

## Is Congruence a Predictor of Satisfaction with the Choice of Degree Program among University Students in Kenya

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### Abstract

A lot of studies carried out in Kenya have examined the factors that lead to a student's choice of degree program with most reports suggesting that parents and peers have significant influence. The extent to which the personal attributes lead to the choice of degree program has not been examined. This study examined congruence as a predictor of satisfaction with the choice of degree program. The Self Directed Search 4<sup>th</sup> Edition questionnaire by (Rosen, Holmberg, & Holland, 1994) and a satisfaction scale were used to gather information. The results indicated that majority of the students were satisfied with their choice of degree program. Congruence was found to be weak predictor of the choice of degree program ( $r=.04$ ,  $n = 389$ ,  $.433$ ), and significantly negatively correlated with satisfaction with the degree program ( $r=-.099$ ,  $n=389$ ,  $p=.051$ ). The study concluded that congruence is a predictor of choice of the degree program but not a strong predictor of satisfaction.

**Key words:** Congruence, Satisfaction, and Choice of degree program.

### 1. Introduction

In last two decades university education in Kenya has undergone tremendous transformation. Among them is the enactment of the Universities Act No. 42 of 2012, which has brought in a raft of changes in the management and operations of the higher education in the country. As a result of these changes, all public universities in Kenya are now under one law as opposed to previously where each university was under its own individual act. As a result of these changes, the Commission for University Education (CUE) is now the regulatory body for all universities in Kenya both public and private. In East Africa (Kenya, Uganda and Tanzania), there are about 100 universities according to CUE. According to the CUE, Kenya has 22-chartered public universities and 9 public constituent colleges, making a total of 31 public universities. Additionally, there are a total of 17-chartered private universities, 10 private universities with Letters of Interim Authority (LIA) and 2 institutions that are affiliated to private universities that are offering degree programs. In total, Kenya has 59 institutions of higher learning under the Commission for University Education.

Globally the choice of a degree program or college major is characterized by a need to match a student's career aspirations, interest, clarity of the nature of work and type of training required. Holland (1997) argues that every individual has the tendency to like or dislike certain activities associated with different careers. The activities that a person likes constitute a career interest and one hopes to experience satisfaction if they pursue that given line. By selecting a subject one is interested in, Holland hypothesizes that there will be a general feeling of satisfaction and the result would be good academic performance.

The academic programs in institutions of higher learning are organized in such a way that they develop different skills and competencies. These academic programs offer training that share similar characteristics with different work environments and the students hope to develop competences, skills, attitudes and abilities developed in selected academic fields (Feldman, Smart & Ethington, 2001). They further argue that when students enroll in a specific academic discipline that simulates the work environment, course content and vocational experiences that match their interest, higher level of satisfaction with the choice of the degree program will be achieved.

Studies done in the 1980s in the west suggest that there is a strong positive correlation between congruence and satisfaction (Smart, Elton & McLaughlin, 1986). These studies revealed that in an organization, the most prevalent personality types showed the highest level of congruence and scored high on satisfaction than those who were incongruent. Investigating dropout rates from the nursing occupation using interest inventories to assess similarities between nurses' specialization and vocational interest revealed that there were high levels of satisfaction where subjects were congruent with the career interest (Hener & Meir, 1981)

Higher levels of educational stability, satisfaction and achievement (Holland, 1997), (Smart, Ethington & Feldman, 2000) have been attributed to congruence. The personal benefits of finding and enrolling in an academic environment that matches one's interest and abilities include less stress, course retention, while the institutional benefits include less absenteeism, low dropout and high academic productivity (Holland, 1994), and consequently satisfaction.

