

Impact of Creativity towards the Performance of Undergraduates of Rajarata University of Sri Lanka

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Abstract: The purpose of this study was to investigate the Impact of Creativity towards the Performance of the Undergraduates in Rajarata University of Sri Lanka. Creativity was considered as the independent variable and the performance of the undergraduates was considered as the dependent variable. Researcher used eight creative talents which includes in the model developed by Lynne C. Levesque as the independent variables. The sample was 100 which selected from two faculties in the university including 4th year undergraduates. A questionnaire was used to collect the data from the undergraduates. Respondents were asked to indicate their agreement or disagreement on Five Point likert Scale as the scaling method. The measurement scale for independent and dependent variables were “interval”. The data was analyzed using Statistical Package for Social Sciences (SPSS) version 21.0. Mean Score and Standard Deviation were used for all the variables for univariate analysis and correlation coefficient was used for bivariate analysis. The hypotheses were tested using the Correlation and regression analysis. The results indicated that the Creativity and the performance of the Rajarata University undergraduates were in moderate level. The Creativity and the performance of the Rajarata University undergraduates have not been changed according to the gender, faculties, and District. The results of correlation analysis illustrated that the undergraduate students Creativity was positively and significantly correlated with the performance of the undergraduates. A weak positive and significant relationship was found between Navigator, Visionary creative talents and the performance of the undergraduates. A Strong positive and significant relationship was found between Adventure, Pilot, Inventor, Poet creative talents and the performance of the undergraduates. The Explorer and Harmonizer creative talents were not significantly correlated with the performance of the undergraduates.

Key words: Creativity, Performance, Undergraduates

01. Introduction

Education is a basic requirement for the existence of all humans. A large number of people in current world do not receive a proper education. Approximately 260 million of children in the world can't read and write (WorldBank, 2017). By the passage of time education has treated as one of the most important human need and the poor people were able to obtain education. Now a day's education is considered as the most powerful weapon to the future. The formation of a knowledge-based society is a global process, and elements of a knowledge-based society develop in a country regardless of its capabilities and resources. (Singh, 2013).

The university plays a particular set of roles in the global knowledge economy. It acts as a provider of both private and public goods in terms of education and research, as well as playing historically well-established roles in terms of applied problem-solving. The university also acts as a conduit for the wider societal impacts linked to and co-evolving with the other three roles and facilitating integration into the wider social and innovation system (Diacio, Hughes, & McKelvey, 2012). Sri Lankan education system consists of 15 universities, 7 post graduate institutes, 10 other higher education institutes and 1138 technical and vocational education and training institutes (Liyanage, 2014). Rajarata University of Sri Lanka, located in the historic city of Mihintale, which is situated 14 kilometres away from the east of Anuradhapura, was established on 31 of January, 1996. It envisages highlighting the city, Mihintale, which marks the inception of the Sri Lankan social development, as one of the most prominent centre of the present academic arena in the Sri Lankan history. Through this, it is expected to produce virtuous, intellectual and competent citizens for the needs of the 21st century (Rajarata University).

Undergraduates are products of universities. Upon graduation, they become the source of manpower for developing the country's economy. However, students who dropped out from the university would not only find it difficult to search for jobs, they could also, in a way, hinder the development of the labour market. Therefore, students' performance in universities should be a concern not only to the academics and educators, but also to corporations which are often said to be the "end user" in the supply chain of graduates for the labour market (Alfan & Othman, 2005). Performance of undergraduates is important because it is strongly linked to the positive outcomes we value. Adults who are academically successful and with high levels of education are more likely to be employed, have stable employment, have more employment opportunities than those with less education and earn higher salaries, are more likely to have health insurance, are less dependent on social assistance, are less likely to engage in criminal activity, are more active as citizens and charitable volunteers and are healthier and happier. But the performance of the undergraduates are poor than that they were at the A/L's in all aspects of performance. Academic achievement is the prior factor that an undergraduate should focus on. But at the current situations the academic achievement is under the true potential of the undergraduates. And also the thinking style, personality, innovation is not at to the standard level that can be expected from an undergraduate. A small scale study held by Gammie, (1999) has suggested that students are not very proficient in predicting their honors degree classification at the beginning of their final honors year. Mostly the weaker students over performed their performance and stronger students underperformed their performances. As university students they all have the requirements needed to compete in same levels. As they all have completed their A/L's with flying colours they all have same level of knowledge. And also they all attend same lecture series and the supervision from the lectures is also same. And the hostel, library, laboratory facilities are also same. So that the level of performance has to be same. But the performance of the undergraduates is not as expected as they need to be.

Investigation of factors related to the academic performance of university students become a topic of growing interest in higher educational circle. Many recent studies were carried out to explore factors that affecting university student's academic performance (Shahzadi & Ahmad, 2011). The performance of undergraduates in university is influenced by many factors. According to O'Connor,(2007) students' learning styles, prior academic results, levels of motivation, spatial ability, self-efficacy, personality factors and Creativity have an impact on performance of undergraduates.

Research Questions

1. What is the level of creativity of the undergraduates?
2. What is the level of performance of the undergraduates?
3. What is the relationship between creativity and the level of performance of undergraduates?
4. Is there any relationship between creativity and the gender of the undergraduates?
5. Is the creativity of undergraduates differs from faculty to faculty?
6. Is the creativity of undergraduates differs from district to district?

