

Eudaimonia among Mathematics Teachers and its Correlates

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Abstract

Happiness and satisfaction with life are vital to the total well-being of an individual. In teaching, the attitude and the emotional state of the teachers affect their performance and their relationship with the learners. Thus, this study was conducted to determine the factors and the level of eudaimonia of the mathematics teachers. The factors included personal profile in terms of age, gender, position, length of service, salary, and teaching load, and school profile which includes class type, type of school, school population, book-student ratio, and school facilities. However, eudaimonia was measured in terms of the happiness index and level of satisfaction with life. Forty randomly selected mathematics teachers enrolled in the graduate studies of a state college in Oriental Mindoro were the respondents of the study. The instrument used was composed of four parts: survey form for personal, and school profile, the Oxford Happiness Questionnaire, and the Satisfaction with Life Scale. The data were treated using mean, frequency-percentage, correlation, coefficient of determination, Analysis of Variance, and stepwise regression. The results showed that personal, and school profiles were not related to the respondents' happiness. However, the type of school, school population, and salary were found to be determinants of satisfaction with life.

Keywords: *determinants of eudamonia, personal profile, school profile, satisfaction with life scale, happiness index, Stepwise Regression*

Introduction

Ever since man existed, happiness has been an exclusive subject for philosophers, artists, and researchers. Happiness is an aspiration of every human being, and can also be a measure of social progress (Srivasta, & Deo, 2016). The key to proper measurement must begin with the meaning of the word "happiness" (Helliwel, Layard, & Sachs, 2013). As Layard (2011) points out that to make people happier it is important to know what will make them happy and how to cultivate happiness in them. Happiness is constructed on the individual's subjective evaluation of life—its framework of sentiments and emotional outcome (Erozkan,

Dogan, & Adiguzel, 2016). Happiness is a vague concept that can mean different things to different people.

Based on the various studies conducted, happiness is influenced by different factors such as sex (Reid, 2004), age (Urry, & Gross, 2010), educational level (Meggiolaro, & Ongaro, 2013), marital status (de Jong Giervald, Dykstra, & Schenk, 2012; Gaymu, 2010; Lucas, & Diener, 2008), interpersonal relationships (Argyle, 1998; Wols, Scholte, & Qualter, 2015), job satisfaction, leisure time (Argyle, 1998), income, health, religion, and personality (Argyle, 1998; Lucas, & Diener, 2008).

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In the case of teachers, which is considered as one of the most challenging and stressful professions, pursuing happiness and well-being are important. Studies show that teachers' well-being influences their teaching performance, relationship with the students as well as competence. Sutton, and Wheatley (2003) observed that the emotional state of teachers influences their thinking about teaching in numerous ways, positively and negatively. The positive effect has also been found to promote creativity and flexibility in problem-solving, and negotiation, efficiency, and thoroughness in decision making (Isen, 2004). How teachers feel about their work also affects their motivation, goal setting, the expectation they hold for students (Bullough, & Baughman, 1997), commitment, determination (Gu, & Day, 2007), effort (Peterson, 2006), willingness to innovate and to invest in school improvement (Rushton, Morgan, & Richard, 2007).

Bolin (2007) found that teacher satisfaction is quite low in salary and work intensity, but are quite high in self-fulfillment. Further, personal factors such as age, length of service, and core courses in teaching significantly affect teachers' job satisfaction. On the other hand, Kalhotra (2012), found that married and unmarried teachers demonstrated the same level of job satisfaction. These studies together with the other studies and literature presented in the succeeding section discussed the factors affecting happiness and satisfaction with life separately. Though there are some studies conducted about happiness among teachers, none was conducted on mathematics teachers in particular. Being regarded as one of the most difficult subjects to learn and teach (Candelario-Aplaon, 2017), improving the well-being of the mathematics teachers should be given emphasis. With the presented literature gap, the researchers were motivated to conduct this study. This study aims to determine which among the pre-determined factors contributed to the eudaimonia of the respondents. The factors are classified as personal profile and the school

profile while eudaimonia will be determined through happiness index and satisfaction with life.

