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| **COURSEWORK ASSIGNMENT** | |
| **Module Title: Team Research and Development Project** | **Module Code: 7COM1079** |
| **Assignment Title: Coursework Report** | **Group Assignment: Group 65** |
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**1 Introduction**

Before we continue our discussion, it needs us to define happiness first. According to Veenhoven (1991), happiness can be characterised by how much a person likes the life he leads. Happiness can also be called a person's life satisfaction. Since 2012, the UN (United Nations) have opted to assess the development of well-being. As an outcome, the World Happiness Report was first released by the United Nations Sustainable Development Solutions Network in 2012 in collaboration with the Ernesto Illy Foundation. Until April 2019, the UN released 7 World Happiness reports and ground-breaking survey of the state of global happiness (Worldhappiness.report, 2019).

The World Happiness Report shows that the Scandinavian countries of the world are happier than the people of other nations, but there are people in the Scandinavian country who report that they are struggling and suffering (Andreasson and Birkjær, 2018). So, what makes the people of Scandinavia the happiest in the world? Is it because Scandinavian countries are developed countries in the world? World happiness report data set shows that developed countries are happier than developing countries because of GDP per capita, Family, Life expectancy, Freedom Generosity and trust in government (kaggle.com). What are the developing countries doing in these sectors?

Developing countries like Bangladesh and India consider being the fastest growing country in the world (Song, 2019). Even using Gapminder tool we found that Scandinavian country is more stable in every sector while south Asian developing countries are on the rise. There were Coming back to world happiness report, which is showing a different view. Scandinavian countries were more stable in happiness score as their stable economy. On the other hand, South Asian countries like Bangladesh and India are growing faster, but happiness score is not growing at all. What's keeping them from being happy? This study aims to asses why developing countries people like Bangladesh and India are not happy like others and how they can be happier.

To find out, we analyse world happiness report dataset from Sustainable Development Solutions Network (2012). This data set includes data from 156-159 countries from 2015 to 2019. To get a more specify answer to our questions we decided to compare 7 countries from 2 different regions. They are Denmark, Iceland, Norway, Switzerland from Scandinavian and Bangladesh, India and Pakistan from South Asia.

The analysis shows that the economy GDP per capita. family, health (life expectancy), freedom, trust (government corruption) and generosity have a significant relationship with world happiness. On the other hand, it shows a significant variation in social support for happiness scores in Southern Asian countries such as Bangladesh, India and Pakistan. We hypothesise that this is because of the imbalance in generosity, freedom and generosity.

To the remainder of this paper is organized as follows, in section 2 we introduce the background to the problem and define our research questions. Our analysis is in Section 3. Section 4 introduces our key result; Section 5 discusses our result concerning our question and present our conclusion.

**2 Background**

People are more concerned with their happiness now. The number of "happiness" articles is rising rapidly. From 1960 to 1990 there was a gradual increase in the article of "happiness" between 0 to 100, but from 1990 to 2016 it rose rapidly from 100 to around 1300 (Myers and Diener, 2018). It's considered that Nordic countries, especially Scandinavians countries are the happiness superpower also they are one of the richest countries in the world. Relationship between GDP and level of well-being support that happiness is related to a person income (Andreasson and Birkjær, 2018). It is hard to answer the question that does money buy happiness? An increasing number of scholars, politicians, journalists and others have given their attention to figuring out what a good life means. Many new fields have been developed, such as positive psychology, and the general public is also searching for books and other resources to find happiness. However, most of this focus has been on developed countries such as North America and Europe and less information is available for other developing countries. Studies in the West may not relate to other countries with a different culture, religious beliefs and philosophic concepts. (Selin and Davey, 2012)

World happiness reports show that developing countries like Bangladesh and India are improving in almost every area, such as GDP, health, freedom of speech, family support, and so on. For example, according to World Happiness data, Bangladesh's GDP per capita was 0.397 in 2015 but increased to 0.562 in 2019, Health (Life Expectancy) was 0.60 in 2015 and is now 0.723 in 2019. On the other side, the happiness score of Bangladesh was 4.69 in 2015 and drop to 4.45 in 2019.

A country like Bangladesh economic growth is related to remittance. In addition, India and Pakistan are also receiving good amount remittances from all over the world (PTI, 2019). The developmental effect of remittances in a nation is a complex issue as it has both a positive and negative impact on a macroeconomic and household level (Hassan and Shakur, 2017). However, world happiness report data did not show that the survey was taken differently for a different region or culture. For this reason, we need to see detail summery of South Asian countries economic growth.

Since 2014, South Asia has been the fastest-growing sub-region in the world. Collectively, its eight economies boast an average annual growth rate of 7%. Countries like Bangladesh and India have an average growth rate of more than 7% over the last five years, and Bangladesh is expected to grow by about 8% over the next two years (Song, 2019). After doing a comparison with Gapminder tools (Gapminder.org, 2019) with some Scandinavian countries and South Asian countries to see are they really developing faster? It is overserved that Scandinavian countries were not growing faster as South Asian countries. In other words, the position of the Scandinavian countries has been more stable, while the South Asian countries are growing rapidly in every field.