Research Objectives

1. To examine the levels of creativity of the undergraduates.
2. To investigate the level of performance of the undergraduates.
3. To examine the relationship between creativity and the level of performance of undergraduates.
4. To investigate the relationship between creativity and the gender of the undergraduates.
5. To identify the way creativity differs from faculty to faculty.
6. To identify the way creativity differs from district to district.

02. Literature Review

The university students' performance plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country's economic and social development (Ali, et al., 2009). Successful undergraduates have higher self-esteem, self-confidence have lower levels of depression and anxiety, are socially inclined (Regier, 2011). Undergraduates who do well in universities are better able to make the transition into adulthood and to achieve occupational and economic success. Given the specialization required for many jobs these days, young people who are entering the job market do need a substantial base of knowledge and, in many cases, specialized skill. Not only academic performance, undergraduates need to have Aesthetic and sports performance in order to achieve their ultimate success.

There are many enduring factors which influence undergraduate student performance at university (Lynch, Seery, & Gordon, 2011). These variables include students' learning styles, prior academic results, levels of motivation, spatial ability, self-efficacy, student personality factors and creativity (Cornor, 2007). Most of the time academic performance was based on such issues like gender difference, teacher's education and teaching style, class environment, socio economic factor and family education background (Mushtaq & Khan, 2012). Educators have expended remarkable exertions in the studying the personal factors on academic achievement of students. Sex related issues have contributed greatly to the creation of gender crisis by providing unequal opportunities for males and females.

For thousands of years people have tried to understand creativity and the creative process. We have striven to unravel the mystery behind the concept and answer a number of pressing questions: Where does creativity come from? What makes creative people creative? Is there any way to be more creative? The number of questions that have arisen around creativity points to the importance that creativity plays in our human lives (Gerlovina, 2011). Creativity is what happens when an individual produces something that is novel as well as appropriate, generative or influential (Stokes, 2006). Kim & Kim, (2007) stated that Creativity is an influential factor to change the world for enhancing the quality of human life in cultures, economics, technology, the arts, and beyond. Creativity is a topic of wide scope that is important at both the individual and societal levels for a wide range of task domains. At the individual level, creativity can lead to new ways of dealing with a job or daily life, and solving problems in a non-traditional way; at the societal level, creativity can lead to new scientific findings, new inventions, new procedures and social reforms. To educate the knowledge society and innovation economy, educational institutes must provide students with opportunities to engage in creative thinking (Sawyer, 2006).

Empirical evidences

Table 01; Empirical evidences

| Date | Author | Source | Findings |
|-------------|--------------------------|--|--|
| 2013 | (Alia Al - Oweidi, 2013) | Creative Characteristics and Its Relation to Achievement and School Type among Jordanian Students | There are apparent differences in the means between high achievers and average achievers on all creative characteristics |
| 2006 | (Premuzic, 2006) | (Creativity Versus Conscientiousness: Which is a Better Predictor of Student Performance?) Journal Applied Cognitive Psychology. | Creative Thinking was positively related To preference for viva voice (Oral) exams, group projects and final dissertation. |
| 1998 | (Jurcova, 1998) | Humour and creativity: Possibilities and problems in studying humour | Use of creativity to help students become better interpersonal and intrapersonal problem solvers, although suggestions also range from the use of humour to defuse potentially violent situations. |
| 1998 | (Chessick, 1998) | Creativity in the psychoanalytic process | Creativity may serve as a foundation for understanding and applying constructivism to learning and treatment |

| | | | |
|------|--------------------|---|--|
| 1996 | (Struthers , 1996) | The Effects of Perceived Attributions, Action Control, and Creativity on College Students' Motivation and Performance | Creativity has been found to be significantly related with academic achievement. |
| 2002 | (Zhang,2002) | Thinking styles: Their relationships with modes of thinking and academic performance | The relationship between characteristics of creativity and academic performance were significantly positive correlation. |

Source; Developed by Author

Creative Talent Profile

Carl G. Jung (1875-1961) defined eight different patterns for perceiving information and decision making (Levesque, 2001). She believed that each of eight patterns differences is equally valuable & equally creative Based on Jung's model of philosophy Katharine Briggs & Isabel Myers developed Myers- Briggs Type Indicator (MBTI) personality inventory. The MBTI is an instrument which has been designed to make the theory of psychological type, developed by Jung, both understandable and usable (Myers & McCaulley, 1998). Thus, eight combinations or creative talents can impact on our creative results & contributions.

Four of these creative talents are used to perceive or collect data and information.

- The Adventure (Extraverted sensation)
- The Navigator (Introverted sensation)
- The Explorer (Extraverted intuition)
- The Visionary (Introverted intuition)

Other four of creative talents help evaluate data & information & make decisions.