Literature Review

This section presents a review of the literature whose purpose is to help present the research topic in a clear context. The review includes discussions on the definition of happiness, antecedents of happiness, and teachers' level of happiness.

Definition of Happiness and Eudaimonia

Happiness is a hard concept to define due to its multiple meanings and the different words that are associated with it (Veenhoven, 1991) across cultures (Becchetti, & Pelloni, 2013) and between disciplines (Blanchflower, & Oswald, 2011). According to Hills and Argyle (2002), happiness is defined as a sense of satisfaction and content. It comprises meaning as self-actualization and personal growth—at the individual level and commitment to socially shared goals (Ryff, 1989) and values—at the social level (Massimini, & Delle Fave, 2000).

Lewinson, Renner, and Seeley (1991) identified that although happiness, objective well-being, subjective well-being, quality of life, and life satisfaction are concepts with different meanings, they all come from the same origin and are all highly associated with certain domains: locus of control, absence of inner conflicts, good social relationships, involvement with goal-directed work and leisure activities, good health, friends, satisfaction with family and marriage.

According to Bullough, and Pinnegar (2009), eudaimonia sustains teachers. They found out that in moments of happiness, of loving and being loved, the teachers found most meaning in their work and value in their lives. Eudaimonia as defined by Waterman, Schwartz, and Conti (2008, p. 42), "refers to the feelings present when one is moving

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toward self-realization in terms of developing one's unique individual potentials and furthering one's purpose in living". It requires fully functioning and becoming successful despite the existential challenges of life (Ryff, & Singer, 2008). Eudaimonia provides a motive to develop the best of oneself (Huta, 2015). It is a product of one's characteristic personality traits or strengths (Seligman, 2002) that enables living a life in full accord with one's potential (Ryan, & Deci, 2001). In this study, eudaimonia was measured in terms of happiness and satisfaction with life. It is the state of happiness and satisfaction that sustains the teachers.

Antecedents of Happiness

Urry, et al. (2010) found that generally, older people are happier than younger ones, so age is a huge factor when measuring happiness. However, Meggiolaro et al. (2013) found that high educational level is positively associated with men's life satisfaction while physical limitations decrease women's life satisfaction.

Research shows that those married or living with a partner normally assess their well-being higher than single individuals (de Jong Gierveld et al, 2012). Family relations are the most important source of life satisfaction among older people (Meggiolaro et al, 2013). The single status itself could influence life satisfaction in different ways: being divorced, compared to being widowed, had a negative impact on life satisfaction, while being never-married was a positive factor (Gaymu, & Springer, 2010).

Happiness can be attributed to various factors, among women happiness are due to interpersonal relationships (Wols, Schotle, & Qualter, 2015). While according to Argyle (1988), it is correlated with domains like income, social relationships, (subjective) health, job satisfaction, leisure time, religion, and personality. Further, Lucas and Deiner (2008) found that personality, income,

marriage, religion, and subjective health are highly correlated subjects with happiness.

Teachers' Level of Happiness

In a study conducted by Kalhora (2012), the researcher found that among 250 randomly selected teachers, (124 male, 126 female) married and unmarried teachers demonstrated the same level of job satisfaction on the particular aspects: the intrinsic aspect of the job, salary, promotional avenues, and services conditions, physical facilities, satisfaction with authorities, satisfaction with social status, and family welfare rapport with students, relationship with co-workers and total components of job satisfaction by (Kalhotra, 2012). Moreover, among 434 teachers in China, findings indicated that teachers with low salary and work intensity have low satisfaction, but are quite high in self-fulfilment.

In general, personal factors such as age, length of service, core courses in teaching significantly affect teachers' job satisfaction (Bolin, 2007). According to Bullough, and Pinnegar (2009), eudaimonia (happiness in teaching) sustains teachers. They found most meaning in their work and value in their lives because they feel they are being loved.