**2.2 Reaserch Questions**

We're attempting to answer the following research questions.

1. Do economy GDP per capita, life expectancy, freedom, trust in government, family support and generosity influence happiness score?
2. If the happiness score is correlated to GDP per capita, life expectancy, freedom trust in government, family support and generosity then why didn't South Asian developing countries like Bangladesh, India, and Pakistan reduce in happiness score?
3. How can South Asian countries (Bangladesh, India and Pakistan) improve their happiness, as those countries are rapidly improving in their economies and other sectors?

**3 Method**

In attempt to answer our questions, we used world happiness dataset from kaggle.com which provided by Sustainable Development Solutions Network (2012). This dataset was taken from The World Happiness Report, a landmark survey of the state of global happiness and this dataset has data from 2015-2019. More detail can found on Sustainable Development Solutions Network (2012) and Worldhappiness.report (2019).

To find our answer, we did some analysis of the 2015 and 2016 datasets. After that, we created a different dataset with information on 7 countries from 2015 to 2018, and we analyse this dataset for further analysis.

**3.1 Data Analysis**

The analysis of this paper focuses on two aspects, which influence more happiness in the World Happiness Report and why developing countries are lagging in this race. To get our answer we proposed the following hyptheses and every hypothesis test is done using SPSS.

**Hypothesis 1**: Influence of social support to the overall world happiness score.

H0: There is no significant statistical relationship between (social support ) economy GDP per capita, life expectancy, freedom, trust in government, family support, and generosity to the overall world happiness score.

HA: There is a significant statistical relationship between economy GDP per capita, life expectancy, freedom, trust in government, family support, and generosity to the overall world happiness score.

**Hypothesis 2:** The difference between Southern Asian (Bangladesh, India, Pakistan) and Scandinavian countries in the impact of social support on the happiness score.

**4 Result**

First, we will tried to find out, influence of social support to the overall world happiness score from 2015 dataset. Table 1 shows the R2, which shows that 78% of the variations in world happiness scores can be explained by GDP per capita economy, life expectancy, freedom, trust in government, family support, and generosity in world happiness report dataset.

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| **Table 1.** Model Summary | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .882a | .777 | .768 | .55105 |
| 1. Predictors: (Constant), Generosity, Trust (Government Corruption), Freedom, Family, Health (Life Expectancy), Economy (GDP per Capita) | | | | |

With F- value of 87.809 and P- value of 0.000 in table 2, it is observed that the relationship between economy GDP per capita, life expectancy, freedom, trust in government, family support, and generosity and happiness score is significant.

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| **Table 2.** ANOVAa | | | | | | |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 159.983 | 6 | 26.664 | 87.809 | .000b |
| Residual | 45.852 | 151 | .304 |  |  |
| Total | 205.835 | 157 |  |  |  |
| a. Dependent Variable: Happiness Score | | | | | | |
| 1. Predictors: (Constant), Generosity, Trust (Government Corruption), Freedom, Family, Health (Life Expectancy), Economy (GDP per Capita) | | | | | | |

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| **Table 3.** Coefficientsa | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 1.860 | .190 |  | 9.766 | .000 |
| Economy (GDP per Capita) | .861 | .220 | .303 | 3.907 | .000 |
| Family | 1.409 | .223 | .335 | 6.327 | .000 |
| Health (Life Expectancy) | .975 | .316 | .210 | 3.084 | .002 |
| Freedom | 1.333 | .385 | .175 | 3.463 | .001 |
| Trust (Government Corruption) | .785 | .437 | .082 | 1.797 | .074 |
| Generosity | .389 | .391 | .043 | .995 | .321 |
| a. Dependent Variable: Happiness Score | | | | | | |

Table 3, determine the weight of each of the components (social support) to happiness score; reference is made to their regression coefficients as shown in Table 3. Using the standardized beta coefficients, the constant “a” would disappear and the regression equation is of the form:

Y (Happiness Score) = a + b1x1 (Econo\_GDP) + b2x2 (Family) + b3x3 (Health) + b4x4 (Freedom) + b5x5 (Trust) + b6x6 (Generosity)

Y = 0.303x1 + 0.335x2 + 0.210x3 + 0.175x4 + 0.082x5+ 0.043x6

That is, the regression coefficients value for economy GDP per capita, family, heath (life expectancy), freedom, trust (government corruption) and generosity, as obtained from coefficients table are 0.303, 0.335, 0.210, 0.175, 0.082 and 0.043 respectively, which shows that “Family” is of more effect than “Economy GDP per capita”, while “Health, Freedom, and Trust in Government” is of less effect than “Economy GDP per capita” while “Generosity” is of less effect than the five above in explaining social support on world happiness score. Furthermore, the table reveals that, with P-values of 0.000, 0.000, 0.002, 0.001, 0.074 and 0.321 with economy GDP per capita, family, heath (life expectancy), freedom, trust (government corruption) and generosity respectively. Therefore, it can be concluded that economy GDP per capita, family, health (life expectancy), freedom, trust (government corruption) and generosity has significant relationship with world happiness score.