According to (Tranberg, Slane & Ekeberg, 1993), there is evidence to link congruence and satisfaction. The personality types that were congruent with the college majors were most satisfied with their choices. Recent meta-analysis studies have confirmed that greater person-environment congruent RIASEC (Realistic, Investigative, Artistic, Social Enterprising, Conventional and Enterprising) personality types are associated with favorable outcomes such as job satisfaction (Spokane, Meir & Catalano, 2000), (Tsabari, Tzinar & Meir 2005). Smart, Elton & McLaughlin (1985) however argue that congruence did not automatically predict satisfaction. Holland (1997) and Gore & Brown (2006) noted the limitations of congruence studies in determining the levels of satisfaction since there are other factors that can influence fulfillment or satisfaction. Even though some studies have shown that congruence appears to be a sufficient though not a necessary condition for job satisfaction, several studies have reported a correlation range of .25. In a meta-analysis of 27 studies by Tranberg, Slane & Ekeberg (1993), congruence –satisfaction correlation was found to be  $r = .21$ . De Fruyt (2002) found that congruence-satisfaction relationship differ depending on the index used to calculate the C-Index. Other variables were found to influence the strength of relationship between congruence and satisfaction with some studies stating that factors such as age, teaching resources, faculty interaction, job market opportunities and vocational identity being crucial (Tracey & Robbins, 2006) (Young, Tokar & Subich 1998). Since congruence as a predictor of satisfaction has generated mixed results in the studies reviewed and the lack to research in this area, the study examined the relationship between congruence and satisfaction with choice of degree program in Kenya.

### **1.1 Methodology**

This study adopted an ex-post facto to examine the relationship between congruence, satisfaction and the choice of degree program. A total of 389 students were drawn from six different schools during their third year at Kenyatta University during the 2011/2012 academic year. Students voluntarily participated in the study. The average age of the participants was 22.7 years as the most reported age was 22 years. Of the respondents surveyed, there were 53 males and 47 females in the schools selected. The School of Engineering N= 56, female 15% and males 85%. The School of Sciences N= 46 female 37% and males 63%. The School of Education N = 139 females 67% and males 33%. The School of Creative and Performing Arts N= 26, females 50% and males 50%. The School of Business N = 46, females 42% and males 58%. The School of Economics N= 76, females 42% and males 58%.

#### **1.1.2 Instruments, procedure and data analysis**

The researcher examined the relationship between congruence, satisfaction and the choice of degree program. The independent variables in this study were congruence and choice of degree program. The dependent variables were satisfaction with the degree program. Degree programs were classified using the Dictionary Holland of Occupational Classification, which reflects the different academic environments within Kenyatta University (Holland & Gottfredson, 1996). Congruence was measured using the C index proposed by Brown & Gore, (1994). C index is easy to calculate and it is sensitive to both the order of the Holland codes as well as to the distance between codes. The formula for C is  $C = [3(x) + 2(x) + 1(x)]$ , where x is a score of 3, 2, 1, or 0 assigned to each comparison according to the hexagonal distance between the letter (3 = identical person and environment letters, 2 = adjacent hexagonal letters, 1 = alternate hexagonal letters, and 0 = opposite hexagonal letters). The highest score for congruence is 18 and the lowest score is 0. In this study, scores between 0-8 were regarded as incongruent and scores between 9 and 18 were considered congruent. Satisfaction was measured using a dichotomous dummy score of (1) satisfied and (2) dissatisfied, which was generated from the Likert scale with scores ranging from 1-5. The Likert scale had statements to assess the student feelings regarding the degree program, which were scored at five levels: 5 (Strongly Agree); 4 (Agree); 3 (Undecided) 2 (Disagree); 1 (Strongly Disagree). For each score 1 was interpreted as least satisfied while 5 indicated most satisfied. All scores between (1-2) on the Likert scale were considered as dissatisfaction, while scores between 3-5 were considered satisfaction with the degree program.

### **1.2 Results and Discussions**

#### **1.2.1 Congruence and choice of degree program**

The distribution of congruent and incongruent cases within schools and departments within Kenyatta University was examined. The results of the distribution of congruent and incongruent as displayed in Table 1 reveals that more than two-thirds of the third-year students at Kenyatta University were congruent (79.2%), while a third were incongruent (20.8%) in their choice of the degree program implying that students personality types matched the academic environment they were enrolled in. The Education (86.3%), Business (93.5%) and Creative & Performing Arts (88.5%) schools had the highest cases of congruence while the Schools of Engineering and Economics had the highest cases of incongruence (35.7%) and (35.5%) respectively.

The distribution of congruent and incongruent cases in schools and departments is more clearly shown in figure 1 and 2. It is notable that the School of Education registered the highest number of congruent cases implying that the students enrolled in Education were social personality types in a social academic environment.