Theoretical Framework

The current study was grounded on the following theories aids or giving a deeper understanding about the happiness of mathematics teachers. The first theory is Onion Theory of Happiness proposed by Czapinski, and Peeters (1989). In this theory, happiness is shaped by three psychological layers: an inner biological-based layer referred to as the will to live, an intermediary level of well-being, and an external layer of domain satisfactions influenced by external circumstances like children, family life, friends, health, work or occupation, accomplishments, housing, goods and services, state of the country, and financial

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situation. This study deals only with the outermost layer which is the external circumstances that could cause happiness such as their personal profile as well as those related with their works the researchers only considered this aspect because they acknowledge that their skills are limited to conduct study on the two inner layers which require psychological expertise.

The second theory in which this study was grounded was developed by Peterson, and Seligman (2004) known as the Orientations to Happiness Framework which proposes that there are three different pathways to happiness. These pathways are pleasure, engagement, and meaning which leads to great satisfaction in life. However, engagement, and meaning are the most significant contributors to happiness relative to pleasure. This study focused on meaning as the source of happiness as the term eudaimonia applies. By determining the causes of eudaimonia the study could help teachers understand their life's meaning.

Based on the literature, eudemonia produces a positive effect on one's life. In the case of the teachers, it provides a positive outlook in teaching as well as a positive influence on teaching performance, and relationships with students. Because of these, the researchers who are all Mathematics teachers were motivated to conduct this study. We would like to understand which among the personal attributes as well as the school's profile, could influence teachers' eudemonia in terms of happiness and satisfaction with life.

Conceptual Framework

The conceptual framework of the study as presented in Figure 1 was based on the readings conducted. The framework shows the hypothesized relationship between the two variables. The independent variable is the determinants of eudaimonia which was described in terms of personal and school

profile. The dependent variable is the level of eudaimonia which was measured in terms of the happiness index and satisfaction with life scale.

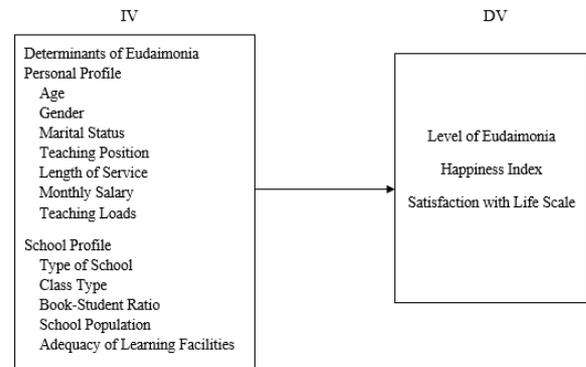


Figure 1. Conceptual Framework of the Study

Based on the presented conceptual framework, the research questions below were formulated.

Research Questions

This study aimed to determine the level of eudaimonia of the graduate students in a certain state college in Oriental Mindoro.

Specifically, this study sought answers to the following questions:

1. What are the personal profile of the respondents and their school's profile?
2. What is the level of eudaimonia of the respondents in terms of happiness and satisfaction with life?
3. Is there a significant relationship between the factors and the respondents' eudaimonia?

Methodology

This section presents the research design used to answer the specific research questions as well as the research setting, participants, sampling, ethical considerations, and the detailed data gathering procedures, and analysis.

Research Design. A descriptive–correlational method of research was used in this study. The descriptive method is characterized by an attempt to determine,

describe or identify (Ethridge, 2004) the perception of respondents on various factors as well as their level of happiness, and satisfaction with life. The correlational method was utilized to identify whether a significant relationship between variables exists.

Research Participants and Sampling. The participants of this study were 40 selected graduate students enrolled in the Master of Arts in Education major in a state college in the second district of Oriental Mindoro. Purposive sampling was used to select the respondents. Only those who are teaching mathematics and are willing to participate were included in the study. The said sampling technique was employed to make sure that the respondents could answer all the questions in the instrument particularly the school profile.

