# Study on the Career Interests, Utility of the Students from the University of Computer Studies (Taunggyi)

Yuzana

University of Computer Studies (Taunggyi) yuzana.yzn@gmail.com

### Abstract

The career success is essential throughout the whole life for the people. No matter what the interest is extrinsic or intrinsic, life without career interest is like a ship goes without the rudder. One of the challenges of the development in higher education is the students decline their deep learning skills, critical thinking, innovation, competency because of the students attending university without interest, ambition, motivation and endeavors. This paper use informal method for measuring interest that is preparation of test sheet with 30 questions that should wrap the required target. We only focus on 3 questions that make sense for extracting assumption from the outcomes. We tested only with 127 of first year students from University of Computer Studies, Taunggyi. The facts from the findings are the students have no interest in computer technology because no one chooses the career of the network engineer. The 47% of the students chose IT professional 52 % of the students will not chose IT. The 62% of the first year students did not know what IT is even though they have attended Computer University. The 80% of the students feel satisfactory (utility) that the university grants ample support to their career interest.

Keywords: measured interest, career interest, correlation

# **1. Introduction**

An interest is a subjective attitude motivating a person to perform a certain task. It affords pleasure and satisfaction. It results in curiosity towards the object of interest, enthusiasm to be attached to the object, strength of will to face difficulties while engaged in the task of one's interest, a definite change in behavior in the presence of the object characterized by attention and concentration [6]. There are three types of interest, the expressed interest, manifest interest and measured interest. In the expressed interest the student expresses his personal likings through such sentences as "I wanted to become a Programmer". Although, it is the first source of knowing the interest of a student yet much reliance cannot be based on it, as such expressions like permanency and are prone to vary from time to time depending upon the maturity of the person. So the result from the current students' interest can vary from time to time. Manifest interest is the interest that is not expressed but observed by others while the student is engaged and absorbed in an activity. For example, Newton forgot his meals while engaged in scientific experiments. The students concentrate on writing programs without knowing about the day or night. The measured interest is the estimate and account of a student's interest as revealed by some psychological tests or interest inventories [1]. This paper uses the measured interest.

# 2. Related Work

The Strong Vocational Interest Blank designed and standardized the check list. The check list contains 400 separate items. It is presented to the individual and he is simply asked to indicate whether he likes, dislikes or is indifferent, on a three point scale. Kuder Preference Record has been prepared by G. Frederic Kuder. This test covers a wider field, comprising of nine separate scales of occupations, such as mechanical, computational, scientific, persuasive, artistic, literary, musical, social and clerical. They presupposes three major interests mechanical, literary and artistic. So when the same task is presented to the subject, with three related activities, the subject will select the activity that relates one of the three interests that he possesses. Thurston's Vocational Interest Schedule test examined a comprehensive test to 3400 college students who expressed their Likeness (L) Indifference (I) and Dislike (D) to each of the items in the test [6]. Some less used interest tests are Hepner's Vocational Interest Ouotient and Lufburrow's Interest Blank. The latter is of the same design as Strong's Blank. It gives eleven families instead of nine. viz. Artistic. Commercial, Constructions, Industrial, Scientific, Humanistic literary, Transportational, Mechanical and Technical. Clecton's vocational Interest Inventory deal with 9 groups of occupations and contains 630 items [6]. In our test sheet some question prepare not only for choosing the item from the check list. But also the students deliberate their authentic sense by answering the sentences. Some questions prepare with the answer can choose one of the item from (a), (b), (c), (d). As a theoretical framework the selfdetermination theory (SDT) and the theory of interest are applied in[1]. They proposed that perceived support of basic psychological needs as well as aspects of a constructivist learning environment such as teachers interest, relevance of contents and quality of instruction are associated with intrinsic motivation, selfdetermined forms of extrinsic motivation and with study interest. They presented specific "Big Five" personality profiles should be associated with interest and motivation. They used the crosscultural testing of the theoretical assumptions of the SDT and the theory of interest. The data of a cross-disciplinary sample of undergraduate students of the University of Cape Town (UCT), South Africa 350 students were analyzed. The results of a cluster analysis demonstrate that 35% of the students are regulating their learning processes simultaneously on an identified and intrinsic level; only 28% are more externally regulated. However, in comparison with other samples, the correlations are slightly lower.

Izaak from Indonesia proposed the study is to determine the relation between interest at Physics and knowledge of Mathematics basic concepts with the ability to solve Physics problems at 7th grade at the junior high school in Ambon. Two independent variables and one dependent variable are studied. The independent variables are the interest at Physics (X1) and the knowledge of Mathematics basic concepts (X2), while the dependent variable is the ability to solve Physics problems (Y). Data collection technique for X1 is an interview with questionnaire instrument, while for the X2 and Y is using the test technique with test items instrument. The obtained data from the measurements were analyzed with descriptive analysis and inferential analysis. The results show that there is a positive relation between interest at Physics and knowledge of Mathematics basic concepts with students' ability to solve Physics problems [2].

