

Understanding the correlation between a preferred choice of specialization and learning styles from the perspective of the Gregorc Learning Model

Ruchika Jha Kashyap¹, Dr. Pradnya Chitrao²

^{1,2}Symbiosis Institute of Management Studies

ABSTRACT

The current situation of COVID 19 forces educators and learners everywhere to re-evaluate the learning styles and learning models that are followed now. With the influx of digital learning because of the pandemic, every management student whose mode of receiving an education was via traditional hierarchical classroom structure is reimagining their learning process to achieve the optimal level of efficiency and productivity. One way that can be utilized is understanding what a specialization's student's predominant learning style is to help most of the students. The results of this study can also be used to gauge why some students are not performing in their preferred specialization and they can be supported with knowledge in a style that suits them.

Keywords

Gregorc, Mind styles model, learning models, learning styles, E-learning, Adaptive learning, Personalized learning, Learning characteristics, Interconnection, Cerebral Cortex, Management students, Classroom environment, Student satisfaction

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Introduction

The dynamic nature of the global market today is leading organizations to look for employees that are specialists in the niche jobs that they have picked for themselves. Another crucial factor in the recruitment of an individual which tips the scale in their favor is a history of learning. Organizations recognize that to be agile and nimble, an employee who is curious to learn more about what's happening in their field is a long term investment and can save the company from problems that arise due to a wrong fit hire where mostly the underlying cause of job dissatisfaction is a lack of motivation to stay updated about the field and learn on the job continuously.

The present paper deep dives into understanding whether there exists a correlation between the choice of specialization opted by management students and their learning style. The frame of reference for the same is the "Gregorc Model or the Mind styles model". The inference for the particular hypothesis has been done, via the medium of a survey wherein the characteristics of the different learning styles under the model have been used as the basis for the formation of survey questions. The paper will explain whether or not such correlation exists and if it does then the paper will seek to provide a model for educators to use the most preferred learning style for the four major specializations i.e. (Human resources, Finance, Operations, and Marketing) to improve the dip in performance of students

Literature Review

How we learn and the importance of learning styles

Learning styles are an integral part of an individual's behavior and characteristics; it is so because our learning styles develop because of our prior life experiences.

Connectivism: A Learning Theory for the Digital Age by George Siemens defines learning as:

"Learning is a process that occurs within nebulous environments of shifting core elements – not entirely under the control of the individual. Learning (defined as actionable knowledge) can reside outside of ourselves (within an organization or a database), is focused on connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing."

The present status quo of the knowledge dispersion system is based on a connected network of fragmented global learners, which becomes even more difficult to cater to due to this gap that occurs because of the learning style and learner mismatch. As we progress further towards a digital future, we have eased into the model of learning which is built on the philosophy – "Learn what you want, how you want and in how much time you want". The traditional structures have been broken down to give rise to a structure that is like a box of Legos where different parts can be combined in different ways to give rise to new structures. The power which earlier was exercised by an instructor has now changed hands and the learner now decides how much will they learn and how much will the already existing system help them with. (Stella Lee, July 2016, Vol. 19, No. 3)

A major area of difference that this paper delves into is the previous background of the learner. Learning styles are regarded as a culmination of cognitive, affective, and physiological traits. It was seen that the expectations of learning for a learner with a prior background or experience in a field of study, modify their learning style of the field. For example, there was a distinctive difference in the learning requirements of a native English-speaking learner and a non-native English speaker. (Reid, Vol. 21, No. 1, Mar. 1987). Another differentiator that has been recognized in studies is the work experience level of each learner, research has shown that the degree of work experience of a diploma holder compared to a regular degree holder is less in the same course (Dubey B., (1977)). A lot of studies have been done to move towards a model that fits all learner

groups despite the external varying factors. One of the areas of extensive research in this regard is the overlapping area between culture and learning style. For the same education has been looked at as a service that is provided by the educators and attempts have been made to understand what will attract the target audience. The segmentation of students has also been broadened from merely domestic and foreign. It was also seen that it is critical for both the teacher and learner to have an understanding of the culture that the other hails from and an in-depth understanding of the learning style within that culture as it helps the teacher deliver knowledge in an efficient manner. It was seen through certain stereotypes have built-in around cultures. For example, it is assumed that Asians are submissive learners and hence learn best where the learning is teacher driven and collective in nature. But further research concluded that the learners of most cultures wanted a system where active learning happens and participation is encouraged. (Xiao, December 2006)