Research Instrument. A set of questionnaire was used as the main data gathering tool for this study. It was composed of 4 parts. The first part was about the personal profile of the respondents in terms of age, gender, marital status, teaching position, length of service, monthly salary, and teaching loads. Part two was about the school profile in terms of class type, school type, school population, and book-student ratio. Part three was a standardized questionnaire for happiness which is the Oxford Happiness Questionnaire (OHQ) by Hills and Argyle (2002), with internal reliability of 0.92 (Cronbach's alpha) and test-retest reliability of 0.73. It was a 6-point scale that was described as strongly agree (6), moderately agree (5), slightly agree (4), slightly disagree (3), moderately disagree (2), and strongly disagree (1). The last part is another standardized questionnaire which is the Satisfaction with Life Scale (SLS) by Diener, Emmons, Larsen, and Griffin (1985) with an internal consistency of 0.74 (Cronbach's alpha). It was a 7-point scale that was described as strongly agree (7), agree (6), slightly agree (5), neither agree nor disagree

(4), slightly disagree (3), disagree (2), and strongly disagree (1). The two standardized questionnaires are readily available on the internet and stated in the website that the said instruments may be used provided that proper citation was done. Just the same, letters of request were sent to the authors of the instruments. Though the researchers did not receive any reply from them, they opted to use the instruments and see to it that proper citations were done.

Data Collection. Before the distribution of the instrument, the researchers asked permission from their school administrators to conduct the study. Then they asked permission from the Dean of the Graduate Studies to sample out and distribute questionnaires to the respondents. The researchers personally distributed the questionnaires. Due to the respondents' support to the study and to the researchers as well, the questionnaires were 100% retrieved.

Data Analysis. The data gathered were analyzed using Descriptive Statistics such as mean, frequency count, and percentage, and Inferential Statistics as Pearson's r , coefficient of determination, Stepwise Regression, and Analysis of Variance.

Ethical Considerations. Throughout the conduct of the study, research ethics were considered by the researchers. Prior to the conduct of the study, the proposal was presented to the Institutional Review Committee to ensure it would not violate any research ethics and that it would serve its purpose. Voluntary participation was observed by securing the informed consent from the respondents. The respondents were also assured of the confidentiality of the information and were informed of their right to withdraw their participation in the said study.

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Results and Discussion

This section presents the results of the data analysis done by the researchers. The results were presented in a way that answers the research questions.

Profile

Personal profile. The personal profile of the respondents is presented in Table 1 which is categorized in terms of age, the three age groups were represented, however, in varying frequencies. Twenty three out of forty respondents are 21-24 years old (57.5%). This implies that almost all of the respondents are categorized as young adults. Majority of the respondents were female which comprised 70% of the respondents. This is not surprising as some studies had similar findings. For example, Gabriel (2012) found that female teachers outnumbered male teachers. Further, Malibiran, Candelario-Aplaon, and Izon, (2019) found teaching to be among the professions generally dominated by women.

As for marital status, 29 of the 40 respondents were still single (72.5%), while 11 of them are married. In terms of position or academic rank, 31 are holding Teacher I position (77.5%), while those holding Teacher II position only comprised 12.5%. These figures denote that the respondents are pursuing graduate studies for tenure and promotion. As the qualification standards for teachers for permanent positions and promotion are becoming more and more competitive, new teachers should strive hard to be able to cope up with the standards. They are aware of the importance of having a master's degree not only for their teaching competence but for their professional development, and academic rank as well.

Table 1
Personal Profile of the Respondents

| Variables | f(%) | Variables | f(%) |
|----------------|-----------|-------------------|-----------|
| Age | | Length of Service | |
| 31 and above | 3(7.5%) | 9 and above | 1(2.5%) |
| 26-30 | 14(35%) | 6-8 | 0(0) |
| 21-25 | 23(57.5%) | 3-5 | 11(27.5%) |
| | | 1-2 | 23(57.5%) |
| Gender | | Less than 1 year | 5(12.5%) |
| Male | 12(30%) | Monthly Salary | |
| Female | 28(70%) | 21, 000 and above | 8(20%) |
| Marital Status | | 16,000-20,999 | 14(35%) |
| Married | 11(27.5%) | 11,000-15,999 | 2(5%) |
| Single | 29(72.5%) | 6,000-10,999 | 12(30%) |
| | | 5,999 and above | 4(10%) |
| Position | | Teaching Loads | |
| Instructor II | 2(5%) | 7-8 | 2(5%) |
| Instructor I | 1(2.5%) | 5-6 | 18(45%) |
| Teacher III | 1(2.5%) | 3-4 | 6(15%) |
| Teacher II | 5(12.5%) | 1-2 | 14(35%) |
| Teacher I | 31(77.5%) | | |