Roung Su examined the incremental validity of vocational interests beyond cognitive ability personality for predicting academic and achievement and career success. Analysis of a national longitudinal survey, Project TALENT showed that interests were the most influential contributor to income, even within occupational groups and after controlling for occupational prestige. Interests were also found to be powerful predictors of college grades, college persistence, degree attainment, and occupational prestige. The effects of interest congruence were examined using polynomial regression and response surface methodology. The results show that In most cases, interest congruence was positively associated with academic achievement and career success [5].

The author discussed the nature of interests, describe several key features of interests, and, contrary to the received knowledge of many, explain how interests can be used to predict career and educational choice, performance, and success. And discussed the continuity of interests across the life span and explain how evidence of stability supports conceptualizations of interests as being distinct dispositions rather than simply extensions or workplace instantiations of basic personality traits. The author explored the data by using total variance and find stability of the interests in[3]. Section 2 stated related work section 3 is methodology, section 4 is proposed framework, section 5 is about assumptions, section 6 is limitation of interest and section 7 is conclusion.

### 3. Methodology

While knowing the interests of a student we can rely more on the manifest interest and the measured interest rather than the expressed interest. But it is not always practicable to know the manifest interest for want of frequent situations arrange able wherein the observer can observe the manifestation. Hence measured interest is the usual source [6].

The tools for measurement of interest are of two types – formal and informal. The formal methods are specialized and standardized instruments as interest measuring such inventories, interest test batteries. The informal methods include the student's own statement: reveal answers, a record of his activities and observation by the parents and the teachers. So we used informal methods with the test sheet which contents coverage the assumptions of the outcomes.

### **3.1. The Correlation Coefficient**

A single summary number that tells whether a relationship exists between two variables how strong that relationship is and whether the relationship is positive or negative. The correlation analysis finds out if there is a statistically significant relationship between TWO variables [4]. And also find the mean and standard deviation and then find correlation.

$$R = \sqrt{\frac{\left[\left(r_{y,x1}\right)^2 + \left(r_{y,x2}\right)^2\right] - \left(2r_{y,x1}r_{y,x2}r_{x1,x2}\right)}{1 - \left(r_{y,x1}\right)^2}} \qquad (1)$$

Where,

Independent variable  $x_1$  = grading of the student

Independent variable x2= motivation

Dependent variable y= career interest

 $(r_{x1,x2})$ = Correlation between grading and motivation

 $(\mathbf{r}_{x1,y})$ = Correlation between grading and career interest

 $(r_{x2,y})$ = Correlation between motivation and career interest

Multiple correlation analyzed the data between + or - to 1. If R= 9, this mean that the combined correlation with grading, motivation and career interest is 9. That seems the two variables grading and motivation is strongly correlated with career interest. If R=0 this mean there is no relationship with these variables.

### 4. Proposed Framework

This paper used informal method of the measured interest approach. For the step of preparation of test sheet we prepare questions test sheet for the students which the contents wrap for the career interest survey. The test sheet contains questions to the students, not checked list and not open questions. The answer is freely revealed their mindset, attitude and opinion upon the university. This sheet contains 30 questions but we emphasize only on these three questions to make assumption. What is your career interest? What is IT? The question is does this university grant ample support to your career interest? In our test sheet some question sets like check list For example, What is the teacher teaching style? The students answer with (a) good(b) fair (c) bad (d) excellent, but this question not focus on this paper.



**Figure 1. Proposed Framework** 

After data had collected and accumulated, data need to be preprocess for the text transfer into the corresponding scores. Calculate the statistic upon the data for finding the appropriate assumptions from the outcome. For the future work scrutinize the independent variables either strongly correlated or negatively correlated with dependent variables. For example, the attribute of marks, grades and motivation that strongly correlated to the career interest .As for the future work, we will find correlation between independent variables and dependent variables described in equation 1 and also use multiple regression technique.

# 5. Finding Assumptions from the Outcomes

IT professional	N 05	Future Studies	N OS	Alternative	N 05	Murky Hypothesis	N 05	Absent Hypothesis	N 05
IT employee	27	Foreign studies	1	Teacher	1	According to the hobby	3	Not yet defined	3
Web de ve lo per	2	Attend Master, PhD	1	Accountant	1	Good/legal jobs that earn a lot of money	2	Not defined	18
Software developer	4			Copier shop	1	Suitable work	2		
Programmer	6			Government officer	3				
Software Engineer	3			Bank employee	2				
IT freelancer	1		-	Designer	1				
Work related with computer	2			Work at company	17				
Work related with computer technology	1			Own business/com pany	10				
IT business professional	1			Tourist guide	1				
Work at foreign IT company	3								
Own IT company	2								
Establish IT training school in TG	2								
Tutor	2								
Android developer	1								
DB Administrator	1								
Game developer	1								
Car repair service with computer	1								