Some popular Learning styles that have been utilized till now to understand the way a predominant choice is made in a student are as follows:

Kolb Learning Style Instrument-

The Kolb learning style model is one of the earliest models of learning and it was in its nascent stages widely criticised for its reliability standards. However, a modified version of the same came out which garnered widespread acceptance and it was utilized as a common framework for understanding how an individual learns. The Kolb's Learning model is a 12 item-based model in which depending upon the decisions that the learners take they are divided into four main categories namely:

- 1) Convergers
- 2) Divergers
- 3) Assimilators
- 4) Accommodators (Hong Lu, 2007)

The test primarily identifies which is the strongest quadrant of an individual as well as their affiliation in other zones. The types as defined by Kolb are as follows:

Divergers

receive information conceptually i.e. they learn by tangibility. For example, a diverger will learn what sadness is by getting hurt and then feeling the emotion. They learn by sensing. These kinds of individuals are caring and seek personal meaning. The variance of perspectives that they possess on a given subject matter makes them a diverger.

Assimilators

as the name suggests these learn assimilate knowledge i.e., they take information abstractly and process reflectively. These individuals usually think rationally and back their decisions with logic. These individuals are much suited for a traditional classroom orientation.

Convergers

are the individuals which are able to converge their ideas. These are the individuals who work best under tight deadlines and are able to work quickly and logically towards a solution as they learn by doing and thinking.

Accommodators

are individuals who are very adaptive in nature. They learn via concrete experience and active experimentation. They learn via trial and error situations and enjoy having conversations. Their learning can be hampered by the fact that they sometimes overlook facts and theories that contradicts their own views. (Sharp, 1997)

The Gregorc Mindstyle Model

The Mindstyle model owes its existence in the Energic Model of styles by Anthony Gregorc. It was a model that delved into the individual differences in thoughts and learning that had a major impact in the educational field and a significant effect in the other fields. (Gregorc, 1982). The Mind styles model is an investigation into how individuals accept and retain information. Gregorc has used different styles in his model to elaborate on findings of his research. A learning style is developed when certain behaviors and characteristics form the foundation of an individual's strengths and weaknesses. Under the scope of this paper, the same would mean the interest or disinterest in the specialization as a choice for majors.

It is important for the relevance of this paper that a clear definition of what exactly is a learning process is put forward. The learning process includes the following processes within it- expectancy, working storage, perception, semantic encoding, long term storage, retrieval, generalizing, and gratification. (R. Gagne, 1995/96)

Expectancy answers the question about the pre-requisites required before a learning process and takes into consideration what is the mental state of the learners before they start learning, what sort of deliverables are they looking to receive from the particular learning process. **Perception** refers to the process by which a learner places certain information into the various compartments of their brain to lead to a cohesive meaning. Working storage refers to how we develop muscle memory for a set of information, usually, it is done by a process of repetition and retention. **Semantic Coding** refers to a process in the brain where actually coding is done for all incoming messages, **Long term storage** involves the process of rehearsal, organizing, and elaboration. Rehearsal leads to brain learning via the process of memorizing, organizing delves in connecting common themes, and forming environments around those themes whereas elaboration leads to relating the particular concept in other scenarios.

There is a genuine interest in the study of learning styles as it helps: 1) personalization of the learning content 2) Reference study materials that are given to students based on their learning styles 3) Can provide the learner and the teacher an insight into how they can learn better 4) It can facilitate interpersonal communications and dispersion of knowledge. (A. Ezzat Labib, August 2017)

Gregorc developed his mind styles is of two bases namely:

Perceptual ability- Under the perceptual ability, he further demarcated into categories-a) Concrete learner(One who deals with the tangible objects, who learn whilst utilizing their five senses and who do not form meaning out of intangible objects or abstract ideas and concepts b)Abstract learner(One who deals with the intangible, who learn by utilizing the power of imagination and intuition to give meaning to a non-realistic reality

Ordering ability- This ability too is further demarcated into two categories namely: **Sequential**(Learners who once receive information as an input stack them into a logical sequence to derive the rationale from it), **Random**(Learners who once receive information store them in such a manner or order that no matter where they utilize it from they can still achieve the deliverables asked of them.

The Gregorc style delineator divides all learners into 4 quadrants namely: Concrete Sequential (Cs), Abstract Sequential (AS), Concrete random (Cr), and abstract random (AR). The delineator is created based on 4 words and 10 sets.