As for the length of service, 57.5% had been teaching for 1-2 years. This is because the respondents are aware of the relevance of continuing professional development since they are just new to the teaching profession. On the other hand, only one of the respondents had been in the service for 9 years and above. For that respondent, pursuing graduate studies is still needed despite the long service rendered. Further, 35% of the respondents are receiving 16, 000 to 20, 999 pesos monthly, and 45% of them have 5-6 teaching loads.

School profile. For the school profile presented in Table 2, most of the respondents are teaching in public schools (62.5%), teaching in junior high school (62.5%), with the book-student ratio of 1:1 (47.5%), and teaching in big schools (52.5%).

Table 2
School Profile

| Variables | f(%) | Variables | f(%) |
|--------------------|-----------|---------------------|-----------|
| Type of School | | Book-Student Ratio | |
| Public | 25(62.5%) | 1:5 | 1(2.5%) |
| Private | 15(37.5%) | 1:4 | 11(27.5%) |
| | | 1:3 | 1(2.5%) |
| Class Type | | 1:2 | 8(20%) |
| College | 2(5%) | 1:1 | 19(47.5%) |
| Senior High School | 10(25%) | School Population | |
| Junior High School | 25(62.5%) | Big (600 and above) | 21(52.5%) |
| Elementary | 3(7.5%) | Medium (300-599) | 16(40%) |
| | | Small (Below 300) | 3(7.5%) |

Table 3 presents the adequacy of the learning facilities. The respondents agreed that mathematics references and textbooks are

moderately adequate with a mean value of 3.90. Science laboratory, library holdings, and teacher-made instructional materials are all moderately adequate with mean values of 3.75, 3.55, and 3.53, respectively. However, mathematics tools and equipment, and mathematics corner are only slightly adequate with mean values of 3.28, and 3.08, respectively.

Table 3
Adequacy of Learning Facilities

| Facilities | Mean | Description |
|--------------------------------------|------|---------------------|
| Library holdings | 3.55 | Moderately Adequate |
| Mathematics Corner (Bulletin Boards) | 3.08 | Slightly Adequate |
| Science Laboratory | 3.75 | Moderately Adequate |
| Mathematics tools and equipment | 3.28 | Slightly Adequate |
| Mathematics References/Textbooks | 3.90 | Moderately Adequate |
| Teacher-Made Instructional Materials | 3.53 | Moderately Adequate |

Eudaimonia

Level of happiness. In identifying the level of happiness among the mathematics teachers enrolled in the graduate studies of the college, the Oxford Happiness Questionnaire designed by Hills and Argyle (2002) was employed. By applying the guidelines in interpreting the happiness index, 21 of the respondents equivalent to 52.5 percent are pretty happy, 11 (27.5%) of them are moderately happy, 7 (17.5%) are not particularly happy or unhappy and 1 (2.5%) is somewhat happy. The findings revealed that generally, the index of happiness of the respondents is low to average. Since various studies had found that happiness affects the teachers' performance (Bullogh, & Baughman, 1997; Sutton, & Wheatley, 2003), it should be improved for them to have a positive outlook in life thus, improving their performance too.

When looking into the responses per item, the highest mean goes to item number 9 which states that life is good (5.7), followed by life is rewarding (5.3), most things are amusing (5.1), and laugh out a lot (5). On the other hand, the item with the lowest mean is feeling able to take anything on (4.3), coming next is being intensely interested in people (4.3), find time in everything they want to do

(4.4), feel fully mentally alert (4.5), and a good influence on events (4.5).