The researcher further examined the relationship between congruence and the choice of degree program using Pearson's coefficient correlation results to determine the strength of the relationship. The results indicate a weak correlation between congruence and choice of degree program ( $r=.04$ ,  $n=389$ ,  $p=.433$ ). Feldman, Smart, and Ethington (2006), found similar results, but also argued that a student who was not congruent can through socialization learn from the interactions with the faculty and develop skills, attitudes and values that would in turn help them fit in the academic environment.

### **1.2.2 Satisfaction levels in Schools and Departments**

Satisfaction in this study was examined as a feeling expressed by individuals regarding the choice of academic program. The results of the distribution of satisfaction in schools and departments are shown in figure 3 and 4. The results show that the School of Education, School of Creative and Performing Arts and School of Business registered the highest number of satisfied cases while the School of Economics and Engineering the highest cases of dissatisfaction. In the Departments of Mechanical Engineering, majority of the students were dissatisfied compared to those in the Department of Energy Engineering in the School of Engineering. Students from the Departments of Special Education and Early Childhood were the most satisfied compared to those from the Department of Educational Psychology who had more cases of dissatisfaction amongst students in the School of Education. Students from the Department of Music were most satisfied compared to those in the Department of Fine Art who had more cases of dissatisfaction amongst students in the School of Creative and Performing Arts. Students in the Department of Applied Economics were most dissatisfied compared to those in the Department of Econometrics in the School of Economics. While in the School of Sciences, the Department of Plant and Microbial Science had more cases of dissatisfaction compared to the Department of Public Health. On the overall, majority of the students surveyed were satisfied with the degree programs at Kenyatta University.

### **1.2.3 Personality types and satisfaction with degree**

The study examined the distribution of satisfaction by personality types within schools at Kenyatta University. The data in figure 5 displays the distribution of personality types and their levels of satisfaction. The results show that the personality types that were most satisfied with the choice of the degree program were Social, Investigative, Artistic, Social, Enterprising, and Conventional.

### **1.2.4 Satisfaction distribution within gender**

Gender and satisfaction distribution within schools and departments at Kenyatta University was investigated and the results are displayed in figure 6. The data reveals that both male and female students were fairly satisfied with their choice of degree program with nearly two-thirds of the respondents (64.8%) comprising of 33.7% males and 31.1% female indicating satisfaction. On the overall, the male students appear to be more satisfied than the female students on their choice of degree program.

## **1.3 Conclusion and recommendation**

Satisfaction in this study was examined as an outcome of congruence which many studies have reported a strong positive correlation (Smart, Elton & McLaughlin) (Hener & Meir, 1981), (Gottfredson & Holland, 1996). Even though most studies have concluded that there is overwhelming evidence linking congruence and satisfaction (Spokane, 1985), and (Tranberg, Slane & Ekeberg, 1993) the results in this study do not indicate a strong correlation. Pearson's coefficient correlation results ( $r=-.099$ ,  $n=389$ ,  $p=.051$ ), suggests a weak negative correlation between congruence and satisfaction. This implies that congruence is not a predictor of satisfaction with the degree program among third-year students at Kenyatta University.

Considering the overwhelming evidence given in the studies in the west linking congruence to satisfaction, the researcher decided to carry out some interviews with a selected sample to explain this result. The researcher contacted 12 participants for a focused group discussion from the school represented. The following results were generated according to the emerging themes that explained why congruence was not necessarily a strong predictor of satisfaction in Kenyan context.

#### **i. Opportunity in the job market**

The respondents from the School of Engineering had mixed responses on satisfaction but felt there were more opportunities in the job market. The respondents from the School of Education felt confident that there were more openings in the job market upon graduation and generally felt that they were well prepared and would be competent to handle children issues in the field. These similar responses were generated from the School of Business. Some of the responses captured were: "I am satisfied with my choice because this is what I wanted to do", "I am a self-sponsored student and so I am doing my preferred course." In the School of Creative and Performing Arts, the responses were: "I am somehow satisfied, not 100% but I like it. I enjoy most of my classes". Music is the best.

#### **ii. Provision of learning resources**

The students from the School of Engineering, in the Department of Manufacturing felt satisfied with the course because the resources provided were adequate, while those from the Energy Engineering felt very dissatisfied

because the course was not what they expected and they were not sure where they would fit in the job market because the teaching resources were lacking.