Though every individual shares a combination of all these different styles, the prevalence of one over the other leads to the development of certain strengths and weaknesses. These strengths and weaknesses lead to them opting for a specialization than the other. For example,

a learner whose preferred style is concrete sequential tends to learn better via programmed instruction, whereas the concrete random learner learns better via hands-on experience, an abstract sequential learner learns best through guided lectures whereas an abstract random learner learns via unstructured presentations, open-ended experiences. (Moore, 1990)

The inference that can be drawn from this model is that majority of the individuals in a specialization will share the same learning style. The basis for the same is based on neuroscience which explains that the cerebral cortex is divided into different regions, these different regions are responsible for receiving different types of stimuli and these parts collaborate so that information can form meaning for the learner. (Lucimar Almeida Dantas, Volume 2, Issue 1, 2020)

A similar study was done amongst management students to understand the difference between balanced and specialized learning styles led to the result that styles that focused on both conceptualizing and experiencing led to more of a holistic skill-set development whereas when we focused on independent learning styles that are experience-based and conceptualization based learning, it led to the skillset relevant for inter-personal relations and analytic skills respectively. The study further supported the conclusion that the gender of the participant did not affect the general conclusions drawn from the study. (Mainemelis, 2002)

Research Hypothesis

The research framework is based on the notion that a learner's learning style motivates them to choose a specialization. The research framework is represented below and the hypothesis is as follows:

H1: There is a direct correlation between learning style and choice of specialization

An attempt would be made to validate the hypothesis by analyzing whether or not there exists a link between learning style and choice of specialization. Once that is done a solution in the form of a tabular model would be provided learning styles for each specialization i.e. Human resources, Finance, Operations, and Marketing.

Research Methodology

Research Methodology is an important section of the empirical paper. The current study uses the interpretivism research paradigm. Interpretivism research paradigm facilitates researcher to interpret and collect results without interfering or manipulating the data acquired (Kankam, 2019). Further, the study will implement quantitative research approach. Quantitative data enables acquiring to the point data and the respondents' views on priorly available evidence from the literature (Goertzen, 2017). In order to gain accurate information for the study, the questionnaire utilized was a structure one which priorly comprised queries on demographic questions. Further, it consisted of questions with multiple choices. This was done in order to acquire the high and low frequency level for different choices made by the post-graduate students. To provide a gist of the questionnaire, participants were asked questions concerning their opinions, attitudes, or reactions. These results were then analyzed using the SPSS software (Statistical Product and Service Solutions) which employed different statistical tools and techniques.

Participants

The study was conducted during 2020, with a group of 140 management students. The students were in their final year of the Master of Business Administration. These students were pursuing different specialization in the management course.

Relevancy of this Research

Most often than not when a particular curriculum is designed, it is designed from the perspective of the curriculum creator. Hence, there is a particular emphasis on one type of learning. For the creation of an environment where every learner benefits, we need a process where the learning is based on the viewpoint of a learner and is relevant to the society one lives in. (Poon Teng Fatt, 2000) When teaching styles get extreme they harm the learner's ability to learn and hence an effort should be made to recognize the style of the group and disperse knowledge via that medium. (Pask, 1976). The paper also adds value to a world that's rapidly moving towards online teaching. Research has shown that classroom environments have a significant impact on a learner's performance and satisfaction with the course. (Umair Ahmed, (2019)). Given the current employment market scenario, one of the most sought after

Results and Analysis

Demographic Data

With regard to the gender of the respondents, it was found that 58.6% of the post-graduate management students were females while 41.4% of them were males. Further, in concern to the age of the respondents, it was conveyed that the majority of them accounting for 34.3% of them were in the age group of 23 - 25 years. Followed by this, 25.7% of the participants were in the age group of 26 - 28 years and 19.3% of the postgraduate management students belong to the age range of 29 - 30 years. Moreover, 11.4% of the participants were in the age group of 30 years and above. While 9.3% of them which was the least percentage accounted their age between 20 - 22 years.