- The Pilot (Extraverted thinking)
- The Inventor (Introverted thinking)
- The Harmonizer (Extraverted feeling)
- The poet (Introverted feeling)

Adventure

The Adventure talent helps the individuals see the external world in terms of concrete sensations, facts, and events that are happening now. People with this talent are creative in the way they quickly and responsively improvise to solve immediate problems. Their natural strengths are in the investigation of the situation and the facts surrounding it and in improvising resolutions. They keep their team grounded on the practical, in the here and now. They promote playful ways of dealing with the situation and add curiosity, flexibility, and adaptability to any project effort If a team doesn't have an Adventurer as one of its members, team members may miss out on the fun of finding creative, practical solutions through the realistic assessment of facts, flexible and emergent approaches to the challenge at hand, and truly successful and enjoyable implementations, by developing their implementation focus, slowing down to examine all sides to an issue, and opening up to possibilities, Adventurers can make even more contributions to the creativity of the organization.

Explorer

Explorers add energy and enthusiasm to any effort. Without an Explorer the team would miss patterns, trends, and future possibilities. It might have a harder time generating many options and alternatives. Explorers are creative in the way they discover and generate new and different ideas. They have great instincts for new trends and connections. They provide passion, possibility thinking, and inspiration and will test the limits of the team's imagination. They can be wonderful catalysts for change and innovation. By developing their abilities to organize and execute and by teaming with and appreciating others with different talents, Explorers can be even more effectively creative.

Navigator

Without a Navigator's creative talent, a team could get lost, like a ship without a rudder. The Navigator talent helps a group be astute observers and recorders of what is going on in the world and what has gone on in the past, assuming that their incredible memory bank is put to use in solving problems. Knowledge of facts and events and a sense of history are important in making sense out of new situations and bringing invaluable experience to bear on problems. Navigators can build on what others have done to find new ways of solving the challenge or situation. They will also ensure that a change effort is well planned and carefully implemented. Navigators need to learn to appreciate their own creative contributions and their own creative process. Taking small steps away from safe shores, opening up to the possibilities and opportunities of the future, and sharing perspectives and opinions can help optimize their creative contributions.

Visionary

The Visionary's creative talent brings vision and far-reaching imagination to any challenge or problem. It allows the team to avoid staying stuck with too narrow boundaries. The Visionary looks at long-range trends and patterns. The Visionary talent gives the team an eye to the future and an uncanny sense of what can possibly happen. These ideas and images are based on a variety of known data from many different sources and data they often don't know how they know. Visionaries add much to the creativity of the organization through their insight into the future and their unusual perspectives and connections. Further developing the ability to effectively communicate ideas and to work with details and a group will heighten a Visionary's creative contributions at work.

Pilot

Without a Pilot, the team can start to flounder and waste valuable resources. Pilots provide structure, leadership, goals, and objectives. They get things going and keep the team working together toward the goals. They ask tough questions and challenge the team to see the situation differently. Pilots come up with new designs for working together and new strategies for getting things done. They provide energy, enthusiasm, and a positive attitude for the team. Through their careful, analytical thinking and their strong ability to focus, they can help ensure that the right problem is being addressed and that an implementation plan is developed and followed. Pilots can optimize their creative contributions to the organization by developing their interpersonal skills; making sure that they take time to look at different perspectives, ideas, and opinions; and strengthening the ability to lead more participatively.

Inventor

Inventors are excellent problem solvers and valuable contributors in any work effort. They are questioning, independent, and unconventional. They are curious about new ideas flexible, and tolerant of others. They can be fun and quite playful in their curiosity and in their quest for the truth. Through their support of the exploration of the facts and possibilities, they help the team arrive at innovative solutions to problems and make important contributions to the creativity of the organization. Further development of their social and organizing skills and their ability to find "both-and" solutions will help them more truly and effectively creativity.

Harmonizer

Without the Harmonizer, the team may suffer from lack of concern for people during the development and implementation of creative solutions. A nurturing, safe environment where team member's needs, values, and feelings are considered may also be missing through their support and high energy. Harmonizers help team members build the self-esteem they need to be truly creative. Harmonizers use their organizational skills to ensure that the team finds creative solutions. They also ensure that the team looks at context and circumstances, keeping them away from black and white thinking, instead focusing on integrating conflicting opinions. Their communication and political skills are extremely important in managing people through change. By focusing on proper boundary and conflict-management skills, finding support when analysis and critique are required,

and making sure they have considered diverse points of view before making decisions; Harmonizers can become even more effectively creative.