Table 1. Career Interest Clusters

The students answer an idea about 33 kinds of career interests as shown in table (1). The answer from the students' career interest such as IT employee, Web developer, programmer etc, we categorized this 17 items into the IT professional. The students also want further studies such as attend Master and PhD courses related with IT this was clustered as Future Studies. And students also interest other field not related with IT profession such as teachers. government officers. accountants, Bank employee etc. This group named as Alternative. Another group is they have not fully sculptured their hypothesis, they want any suitable job that will be legal and earn a lot of money after they get the degree grouped as murky hypothesis group and some students' answers have "not defined" goals and "not yet defined" goals were grouped as absent hypothesis group. This group has no idea about their future.



### Figure 2. The percentages of the Career Interest of the First Year Students

Figure 2 show the percentage among first year students. Among the first year students, 47% of the students' career interests were the IT professional, the 1.60% of the students has an ambition for future studies, so near 49% were interested in IT. 29% of the students were not interested and they chose for alternative career. The 22% of the students is walking in the gloomy way without intention and lack of vigorous hypothesis. So we can say in half by half portion that is less than 50 % (=49%) of the students have strong attitude and passionate to their career choices, 52 % of the students will not chose IT. This shows that only less than 50% we can nurture IT human per academic year. But this finding is only for the current situation of the first year students, their attitude can change according to their interest along their academic lifelong learning.

For the figure 3, this test sheet answered at the second half of the second semester. The question is what is IT? The 9% of the students answered very diminutive answer such as "IT is just Information Technology". The 7% of the students respond "I don't know". The 5% of the students reply "Not yet known". The 41% of the students "not defined answer". Only 38% of students explain comprehensive answers. This shows that 62% of the overall first year students did not know what IT is even though they attend Computer University.







#### Figure 4. The Percentage of Student Answers Is it support to your career?

According to the figure 4 the question is does this university grant ample support to your career interest? The 80% of the students say absolutely "yes" whereas 6% of the students give "moderate", this include the answer such as "may be", "perhaps", "I think so" and 5% of the students said "No". The 9% of the students not defined answer. So warping up to these statistics it is only 20% of the students feel unsatisfactory upon the university while 80% of the students sense satisfactory. This is the good news for the university and need to sustain this famous.

# 6. Limitation of Interests

Some of the tests reveal ability rather than interest. But interest is not the same thing as ability. So some tests are not fully valid or reliable. The interests revealed may not remain permanent. Moreover the interests are cultivable also. For the case of Murky Hypothesis and Absent Hypothesis in this paper, at the time of testing a particular interest may not have developed fully, but it may develop afterwards. It has been seen that some interests develop during the next academic year. The interest inventories reveal facts on the basis of the report given by the subject.

# 7. Conclusion

The findings have they have no interest in computer technology such as network engineer, this shows that students did not familiar with computer technology. The existing first year computer technology course should be revising or appending some more subjects related with computer technology. The 62% of the overall first year students did not know what IT is even though they attend Computer University so student change their mindset in attending university. So warping up to these statistics it is only 20% of the students feel unsatisfactory upon the university while 80% of the students sense satisfactory. This should be maintained all of the teachers from the strategic level, managerial level and operational level from the whole university acquire the skills of the responsibility, accountability, affordability, credibility, efficacy and competency. The accuracy of the report is still a problem. Some students do not reveal facts. Because some students did not answer with blank space this mean not willing to say comments about it or he is not enthusiasms to take part in this survey or perhaps he actually did not know the answer or he

can't clarify how to answer the questions. There was some extent percentages included in the survey for three questions. In spite of the above limitations, Interest Inventories are very useful in determining the future trends of the individual's career interest in his life.

### References

[1]Florian H. Muller, Johan Louw, "The Condition of the University Interest, Motivation and Study Interest," The European Conference of Educational Research, University of Hamburg, Germany, 17-20 September 2003.

[2] Izaak Hendrik Wenno, "The Correlation Study of Interest at Physics and Knowledge of Mathematics Basic Concepts towards the Ability to Solve Physics Problems of 7th Grade Students at Junior High School in Ambon Maluku Province, Indonesia", Education Research International, Volume 2015, Article ID 396750, 6 pages.

[3] James Rounds, Roung Su, "The Nature and Power of Interests", Current Directions in Psychological Science, pp1-6 DOI: 10.1177/0963721414522812, cdps.sagepub.com, 2014.

[4] Jim Higgins , Ed.D. "Excerpted from The Radical Statistician, Chapter 4, Introduction to multiple regressions", 2005.

[5] Roung Su, "The Power of Vocational Interests and Interest in Predicting Career Success", Dissertation, University of Illinois at Urbana-Champaign, 2012.

[6]Shivangi Zav, " Interest: Meaning, Types and Measurement | Psychology"