Further, the management students were also inquired about their work experience. This was because work experience played an essential role in deciphering the specialization choice. As there might be a possibility that their prior experience in a certain field may have driven their decision for postgraduate specialization for management. From the findings, it was uncovered that 29.3% of the management students had a work experience of 3 - 4 years. Followed by this, 2 - 3 years of experience was acquired by 20.0% of the total postgraduate students. 17.9% of the students had a work experience of 1 - 2 years and 12.1% of the PGM students had a work experience ranging from 4 - 5 years. Students accounting for 11.4% had a work experience of more than 5 years. In contrary to this, there were only 9.3% of the students that a work experience of less than 1 year.

Inquires made to the postgraduates' management students in concern to their specific area of specialization in the field of management. It was found that 34.3% of the participants were specializing in Human Resources for pursuing their postgraduate management course. This was followed by Operations Management, which accounts for the second-highest subject of specialization with 27.1% of them pursuing management education. Further, 22.9% of the students were found to specialize in Marketing for the purpose of completing their management course. Finally, only 15.7% of the total management students took up Finance as their major specialization subject for the competition of the management studies.

To gain insight over the factors or drivers that influenced the post-graduates to choose the respective specializations were also inquired. It was found that 21.4% of the participants decided to pursue their specific subject of specialization owing to advancement to their skills set. Followed by this, 20.0% of the students were driven by the motive to accomplish further education in the field. 16.4% of the participants outlined they were influenced by potential access to an advanced business network. Further, 13.6% of the respondents highlighted that higher salaries were the major motive that drove their choice of specialization. Followed by these drivers, 10.7% of the postgraduates reflected that starting their own venture i.e. to become an entrepreneur was the major influencing factor choosing their respective specialization. For a fraction of students, the family was the major influencing factor for their specific field of specialization accounting for 10.0%. Finally, only

7.9% of the total students were influenced by their previous work experience while selecting their subject of specialization.

Percentage Analysis

Participants were asked to provide their view or perspective concerning a number of questions that were then analyzed along with the specific subject of specialization chosen by them. Each question had four distinct alternatives to choose from. Each alternative represented one of the four Gregorc's Learning Style groups. The results acquired with concern to the same are outlined below.

My Mindset for Studying is

Students' perspectives were acquired for understanding what type of mindset they hold. The particular mindset was instrumental in reflecting the choice of their specific subject of specialization. 31.0% of the Finance students had an imaginative mindset for studying. This percentage was highest among students from all specializations' that hold an imaginative perspective. As for an investigative mindset, 63.9% of the students belonged to Human Resource specialization. 30.8% of both students specializing in Marketing and Operations management had a Realistic mindset. Lastly, 44.9% of the students that were specializing in Operations Management had an Analytical mindset.

When I approach a change, I am

In order to understand how students' approach a change, i.e. whether they randomly approach to change things or in opposite to this, they reacted to in a systematic manner, they were inquired the specific procedure or quality they highlight while approaching a change. It was found that 36.8% of the students pursuing Marketing are Organized when they approach a change. Adaptable approach was implemented mainly by Human Resource students accounting for 50.0% when expecting to change things. Followed by this, 58.8% of the students were Critical when they approach a change which mainly belonged to the Human Resource specialization. Finally, 54.8% of the students were Inquisitive when they approach they approach a change and these students were pursuing specialization in Operations Management.

When I am presented with a challenge

With regard to difficult situations, students were inquired about the strategy adopted by them when they were presented with a challenge. Statistics reflected that 36.7% of the students that were specializing in Finance resorted to Debating when they were presented with a challenge. Further, 39.4% of the post-graduates that pursuing specialization in Human Resource focused on Getting to the point when presented with a challenge. 46.4% of the post-graduates focused on Creating when faced with a challenge and these students belonged to Human Resource field. When faced with a challenge, 32.7% of the students pursuing Operations Management resorted to Relating.

My preference for learning

In order to delineate the choice of selection of specialization, the students were strategically inquired the explicit personal quality they value. This, in turn, stood as proxy and the ultimate rationale for selecting a particular specialization. Three groups of students each accounting 25.9% specializing in Finance, Marketing, and Operations Management outlined that their preference for learning was Personal. Moreover, 63.3% of the students were had a Practical preference for learning which were pursuing specialization in the Human Resource course. It was found that 45.8% of the students had Academic preference for learning which belonged to Human Resource specialization. 40.7% of the students outlined that their preference for learning was inspired through Adventurous thinking. These students were specializing in Operations Management.