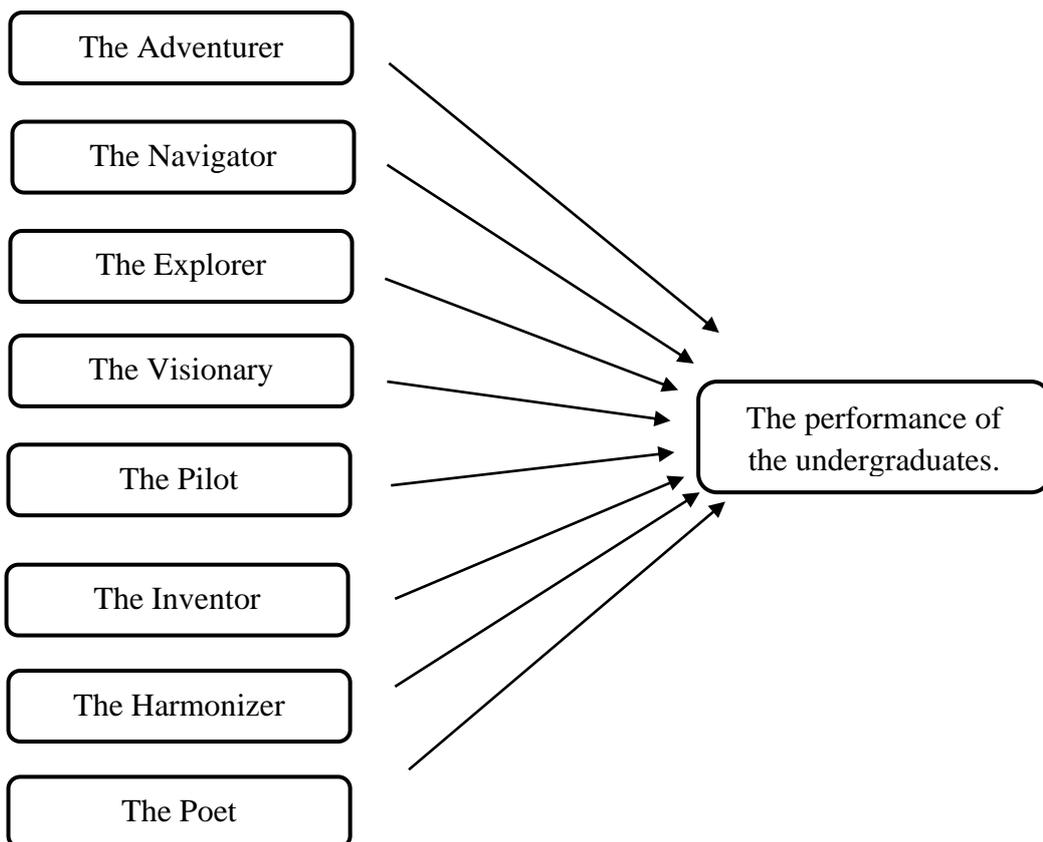
Poet

The Poet's creative talent provides a reflective perspective for making decisions based on personal values that are usually people focused, quietly supportive, and nurturing: Without a Poet's creative talent on the team, the team's effort might suffer from a lack of focus on people issues, lose some grace and beauty, and fail to incorporate values into the problem-solving and decision-making processes. The team also may not stay open to see contextual issues and additional opportunities as they emerge. To bring out the best in Poets, the team needs to respect the unique perspectives Poets bring and allow them the time and space they need to make their contributions. If Poets take the time to listen to information that may conflict with their values and to speak out, share opinions, and learn to manage conflict, they can optimize their creative contributions to the organization.

03. Methodology

Through this research researcher aims to test the '8 Creative Talents from Breakthrough Creativity Profile' which develops by Levesque, (2001). Under her findings The Adventurer, The Navigator, The Explorer, The Visionary, The Pilot, The Inventor, The Harmonizer, The Poet are the creative talents that influences on students' performance. Thus, the conceptual framework is illustrated as follows to implement the relationship among variables.

Figure 01; Conceptual Framework



Source : Developed by Author

Thus following hypothesis can be developed.

H₁. There is a significant relationship between the Adventure creative talent and the performance of the undergraduates.

H₂. There is a significant relationship between the Navigator creative talent and the performance of the undergraduates.

H₃: There is a significant relationship between the Explorer creative talent and the performance of the undergraduates.

H₄: There is a significant relationship between the Visionary creative talent and the performance of the undergraduates.

H₅: There is a significant relationship between the Pilot creative talent and the performance of the undergraduates.

H₆: There is a significant relationship between the Inventor creative talent and the performance of the undergraduates.

H₇: There is a significant relationship between the Harmonizer creative talent and the performance of the undergraduates.

H₈: There is a significant relationship between the Poet creative talent and the performance of the undergraduates.

This study falls into the category of basic research. The primary purpose of such a basic research is to generate a body of knowledge and understanding of the phenomenon of interest and build theories based on the research results. In this study, the researcher tries to find the impact of Creativity towards the performance of undergraduates. Therefore, this study is a hypothesis study that seeks to build the relationship between variables. The objective of this study is to examine the impact of Creativity on the performance of undergraduates in Rajarata University of Sri Lanka. A model developed by Levesque, (2001) called Breakthrough Creativity Profile which is considered to be an important model in creativity models used in this research to investigate how creativity affects to the undergraduates' performance. No artificial environment was created by the researcher to test the effect. The respondents were made to answer the questions from where they are by imaging the circumstance tested. Therefore the interference caused by the researcher is minimal in this research. The type of the investigation used by the researcher is correlation. The study was conducted using the correlation research design because the study was intended to investigate the relationship between Breakthrough creative talent profile and the performance of undergraduates. According to Fraenkel & Wallen (1988) correlation research describes an existing relationship between variables. The study took the quantitative approach because it was based on variables measured with numbers and analysed with statistical procedures.

This research is focused on deciding the relationship between the eight creative talents (The Adventurer, The Navigator, The Explorer, The Visionary, The Pilot, The Inventor, The Harmonizer and The Poet) and academic performance of the undergraduates in the Rajarata University of Sri Lanka. Data was collected from all the fourth year undergraduates in faculty of Management studies and faculty of Social Sciences and Humanities in Rajarata University of Sri Lanka. Therefore, the unit of analysis in this study is individual. Questionnaires are an efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest. Questionnaires can be administered personally, mailed to the respondents, or electronically distributed (Sekaran, 2006). In this study researcher administered questionnaires personally.