Table 4
Level of Happiness

| Happiness Index | f(%) | Description |
|-----------------|-----------|-----------------------------------|
| 5.81-6.00 | 0(0) | Too Happy |
| 5.50-5.80 | 0(0) | Very Happy |
| 4.50-5.49 | 21(52.5%) | Pretty Happy |
| 4.00-4.49 | 11(27.5%) | Moderately Happy |
| 3.50-3.99 | 7(17.5%) | Not Particularly happy or unhappy |
| 2.50-3.49 | 1(2.5%) | Somewhat unhappy |
| 1.00-2.29 | 0(0) | Not happy |

Satisfaction with life. The study utilized the Satisfaction with Life Scale by Diener, et al. (2006). Based on the sum aggregate scores obtained by the respondents, 7 (17.5%) are highly satisfied with life. This implies that the respondents love their life, and the major domains of their life are going well. Nineteen or 47.5% of them are satisfied in their life which denotes that their life is enjoyable and feel that their life is going well. Nine (22.5%) are moderately satisfied which is described as they are mostly satisfied with most areas in their lives but see the need for some improvement in each area. Further, there are five (12.5%) who are slightly dissatisfied with their life which is described as having small but significant problems in several areas of their lives or having many areas that are doing fine but one area that represents a substantial problem for them. The result denotes that the majority of the respondents love their lives and feel that their lives are going well.

Table 5
Level of Satisfaction with Life

| Life Satisfaction Scale | f (%) | Description |
|-------------------------|-----------|------------------------|
| 30-35 | 7(17.5%) | Highly Satisfied |
| 25-29 | 19(47.5%) | Satisfied |
| 20-24 | 9(22.5%) | Moderately Satisfied |
| 15-19 | 5(12.5%) | Slightly Dissatisfied |
| 10-14 | 0(0) | Dissatisfied |
| 5-9 | 0(0) | Extremely Dissatisfied |

Relationship between Factors and Eudaimonia. Based on the correlation result presented in Table 6 all the p-values for the

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profile and happiness index were greater than 0.05, therefore all the indicators were found not significantly related to the level of happiness. This implies that other factors could have influenced happiness, however, they are not covered in this study.

On the other hand, the type of school has a moderately small negative correlation with the satisfaction with life ($r = -0.466$, $p < 0.01$), and that 19.89% of the satisfaction of life was attributed to the type of school the respondents are teaching. This implies that those in public schools have higher satisfaction with life index than those in private schools. This could be because the security of tenure and the benefits of teaching in public schools resulted in satisfaction. The findings affirm with the studies claiming (Bolin, 2007; Lucas, & Diener, 2008) that well-being is correlated with job satisfaction. For the teachers to achieve life satisfaction, they should be enjoying the benefits of their job to the fullest. Among them are high salary, and other monetary benefits that could be received when teaching public schools.

Table 6
Relationship between Variables

| Variables | Happiness Index | | | Satisfaction with Life Scale | | |
|--------------------|-----------------|----------------|---------|------------------------------|----------------|---------|
| | r | R ² | P-value | R | R ² | P-value |
| Age | -0.032 | 0.0010 | 0.422 | -0.005 | 0.0003 | 0.488 |
| Gender | -0.212 | 0.0449 | 0.094 | -0.121 | 0.0146 | 0.229 |
| Marital Status | -0.116 | 0.0135 | 0.237 | 0.111 | 0.0123 | 0.247 |
| Position | 0.188 | 0.0353 | 0.122 | 0.122 | 0.0149 | 0.227 |
| Length of Service | -0.155 | 0.0240 | 0.170 | -0.054 | 0.0149 | 0.371 |
| Monthly Salary | -0.151 | 0.0228 | 0.176 | 0.099 | 0.0098 | 0.271 |
| Teaching Loads | -0.203 | 0.0412 | 0.104 | -0.047 | 0.0022 | 0.388 |
| Type of School | -0.232 | 0.0538 | 0.075 | -0.446 | 0.1989 | 0.002** |
| Class Type | 0.173 | 0.0299 | 0.143 | 0.032 | 0.0010 | 0.422 |
| Book-Student Ratio | 0.128 | 0.0164 | 0.216 | 0.164 | 0.0269 | 0.155 |
| School Population | -0.075 | 0.0056 | 0.323 | 0.206 | 0.0424 | 0.101 |
| Facilities | -0.201 | 0.0404 | 0.107 | 0.129 | 0.0166 | 0.215 |

Legend: ** - significant at 0.01

After the correlation analysis had been done, the researchers conducted the stepwise regression to determine which among the pre-determined variables the possible predictors of satisfaction with life are. Since the profile did not show a significant relationship with the happiness index, there's no need to conduct regression on the first part.

