined a significant relationship for self- identified leadership roles and the student's graduation from the education program. Although not significant for retention, the identification of the student with Gardner's multiple intelligence category and Sternberg's Triarchic intelligences within leadership roles further identified the nature of the typical student. Further qualitative analysis of participant dialogue painted a picture for this small MidWestern university of the student who matriculated in education and the student who left education.

This study was a preliminary look at using leadership styles as a means to explore retention in pre-service teacher programs. While this study did not yield glaring statistical evidence, it offered a starting point for discussion. In this pilot, with its bounded population at a small Mid -Western university, motivators and leaders are more likely to stay in education as a degree major while those who identify as Innovators or Organizer are more likely to leave education for another major.

This study drew attention to the Innovative and Creative participant. The smallest category chosen for leadership role was Innovation (N= 9) with three Stayers and six Leavers. Thirty-three participants

(48.5%) of which twenty –two were Stayers and eleven who were Leavers those Creative Intelligence as essential for their sense of self-efficacy. Overall, Stayers spoke of the importance of being a member of a group dedicated to finding creative solutions to shape learning. Leavers emphasized their need for respect and authority as they helped others find exciting and creative solutions to problems.

The question is can a creative and innovative student at this Mid- Western University or generally in the field of education find their bliss? Time management, funding, curriculum demands, content standards, Individualized Education Plans, etc. are potentially not colorful, musical, poetic, innovative, or creative. They are necessary facets of a scope and sequence education for pre-service teacher. If we want to attract and retain the innovative and creative preservice teacher then innovation and creativity deserves to be a valued priority in the educational curriculum not just the University core. Creativity needs to be more than decorating the school bulletin board. Novel lesson plans, socio-dramatic play opportunities, musical opportunities, and projects that include art, graphic design, and poetry keep our Innovators and our Creative students interested and motivated. If we ignore the need to invent, create, explore, and "play" with concepts during pre service curriculum because of our fear that content will be side-barred we may alienate the teacher-leader who wants to motivate the innovative minds of future generations and inspire creative genius.

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