Population and Sampling

Table 02 ; Population and Sampling

| Faculty | Academic Year | Population | | |
|---|---------------|------------|--------|-------|
| | | Male | Female | Total |
| Faculty of Management Studies | 2013/2014 | 155 | 209 | 364 |
| Faculty of Social Sciences and Humanities | 2013/2014 | 49 | 316 | 365 |
| Total | | 204 | 525 | 729 |

| Faculty | Academic Year | Sample | | |
|---------|---------------|--------|--------|-------|
| | | Male | Female | Total |

| | | | | |
|---|-----------|----|----|----|
| Faculty of Management Studies | 2013/2014 | 21 | 28 | 49 |
| Faculty of Social Sciences and Humanities | 2013/2014 | 8 | 43 | 51 |

Source : Developed by Author

As per the sample that builds upon stratified sampling technique 49 undergraduates from Faculty of Management Studies and 51 undergraduates from Faculty of Social Sciences and Humanities were selected in order with a combination of gender to achieve the research objectives as mention in the sample design. The researcher personally handed over the questionnaire to the undergraduates and collected the necessary information.

The following tables indicate the measurement scales that can be used to measure each variable.

Table 03 ; measurement scales

| Variable | Level of measurement |
|----------------------|----------------------|
| Demographic factors | Nominal |
| Dependent variable | Ordinal |
| Independent variable | Ordinal |

Source : Developed by Author

In this research, descriptive statistics and inferential statistics were used to justify the quantitative nature of the data collection. Descriptive statistics usually involved measures of central tendency (mean, median, mode) and measures of dispersion (variance, standard deviation, etc.) and Inferential statistics involved to measure Multiple Linear Regression, Correlation Coefficient, ANOVA and Independent sample T-test was used to test the hypotheses. Correlation explains the relationship between variables. The study used correlation analysis to measure the relationship between dependent and independent variables. Statistical Package for Social Science (SPSS) version 16.0 software used to analyze the both descriptive analysis and inferential analysis.

04. Results and Discussion

For the research study, has considered 100 undergraduates as the sample of the research. According to the records of the Faculty of Management Studies and Faculty of Social Sciences and Humanities 729 undergraduates are registered for the academic year 2013/2014 who currently in the final year. At the 95% confident level and confident intervals at 5% for a population of 700, sample size should be 248 (Sekaran (2006)). But considering time limitations and other restrictions sample size selected as 100.

Reliability Analysis

Table 04 ; Reliability Analysis

| Variables | Cronbach's Alpha |
|------------|------------------|
| Adventure | 0.734 |
| Navigator | 0.705 |
| Explorer | 0.792 |
| Visionary | 0.780 |
| Pilot | 0.778 |
| Inventor | 0.693 |
| Harmonizer | 0.817 |

| | |
|---------------------|-------|
| Poet | 0.707 |
| Student Performance | 0.721 |

(Source: Survey Data 2018)

Cronbach’s alpha is computed in terms of the average inter correlations among the items measuring the concept (Sekaran & Bougie, 2013). Cronbach’s alpha should be greater than its’ minimum value of 0.700 and considered questions in the questionnaire can be accepted. According to the above table questions in the questionnaire can be accepted in terms of all the variables. However as the questions used for accessing the inventor creative talent shows a Cronbach alpha which is very close to 0.700 and its reliability is relatively acceptable. In the aspect of undergraduate researches the minimum value of Cronbach alpha is allowed up to 0.600. For all the other variables Cronbach’s alpha range from 0.693 to 0.817.

Descriptive statistics for independent variables

Table 05 ; Descriptive statistics for independent variables

| | Mean | Std.Dev | Skewness | | Kurtosis | |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Statistic | Statistic | Statistic | Std.Error | Statistic | Std.Error |
| Adventure | 3.8125 | .71631 | .138 | .241 | -.864 | .478 |
| Explorer | 3.2825 | .67761 | .077 | .241 | 1.651 | .478 |
| Navigator | 3.1975 | .58635 | .248 | .241 | .250 | .478 |
| Visionary | 3.3225 | .48630 | .127 | .241 | .400 | .478 |
| Pilot | 3.4375 | .57667 | -.746 | .241 | 1.128 | .478 |
| Inventor | 3.4875 | .71983 | -.319 | .241 | 1.205 | .478 |
| Harmonizer | 3.5400 | .54323 | -.005 | .241 | .185 | .478 |
| Poet | 3.3550 | .63483 | .192 | .241 | .601 | .478 |

Above table describes descriptive statistics of responses of respondents related with independent variables of the study. According to the above table, mean value for Adventure indicates that Adventure creative talent among the undergraduates of the Rajarata university is significantly high (M=3.8125.46, SD=0.71631). And in case of Harmonizer creative talent it also shows a high significance (M=3.5400, SD= 0.54323) towards the performance of the undergraduates. Mean value of Pilot creative talent (M=3.4375, SD=0. 57667) and Inventor creative talent (M=3.4875, SD=0.71983) too are high indicating that both variables are favourably impacting towards the performance of the undergraduates. And in case of Visionary (M=3.3225, SD=0.48630) and Poet (M=3.3550, SD=.63483) is high indicating that those two variables have high impact on the performance of the undergraduates. Explorer (M=3.2825, SD=0.67761) and Navigator (M=3.1975, SD=0.58635) are having significantly high impact towards the performance of undergraduates whereas the impact is relatively low than other variables.