The Stepwise Regression result presented in Table 7 shows that among the ten

predictors, there are only four that predict the satisfaction of the respondents. From the listed predictors, it was found out that the type of school, age, school population, and monthly salary predict the satisfaction of the mathematics teachers. Based on the result, only the first three models are significant at $p < 0.01$, while the fourth model is significant at $p < 0.05$.

Stepwise Regression Result

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 31.040 | 1.954 | | 15.884 | .000 |
| 1 school | -4.120 | 1.341 | -.446 | -3.073 | .004 |
| 2 (Constant) | 47.644 | 7.465 | | 6.382 | .000 |
| 2 school | -6.148 | 1.548 | -.666 | -3.972 | .000 |
| 2 age | -.547 | .238 | -.385 | -2.296 | .027 |
| 2 (Constant) | 45.599 | 7.050 | | 6.468 | .000 |
| 3 School | -6.845 | 1.479 | -.741 | -4.629 | .000 |
| 3 Age | -.652 | .228 | -.459 | -2.866 | .007 |
| 3 population | 2.308 | .937 | .326 | 2.464 | .019 |
| 3 (Constant) | 48.693 | 6.735 | | 7.230 | .000 |
| 4 School | -9.030 | 1.653 | -.978 | -5.463 | .000 |
| 4 Age | -.590 | .215 | -.415 | -2.744 | .010 |
| 4 population | 3.043 | .929 | .429 | 3.275 | .002 |
| 4 Salary | .000 | .000 | -.404 | -2.431 | .020 |
| 4 (Constant) | 51.933 | 9.037 | | 5.747 | .000 |
| 5 school | -11.721 | 1.803 | -1.269 | -6.499 | .000 |
| 5 Age | -.823 | .262 | -.579 | -3.140 | .004 |
| 5 population | 2.441 | 1.018 | .344 | 2.397 | .024 |
| 5 salary | .000 | .000 | -.653 | -3.539 | .001 |
| 5 position | 1.131 | .774 | .239 | 1.462 | .155 |
| 5 service | .644 | .378 | .244 | 1.705 | .100 |
| 5 loads | .002 | .061 | .003 | .025 | .980 |
| 5 gender | .529 | 1.455 | .055 | .363 | .719 |
| 5 marital | -1.855 | 1.393 | -.185 | -1.331 | .194 |
| 5 class | -.717 | 1.192 | -.107 | -.601 | .553 |
| 5 book | 1.174 | .471 | .352 | 2.494 | .019 |
| 5 facilities | 2.161 | .988 | .371 | 2.188 | .038 |

To analyze the results further, Analysis of Variance (ANOVA) was employed to determine whether the models formulated are significant. Table 8 presents the ANOVA result which shows that all the five models were significant at $p < 0.01$. However, the highest f-value was recorded by the first model which includes the variable type of school. While the least f-value was recorded by model 5 which includes all the indicators used in this study. This implies that type of school is the indicator with the most influence on the satisfaction with life of the respondents.