We also did one test with some Scandinavian Countries and South Asian Countries and found out that R2 is 98%, F- value of 209.823 and P- value of 0.000 table 1.1 and 2.1 showing the result.

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| **Table 1.1.** Model Summary | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .992a | .984 | .979 | .20691 |
| 1. Predictors: (Constant), Generosity, Trust (Government Corruption), Freedom, Family, Health (Life Expectancy), Economy (GDP per Capita) | | | | |

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| **Table 2.1.** ANOVAa | | | | | | |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 53.899 | 6 | 8.983 | 209.823 | .000b |
| Residual | .899 | 21 | .043 |  |  |
| Total | 54.798 | 27 |  |  |  |
| a. Dependent Variable: Happiness Score | | | | | | |
| 1. Predictors: (Constant), Generosity, Trust (Government Corruption), Freedom, Family, Health (Life Expectancy), Economy (GDP per Capita) | | | | | | |

Now, we are trying to find out difference between Scandinavian countries (Denmark, Iceland, Norway, Switzerland) and South Asian countries (Bangladesh, India, Pakistan).

**Table 4:** Results of regression of equation for Southern Asian and Scandinavian Countries, From 2015-2018.

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| **Southern Asian** (Bangladesh, India, Pakistan) | | | | **Scandinavian** (Denmark, Iceland, Norway, Switzerland) | | | |
| Social Support | Coefficient | t-value | P-value | | Coefficient | t-value | P-value |
| economy GDP | -0.902 | 6.706 | 0.013 | | -0.124 | -0.295 | 0.775 |
| Family | 0.467 | 3.280 | 0.022 | | -0.252 | -0.452 | 0.662 |
| health | -0.850 | -2.990 | 0.030 | | -0.040 | -0.073 | 0.944 |
| freedom | -0.736 | -1.715 | 0.147 | | 0.674 | 1.273 | 0.235 |
| trust | -0.099 | -0.099 | 0.793 | | 0.229 | 0.391 | 0.705 |
| generosity | -0.030 | -0.060 | 0.954 | | 0.231 | 0.408 | 0.693 |

The table above is to determine the weight of each of the components (social support) to southern Asian and western Europe; reference is made to their regression coefficients as shown in table above. Using the standardized beta coefficients, the constant “a” would disappear and the regression equation is of the form:

**Sothern Asian Countries** (Bangladesh, India, Pakistan)

Y (Happiness Score) = a + b1x1 (Econo\_GDP) + b2x2 (Family) + b3x3 (Health) + b4x4 (Freedom) + b5x5 (Trust) + b6x6 (Generosity)

Y = – 0.902x1 + 0.467x2 – 0.850x3 – 0.736x4 – 0.099x5 – 0.030x6

That is, the regression coefficients for economy GDP per capita, family, heath (life expectancy), freedom, trust (government corruption) and generosity as obtained from coefficients table are -0.902, 0.467, -0.850, -0.736, -0.099 and -0.030 respectively, which shows that “Family” is of more effect than “generosity”, while “trust” and “freedom” is of less effect than “generosity” and “health” is of less effect than the four above while “economy GDP per capita” is of less effect than the five above in explaining social support in Southern Asian. The table further reveals that, with P-values of 0.013, 0.022, 0.030, 0.147, 0.793 and 0.954 for economy GDP per capita, family, heath (life expectancy), freedom, trust (government corruption) and generosity respectively. Therefore, it can be concluded that there is significant variation among the social supports to their happiness score in southern Asian.

**Scandinavian Countries** (Denmark, Iceland, Norway, Switzerland)

Y (Happiness Score) = a + b1x1 (Econo\_GDP) + b2x2 (Family) + b3x3 (Health) + b4x4 (Freedom) + b5x5 (Trust) + b6x6 (Generosity)

Y = – 0.124x1 – 0.252x2 – 0.040x3 + 0.674x4 + 0.229x5 + 0.231x6

That is, the regression coefficients for economy GDP per capita, family, heath (life expectancy), freedom, trust (government corruption) and generosity as obtained from coefficients table are 3.593, -8.903, 14.528, 2261.719 and -8.647 respectively, which shows that “freedom” is of more effect than “generosity”, while “trust” and “health” is of less effect than “generosity” and “economy GDP per capita” is of less effect than the four above while “family” is of less effect than the five above in explaining social support in Western Europe. The table further reveals that, with P-values of 0.775, 0.662, 0.944, 0.235, 0.705 and 0.693 for economy GDP per capita, family, heath (life expectancy), freedom, trust (government corruption) and generosity respectively. Therefore, it can be concluded that there is no significant variation among the social supports to their happiness score in Scandinavian Countries.

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