Descriptive statistics for dependent variable

Table 06 ; Descriptive statistics for dependent variables

| | Mean | Std. Deviation | Skewness | | Kurtosis | |
|----------------------|-----------|----------------|-----------|------------|-----------|------------|
| | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Students Performance | 3.4356 | .40955 | -.066 | .241 | .776 | .478 |

(Source: Survey Data 2018)

According to the data presented in table above, the respondents of sample shows high level of overall performance of the undergraduates. Researcher has taken two aspects of the performance both academic performance and extracurricular activities together. According to the above table the performance of the undergraduate is significantly high (M=3.4356, SD= 0.40955).

Gender comparison

Table 07 ; Gender comparison

| Gender | Mean | Std. Deviation | t value | Sig. |
|--------|--------|----------------|---------|------|
| Female | 3.5220 | .41981 | -3.790 | .599 |
| Male | 3.2241 | .29529 | | |

(Source: Survey Data 2018)

According to the above table, both female and male have taken higher mean values respectively (M=3.5220), (M=3.2241). The results of t-test further reveals that there is no significant difference between these two groups on the performance of the undergraduates (t= -3.790, p>0.05).

Faculty Comparison

Table 08 ; Faculty comparison

| Gender | Mean | Std. Deviation | t value | Sig. |
|---|--------|----------------|---------|------|
| Faculty of Management Studies | 3.2870 | .42002 | -3.481 | .577 |
| Faculty of Social Sciences and Humanities | 3.5784 | .34683 | | |

(Source: Survey Data 2018)

According to the above table, both faculties have taken higher mean values respectively (M=3.2870), (M=3.5784). The results of t-test further reveals that there is no significant difference between these two groups on the performance of the undergraduates (t= -3.481, p>0.05).

District Comparison

Table 09 ; District comparison

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 1.956 | 17 | .115 | .644 | .847 |
| Within Groups | 14.649 | 82 | .179 | | |
| Total | 16.605 | 99 | | | |

(Source: Survey Data 2018)

According to the above table sig. value is higher than 0.05 (0.847) so that there is no significance difference between districts when regarding to the performance of the undergraduates.

Correlation and Regression Analysis

In regression analysis students’ performance was entered as dependent variable and Adventure, Explorer, Navigator, Visionary, Pilot, Inventor, Harmonizer, Poet as the independent variables. The results are produced in following tables.

Table 10 ; Overall model fit

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|----------------------------|
| | | | | |

| | | | | |
|---|-------------------|------|------|--------|
| 1 | .918 ^a | .843 | .829 | .16923 |
|---|-------------------|------|------|--------|

(Source: Survey Data 2018)

The Adjusted R Square value is 0.829 which means 82.9% of the factors affecting on the performance of the undergraduates can be explained by the Adventure, Explorer, Navigator, Visionary, Pilot, Inventor, Harmonizer, Poet creative talents.

Table 11 ; ANOVA result

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| | Regression | 13.999 | 8 | 1.750 | 61.104 | .000 ^b |
| | Residual | 2.606 | 91 | .029 | | |
| | Total | 16.605 | 99 | | | |

(Source: Survey Data 2018)

The P value from the ANOVA table is less than 0.001, which means that at least one of the eight variables Adventure, Explorer, Navigator, Visionary, Pilot, Inventor, Harmonizer and Poet can be used to model the impact on performance of the undergraduates.

Table 12 ; Coefficient results

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| | (Constant) | .426 | .222 | | 1.920 | .058 |
| | Adventure | .173 | .033 | .303 | 5.299 | .000 |
| | Explorer | .035 | .049 | .057 | .706 | .482 |
| | Navigator | -.062 | .031 | -.089 | -1.999 | .049 |
| | Visionary | .077 | .036 | .091 | 2.110 | .038 |
| | Pilot | .385 | .032 | .542 | 12.116 | .000 |
| | Inventor | .133 | .059 | .234 | 2.244 | .027 |
| | Harmonizer | .021 | .032 | .028 | .654 | .515 |
| | Poet | .094 | .047 | .145 | 1.995 | .049 |

(Source: Survey Data 2018)

According to the table P values for Explorer and Harmonizer are 0.482, 0.515 respectively. Hence, these creative talents are not significant predictors to effect on the performance of the undergraduates in the faculties of Management Studies and Social Sciences and Humanities in Rajarata University of Sri Lanka. The P values for the Adventure, Navigator, Visionary, Pilot, Inventor and Poet are 0.000, 0.049, 0.038, 0.000, 0.027 and 0.049 respectively. Thus these variables are significant predictors effecting on the performance in the faculties of Management Studies and Social Sciences and Humanities in Rajarata University of Sri Lanka. According to the results of the Correlation and regression analysis the final findings can be developed as follows.