When I am presenting a certain idea, I am

For outlining the personal quality of the students displayed while representing a certain idea, they were asked to highlight the same. This was vital to reflect the specific learning style they were inclined to. 29.7% of the students pursuing Marketing showcased that they were Precise when they are presenting a certain idea. Followed by this, 57.1% of the students, pursuing specialization in Human Resource, reflected they were Flexible when they present a certain idea. Moreover, 56.6% of the students that were also pursuing specialization in Human resource highlighted that they were Systematic in presenting a certain idea. Finally, 44.4% of the students were Inventive when they were presenting a certain idea.

When I am with other people, I am

It was essential to highlight and comprehend the qualities displayed by management students of varied backgrounds when they were with other people. This helped in sketching out the overall nature of the students. It was revealed that 40.0% of the students had a Sharing attitude when they were with other people and these students were found to be pursuing Operations Management. 44.4% of the students pursuing specialization in Operations Management showcased that they were Orderly when they were with others. Further, 69.6% of the students that were accomplishing management studies in Human Resource field were Sensible when they were with others. Moreover, 50.0% of the students pursuing Marketing as a subject of specialization depicted that they were Independent when they were with other people.

My approach in a group activity is

Students were strategically inquired about the behaviour they depict and the perspectives they held when they have to work in a group activity. This was essential as subjects like Human Resource and Operations required a lot of communication between team members as well as closely coordination with them in a compassionate manner. Competitive approach was held by 37.9% of the post-graduates pursuing Human Resource subject for group

activities. 64.0% of the students again pursuing specialization in the field of Human Resource had a Perfectionist approach when in a group activity. Furthermore, 33.3% of the students accounting for pursuing specialization in Human resource had a Cooperative approach in a group activity. Nonetheless, 37.3% of the students specializing in Operations Management had a Logical approach in group activity.

I would describe myself as

Queries were made in concern to how they would best describe themselves. The specific trait they selected provided the underlying rationale behind the choice of a specific subject of specialization. Statistics revealed that students accounting for 26.9% of each pursuing Marketing and Human Resource specialization respectively described themselves as Intellectual. Further, 60.6% of the students that selected Human Resource as their subject of specialization described themselves as Sensitive. In line with this, 31.4% of the students that chose Human Resource management outlined that they describe themselves as Hardworking. Nonetheless, 41.3% of the students specializing in the field of Operations Management depicted that they would describe themselves as Risk taking.

I would like myself to be identified as

Four distinct adjectives while listed, among which the students were asked to select the most appropriate one that they want to be identified as by others. It was found from the analysis that 38.7% of the students pursuing post-graduation specialization in Human resources wanted themselves to be identified as Reader. Further, it was found that 51.9% of the students specializing in Human Resource would like themselves to be identified as People's person. Followed by this, 38.7% of the students wanted themselves to be identified as Problem solver and these students were specializing in the field of Human resource. Moreover, 39.2% of the students highlighted that would like themselves to be referred to as Planner and these students were accomplishing management studies in Operations Management.

I am able to remember better when I

Remembering things is an important aspect of learning. As a result, the procedural technique students rely upon for remembering plays a vital role in deciding the choice of specialization. Moreover, it directed towards the major learning type they were associated to. Findings suggested that 41.9% of the students pursuing Human Resource specialization were able to remember better when they Memorize it. Further, it was uncovered that 36.7% of the post-graduates fulfilling management course in Operations Management outlined that they were able to remember better when they Associate it. This was further followed by 40.6% of the students each that pursuing post-graduation management education in the respective fields of Human Resource and Operations Management, were found remember better when they utilize the Think-through strategy. Finally, 34.3% of the students specializing in the

field of Marketing were found to remember better when they Originate it.

When I encounter a problem

People have a general tendency to respond to things differently when the situation is worrisome. Thus, students were inquired about the type of response they usually channelize when encountered with a certain problem. From the findings gained, it was elucidated that 37.2% of the students pursuing Human Resource were a Changer when they were encountered with a problem. Followed by this, 45.2% of the students pursuing Human Resource specialization were a Judger when they faced a problem. Furthermore, 40.7% of the students were found to be Spontaneous when they encountered a problem. Moreover, 46.2% of the students reflected that they Want direction when they are faced a problem. And these students were specializing in the field of Operations Management.