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Table 8
ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 159.135 | 1 | 159.135 | 9.445 | .004 ^b |
| | Residual | 640.240 | 38 | 16.848 | | |
| | Total | 799.375 | 39 | | | |
| 2 | Regression | 238.974 | 2 | 119.487 | 7.889 | .001 ^c |
| | Residual | 560.401 | 37 | 15.146 | | |
| | Total | 799.375 | 39 | | | |
| 3 | Regression | 319.844 | 3 | 106.615 | 8.004 | .000 ^d |
| | Residual | 479.531 | 36 | 13.320 | | |
| | Total | 799.375 | 39 | | | |
| 4 | Regression | 389.127 | 4 | 97.282 | 8.300 | .000 ^e |
| | Residual | 410.248 | 35 | 11.721 | | |
| | Total | 799.375 | 39 | | | |
| 5 | Regression | 532.373 | 12 | 44.364 | 4.486 | .001 ^f |
| | Residual | 267.002 | 27 | 9.889 | | |
| | Total | 799.375 | 39 | | | |

a. Dependent Variable: ssl

b. Predictors: (Constant), school

c. Predictors: (Constant), school, age

d. Predictors: (Constant), school, age, population

e. Predictors: (Constant), school, age, population, salary

f. Predictors: (Constant), school, age, population, salary, class, loads, book, gender, marital, service, position, facilities

After the stepwise regression and the other variables were removed, the model summary is presented in Table 9. Based on the new model, type of school contributed 17.8%, combined type of school, and age contributed 26.1% while the combined three indicators type of school, age, and school population contributed 35% and the combined type of school, age, school population, and monthly salary attributed 42.8% to the respondents' eudaimonia in terms of satisfaction with life. Of the five models presented, only model 1 is significant at $p < 0.01$, while models 2, 3, and 4 are significant at $p < 0.05$ while model 5 is not significant to satisfaction with life. This implies that the type of school is a predictor of satisfaction with life but it increases its significance level when other variables were combined. The best however is the model in which school type was combined with age, school population, and salary.

Table 9

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|-------|-----|-----|--------------------|
| | | | | | R Square Change | F | df1 | df2 | Sig. F Change |
| 1 | .446 ^a | .199 | .178 | 4.10468 | .199 | 9.445 | 1 | 38 | .004 ^{**} |
| 2 | .547 ^b | .299 | .261 | 3.89178 | .100 | 5.271 | 1 | 37 | .027 [*] |
| 3 | .633 ^c | .400 | .350 | 3.64970 | .101 | 6.071 | 1 | 36 | .019 [*] |
| 4 | .698 ^d | .487 | .428 | 3.42365 | .087 | 5.911 | 1 | 35 | .020 [*] |
| 5 | .816 ^e | .666 | .518 | 3.14467 | .179 | 1.811 | 8 | 27 | .119 |

a. Predictors: (Constant), school

b. Predictors: (Constant), school, age

c. Predictors: (Constant), school, age, population

d. Predictors: (Constant), school, age, population, salary

e. Predictors: (Constant), school, age, population, salary, class, loads, book, gender, marital, service, position, facilities

Conclusion and Recommendations

After the readings and statistical treatment of data, it was concluded that various factors could affect the happiness and satisfaction of the mathematics teachers. Based on the result, age predicts the satisfaction with life (Bolin, 2007; Urry, et al., 2010) of the mathematics teachers, as well as the type of school (Kalhotra, 2012) and school population. As they become mature, they tend to be satisfied as compared to when they were younger. They tend to have a clear disposition in life and are not easily affected by issues and pressure in the workplace. The respondents who are employed in public schools are generally more satisfied than those in private schools mainly because of the security of tenure. Teachers in public schools also have more benefits than those in private schools. Further, teachers in big schools tend to have higher satisfaction with life as compared with those teaching in smaller schools. Nurturing children is rewarding, so working in a bigger school meaning being with more children thus, making the respondents feel more satisfied.

This study is limited as it only involves those that are studying in graduate school at the university the data was collected from. It is recommended therefore to have a wider scope of respondents. Also, as none of the listed indicators affect happiness, it is recommended to add other variables such as other designations aside from teaching, educational attainment, relationship with the administrator, relationship with co-workers, relationship with students, students'

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achievement, leisure, and health. Qualitative research may also be conducted to have an in-depth understanding of how math teachers define happiness, what makes them happy, and how do they pursue happiness. Lastly, a study on the effect of teachers' eudemonia on their teaching performance and the students' performance should also be conducted.

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