Table 13 ; Final findings

| Hypothesis | Correlation Analysis | | Accept/Reject | Regression analysis | | Accept/Reject | Findings |
|--|----------------------|-------|---------------|---------------------|-------|---------------|----------|
| | R | P | | β | P | | |
| H1:Adventure creative talent has an effect on the level of academic performance of | 0.610 | 0.000 | Accept | 0.173 | 0.000 | Accept | Accept |

| | | | | | | | |
|--|-------|-------|--------|-------|-------|--------|--------|
| Undergraduates. | | | | | | | |
| H ₂ : Navigator creative talent has an effect on the level of academic performance of Undergraduates. | 0.101 | 0.318 | Reject | -.062 | 0.049 | Accept | Accept |
| H ₃ : Explorer creative talent has an effect on the level of academic performance of Undergraduates. | 0.622 | 0.000 | Reject | 0.035 | 0.482 | Reject | Reject |
| H ₄ : Visionary creative talent has an effect on the level of academic performance of Undergraduates. | 0.322 | 0.001 | Accept | 0.077 | 0.038 | Accept | Accept |
| H ₅ : Pilot creative talent has an effect on the level of academic performance of Undergraduates. | 0.645 | 0.000 | Accept | 0.385 | 0.000 | Accept | Accept |
| H ₆ : Inventor creative talent has an effect on the level of academic performance of Undergraduates. | 0.678 | 0.000 | Accept | 0.133 | 0.027 | Accept | Accept |
| H ₇ : Harmonizer creative talent has an effect on the level of performance of the undergraduates. | -.035 | 0.729 | Reject | 0.021 | 0.515 | Reject | Reject |
| H ₈ : Poet creative talent has an effect on the level of performance of the Undergraduates. | 0.649 | 0.000 | Accept | 0.094 | 0.049 | Accept | Accept |

Discussion of the study

The main purpose of the research was to identify the creative talents that are most likely to impact on the performance of the undergraduates of the faculties of Management Studies and Social Sciences and Humanities in Rajarata University of Sri Lanka. Eight hypotheses were established and six of those accepted while two hypotheses were rejected.

The first hypothesis of the study proposed a significant relationship between Adventure creative talent and the performance of the undergraduates. The results of the correlation analysis identifies that there is a significant ($P= 0.000$) as well as relatively a strong positive relationship ($R= 0.610$) between the dependent and independent variable. In here Adventure creative talent was tested in

the spheres of information gathering, predicting the future, usage of skills and blindside identification. This means the performance will be increased if the adventure talent is increased among the university students.

The second hypothesis considered in the thesis was that there is a significant relationship between Navigator creative talent and the performance of the undergraduates. The correlation results showed that there was a positive relationship but regression results found that a no significant relationship between the two variables. A strong literature background has established by the researcher by basing on the Lynne C. Levesque's Breakthrough Creativity Profile book to the relationship and it was proved in the regression analysis which builds up in the current study.

The third hypothesis established was that there is a significant relationship between explorer creative talent and the performance of the undergraduates. And this hypothesis was also able to accept in the sample considered in the current study though correlation analysis. The empirical evidences from Lynne C. Levesque's Breakthrough Creativity Profile book was highlighted that there is a strong impact of Explorer Creative talent and the performance, but the relationship was unable to build up in the present study.

As the researcher has developed the fourth hypothesis in the thesis, there is a significant relationship between Visionary creative talent and the performance of the undergraduates. This hypothesis too was accepted revealing there is a significant positive relationship between the considered two variables.

The relationship between Pilot creative talent and the performance of the undergraduates was developed as the fifth hypothesis. As the results of the correlation analysis a positive correlation was build up to this hypothesis ($R=0.645$, $P=0.000$). And it was proved by the regression results indicates that there is a significant relationship between these two variables. As the Lynne C. Levesque's empherical evidences pilot creative talent was tested by using aspects such as problem solving method, dynamic energy, aggregate view, conventional thinking. This means that the performance of the undergraduates will be increased if the pilot creative talent is increased among the university students.

The sixth hypothesis established in this research was there is a significant relationship between Inventor creative talent and the performance of the undergraduates. As per the results of both correlation and regression analysis it did show there is a significant relationship between the dependent and the independent variable. A strong positive correlation ($R=0.678$, $P=0.000$) was resulted while the relationship has proved through the regression analysis also. So that the performance of the undergraduates can be increased if the pilot creative talent is increased among the university students.

The relationship between Harmonizer creative talent and the performance of the undergraduates was developed as the seventh hypothesis. But the hypothesis was not accepted as both correlation and regression results were not met the significance values. In the correlation analysis the correlation of these two variables showed a negative relationship but this is not a significant relationship. As in the regression results also the relationship between these two variables was not significant. Hence the hypothesis was rejected.

The final hypothesis of this study is developed as there is a significant relationship between Poet creative talent and the performance of the undergraduates. The poet creative talent was tested using the dimensions self-knowledge, uniformity, personal values and sensitivity. The correlation result for this hypothesis showed that there is a positive relationship between these two variables ($R=0.685$, $P=0.000$). And the regression result approved that there is a significant relationship. So the hypothesis was accepted.