My contrary approach to an argument would be

Respondents were asked the type of action they display in concern to their responsive action or contrary approach to an argument. This showcases the sense of attitude held by them in dealing with an argumentative situation. It is because that placing ones' idea without quarelling is an important aspect for smoothless flow of work. It was depicted through the analysis that 29.4% of the students each accomplishing post-graduation specialization in the fields of Finance and Human Resource respectively, adopted a Communicating approach for an argument. This was followed by 39.6% of the students that were specializing in the field of Human resource were found to have a Discovering approach in response to a argument. Moreover, 35.7% of the students each specializing in the specific field of Marketing and Human resource respectively, were found to adopt a Cautious contrary approach to persuade an argument. Finally, 36.7% of the post-graduates that were pursuing specialization in Operations Management were found to adopt a Reasoning approach for facing with an counter argument.

When searching for a new task I like it to be

The post-graduates were inquired the specific quality they utilized or potentially like to showcase when they are searching for a new task. These inquiries help in determining the type of subject and learning style they prefer. Statistics acquired in concern to this query highlighted that 37.5% of the students that chose to specialize in the field of Marketing, outlined they like to be Challenging when they are searching for a new task. Further, 42.9% of the students that pursued specialization in the field of Human Resource reflected they liked to be Practicing when searching for a new task. Followed by this, 40.9% of the students that were specializing in the field of Human Resource liked them to be Caring when they were searching for a new task. Moreover, 34.8% of the students

that were accompling management studies in the field of Human resource highlighted that they liked to be Examining when they are searching a new task.

What I seek from the work handed over to me

The major potential student's seek to when they are handed over a work was inquired. This was done to highlight the specific aspect they held in mind while working on a given project. Data analyzed showcased that 34.8% of post-graduate students accomplishing their management studies in Finance field, aimed at Completing work when they are handed over a certain work. 37.0% of the students each completing their studies in the fields of Human Resource and Operations Management respectively, seeked to Seeing possibilities when a work was allocated to them. Furthermore, 38.5% of the students seeked at Gaining ideas when they were handed over work. And these students were found to belong to the Human resource course for specializing in the management education. Nonetheless, 34.4% of the students that were pursuing post-graduation in Human Resources showcased that they seeked to Interpreting when allocated with a work.

My approach when I am presented with new opportunities

Lastly, the students were made queries regarding the approach they hold when they are presented with new opportunities. This was done particularly to accentuate the specific pattern of thinking that runs among students when they are given new opportunities. Statistics acquired highlighted that 32.4% of the students pursuing specialization in Finance reflected that they adopt a Doing approach when they are presented with new opportunities. Further, 40.0% of the students that were specializing in the field of Operations Management adopted a Feeling approach when they are given new opportunities. Followed by this, 46.7% of the students adopted a Thinking approach when they were presented with new opportunities. Finally, 36.8% of the students that were specializing in the field of Operations Management highlighted that they adopted a Experimenting approach when they are given new opportunities.

Hypothesis Testing

a) **H₀₁: There is no direct correlation between learning style and choice of specialization.**

H₁₁: There is a direct correlation between learning style and choice of specialization.

A **cross tabulation** displays the joint frequency of data values based on two or more categorical variables. The joint frequency data can be analyzed with the **chi-square** statistic to evaluate whether the variables are associated or independent.

Table 1: Crosstabulation – My mindset for studying is * What influenced you to choose this specialization

| | | My mindset for studying is | | | | Total |
|--|-------------------------------------|----------------------------|---------------|-----------|------------|-------|
| | | Imaginative | Investigative | Realistic | Analytical | |
| What influenced you to choose this specialization? | Family | 8 | 1 | 0 | 5 | 14 |
| | Previous work experience | 2 | 2 | 2 | 5 | 11 |
| | Further education in the field | 1 | 10 | 6 | 11 | 28 |
| | Advancement in your skill | 3 | 5 | 5 | 17 | 30 |
| | Access to advanced business network | 6 | 8 | 3 | 6 | 23 |
| | Higher salaries | 9 | 3 | 7 | 0 | 19 |
| | Starting your own venture | 0 | 7 | 3 | 5 | 15 |
| Total | | 29 | 36 | 26 | 49 | 140 |

Table 2: Chi-Square

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 51.064 ^a | 18 | .000 |
| Likelihood Ratio | 60.210 | 18 | .000 |
| Linear-by-Linear Association | .592 | 1 | .442 |
| N of Valid Cases | 140 | | |

a. 16 cells (57.1%) have expected count less than 5. The minimum expected count is 2.04.