05. Conclusion and Recommendations

Conclusion

This study was conducted in order to find out whether there is an impact on the creativity towards the performance of the undergraduates in Rajarata University of Sri Lanka. As creativity is a significant factor which affects to the performance of the undergraduates, researcher has used creativity among many factors that performance is affected. It was proved in the chapter two and furthermore researcher has illustrated different types of creativity models from previous research findings. Among those models researcher chooses 'Breakthrough creativity Profile' by Levesque (2001) as the model which is going to test through this study.

The researcher identified eight creative talents that are most likely to impact on the performance of the undergraduates through reviewing the model of 'Breakthrough creativity Profile' in order to achieve the first objective of the research. In this model of

creativity eight creative talents were described as Adventure, Explorer, Navigator, Visionary, Pilot, Inventor, Harmonizer and Poet.

The second objective of the study was to measure the creativity level of the undergraduates. It was done by using descriptive statistics. The results were mentioned in the demographic factor analysis in the fourth chapter and the creativity levels of the undergraduates were high as per the results. By that second objective was accomplished.

The third objective of the study was to identify the level of performance of the undergraduates. Using the mean values which was taken through descriptive statistics it was cleared that the performance of the undergraduates were high. Hence the third objective was accomplished.

By using the appropriate statistical package it is found that Adventure, Navigator, Visionary, Pilot, Inventor and poet are the creative talents that mostly influencing on the performance while creative talents like Explorer and Harmonizer are not significantly affect to the performance of the undergraduates. Hence six hypotheses were accepted while two hypotheses were rejected. Thus the hypotheses H_1 , H_2 , H_4 , H_5 , H_6 and H_8 were accepted while H_3 , H_7 and were rejected. Thus the fourth objective of the research was realized by examining the impact of each creative talent on the performance of the undergraduates.

According to the results the overall performance was considerably high among the undergraduates selected in the sample as well as a significant difference was not exhibited among male and female undergraduates. The fifth research objective of the study was accomplished by that.

As per the sixth objective of the research it was identified that there is no significant difference among the faculties of Rajarata University of Sri Lanka in regarding to the impact of creativity towards the performance of the undergraduates. As per the results of the study a significant difference was not identified by the researcher. Hence the sixth objective of the study was accomplished. In the results of the study there was no any significant difference between the districts of the selected sample on the performance of the undergraduates. So the seventh objective of the study was realized by examining the impact of each creative talent on the performance of the undergraduates.

Recommendations

As per the results of the study following recommendations can be produce. The study reveals that students who have the characteristics of the adventure creative talent are having higher performance level in both academic activities and extracurricular activities. Having ability to gather information, predicting the future of entire own journey, usage of skills that you have, identifying the unseen areas of an incident will enhance the performance of the undergraduates. Thus management of the university also needs to make steps to enhance this creative talent within the university students by a proper methodology.

The undergraduates are people who always find new ways to achieve their objectives. And practical adaptation to the situations, fine tuning and building on what others have done enhances their performances too. Developing greater self-awareness, find heroes or role models are ways to enhance the current level of performance and it would rather help not only to enhance the performance in the degree programme but also to achieve greater success in the future activities too. So that the Navigator talent within undergraduates should enhance and the authorities should take necessary steps to enhance the navigator creative talent among the undergraduates in the university. For that workshops to spread the knowledge on the controlling of practical scenarios which meet in day today life can be implemented by the university authority.

Undergraduates whose performance is high have characteristics of visionary creative talent within them. Having far reaching insights, keeping broad perspectives, searching new angles of life is good characteristics where those helps to develop one's entire career. Visionary creative talent is a major factor which can used to achieve greater success in the lives. Adopting and absorbing the features in this talent will influence heavily to the undergraduates and necessary ways and means should be developed by the authority to spread and increase within the undergraduates. Furthermore to enhance this creative talent a certain parts or information can be included to the degree programme about this creative talent.

As the results of the study Pilot creative talent, the students who are with the characteristics of pilot creative talent are having higher performance level. Having proper problem solving techniques, having dynamic energy, looking at an incident with an aggregate view will increase the performance of the undergraduates. Authorities of the university need to take necessary steps in order to uplift this creative talent among the undergraduates.

With regard to inventor creative talent, most of the university undergraduates who are with this shows high performance on their academic and extracurricular activities. Students with a penetrating mind, updated knowledge, having own ways to achieve the goals are more likely to enhance their performance in the university. The necessary measures should take from the university management to enhance this creative talent within the students in the university.

Poet creative talent complies with much more mental characteristics than other creative talents. It is an aesthetic appreciation for grace and elegance in solutions. Voicing your opinions in mind, set boundaries for yourself within the mind, accessing to your unconscious are ways to develop not only the mind but also the physical strength within a person. In undergraduates aspects it is

very much necessary to have this creative talent so that it helps to enhance the performance. As the authority steps and procedures should be implemented in order to enhance this creative talent among the undergraduates.

As an overall the authorities of the organizations are capable to uplift the creative talents within undergraduates. Mostly this can be done through the inauguration period of the undergraduates. The management of the university can establish training programmes, workshops, advisory services, practical scenario discussion sessions on these creative talents and it would enable the undergraduates to enhance these creative talents within them. And furthermore within all the academic years of the university these programmes needed to be held so that the better results for all the undergraduates could be obtain.

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