From the above tables, it can be delineated that the Pearson Chi-square value gained is 51.064 and its corresponding p-value is 0.000. This value is less than 0.05 level of significance. Hence, it can be concluded that mindset for studying and factors influenced for choosing specific specialization are correlated with one another.

Table 3: Crosstabulation – My preference for learning*What influenced you to choose this specialization?

| | | My preference for learning | | | | Total |
|--|-------------------------------------|----------------------------|-----------|----------|-------------|-------|
| | | Personal | Practical | Academic | Adventurous | |
| What influenced you to choose this specialization? | Family | 7 | 0 | 2 | 5 | 14 |
| | Previous work experience | 1 | 4 | 1 | 5 | 11 |
| | Further education in the field | 1 | 2 | 6 | 9 | 28 |
| | Advancement in your skill | 6 | 3 | 2 | 19 | 30 |
| | Access to advanced business network | 0 | 6 | 5 | 12 | 23 |
| | Higher salaries | 12 | 2 | 5 | 0 | 19 |
| | Starting your own venture | 0 | 3 | 3 | 9 | 15 |
| Total | | 27 | 30 | 24 | 59 | 140 |

Table 4: Chi-Square Test

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 68.309 ^a | 18 | .000 |
| Likelihood Ratio | 78.440 | 18 | .000 |
| Linear-by-Linear Association | .121 | 1 | .728 |
| N of Valid Cases | 140 | | |

a. 17 cells (60.7%) have expected count less than 5. The minimum expected count is 1.89.

From the above tables, it can be delineated that the Pearson Chi-square value gained is 68.309 and its corresponding p-value is 0.000. This value is less than 0.05 level of significance. Hence, it can be concluded that the preference for learning and factors influenced for choosing specific specialization are correlated with one another.

Table 5: Crosstabulation – My approach in group activity is * What influenced you to choose this specialization?

| | | My approach in a group activity is | | | | Total |
|--|-------------------------------------|------------------------------------|--------------|-------------|---------|-------|
| | | Competitive | Perfectivist | Cooperative | Logical | |
| What influenced you to choose this specialization? | Family | 9 | 1 | 2 | 2 | 14 |
| | Previous work experience | 2 | 1 | 3 | 5 | 11 |
| | Further education in the field | 4 | 9 | 3 | 12 | 28 |
| | Advancement in your skill | 0 | 5 | 7 | 18 | 30 |
| | Access to advanced business network | 1 | 4 | 3 | 15 | 23 |
| | Higher salaries | 13 | 2 | 4 | 0 | 19 |
| | Starting your own venture | 0 | 3 | 5 | 7 | 15 |
| Total | | 29 | 25 | 27 | 59 | 140 |

Table 6: Chi-Square Test

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 71.568 ^a | 18 | .000 |
| Likelihood Ratio | 77.821 | 18 | .000 |
| Linear-by-Linear Association | .902 | 1 | .342 |
| N of Valid Cases | 140 | | |

a. 16 cells (57.1%) have expected count less than 5. The minimum expected count is 1.96.

<https://scihub.se/10.1016/j.lisr.2019.04.003>

From the above tables, it can be delineated that the Pearson Chi-square value gained is 51.064 and its corresponding p-value is 0.000. This value is less than 0.05 level of significance. Hence, it can be concluded that the approach of students in a group activity and factors influenced for choosing specific specialization are correlated with one another.

Moreover, it can be stated that since all the assumed variables have gained a value of 0.000 which is less than 0.05 level of significance, it can be delineated that the study rejects the null hypothesis and accepts the alternative one. Hence, it can be concluded that there is a direct correlation between learning style and choice of specialization.

Conclusion

Based on the findings of the current study, it can be comprehended that the types of learning styles and different personal traits are equally correlated with the specific choice of specialization of the students. The comprehensive data acquired reflects that some strategies and practices of the students pursuing Human Resource specialization were indifferent with the choices and strategies of the Marketing, Operations Management, as well as Finance students. Moreover, it is essential to understand that not all choices and strategies of the students from each specialization were unique to their categorical group. To conclude, it can be stated that Gregorc's Learning Style model is conducive to outline the specific choice of specialization. A future research can be conducted on outlining students' choice on completely different subjects that are not a classification from a given course. For instance, the current study was specifically directed towards understanding the particular choice of management students. However, to gain a better insight of the model's capabilities, a future research can be conducted on outlining how students from explicitly unrelated fields depict different types of learning styles.

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