### iii. Teaching methods

In a number of schools, students expressed satisfaction with the teaching methods. Many students were happy that the faculty members were now using technology for instruction. One respondent stated, "In the School of Engineering, we are taught unlike other courses where they are lectured." Such a fact produced a sense of satisfaction. However one respondent taking two course one in English and Literature and the other in Music felt "I feel I will be a better teacher in Music than English" because in English and Literature we are to many for quality interaction with the faculty." Another respondent felt dissatisfied "I am not satisfied because we do not cover enough to make one an expert in this area. I expected to learn modern courses in music; it is too traditional here. We do mostly music and traditional dance. Most of the current courses like music technology are not offered."

### iv. Regulatory Bodies related to the degree program

Students from the Department of Energy in School of Engineering felt quite dissatisfied because the Engineering Regulatory Board (ERB) failed to recognize their training. "I am not satisfied, I do not like the course I was told to do it by my parents and society in general put pressure because I had passed. More than half of my classmates are not satisfied and I am personally doing other diploma courses. You know our course is not registered by the Engineering Regulatory Board and the general public does not view energy engineering as a prestigious course." "We are all under government sponsorship JAB, I had no prior knowledge of this course even though my grades qualified me for it". "I did not know which other course to pursue but later I learnt I could do Computer Sciences but I was not allowed to change". I just want to finish and get a certificate and move on with it."

From the above responses, it is clear that there are other factors that accounted for satisfaction or dissatisfaction, in addition to congruence. It is therefore important for the institutions of higher learning to provide for conditions that will help students achieve satisfaction especially if they are enrolled in a congruent degree program. When this happens a student will experience satisfaction as an immediate outcome of the match between their personal characteristics and their choice of degree program.

The researcher recommends a more detailed study drawing students from more universities since this study was limited to only one university. The need to examine student satisfaction with the degree program is critical because satisfaction indicators are viewed as an important component in skill development.

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**Figures and Tables**

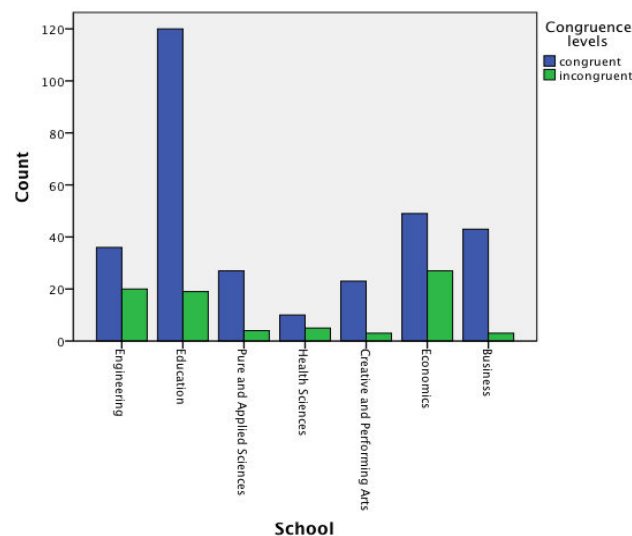


Figure : Congruent cases distribution in Schools

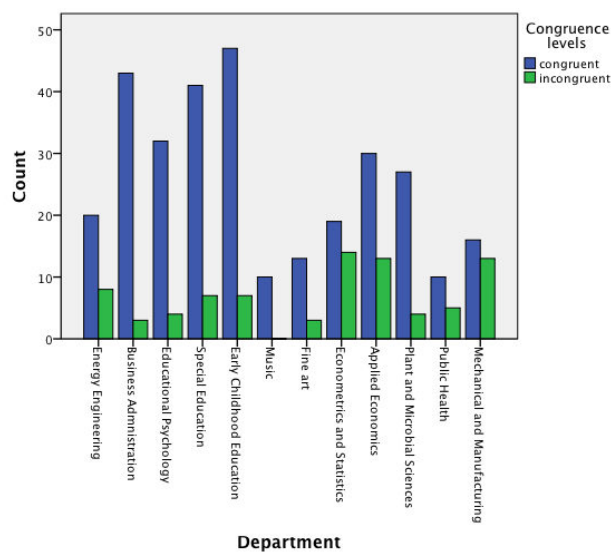


Figure 2: Congruence distribution in departments

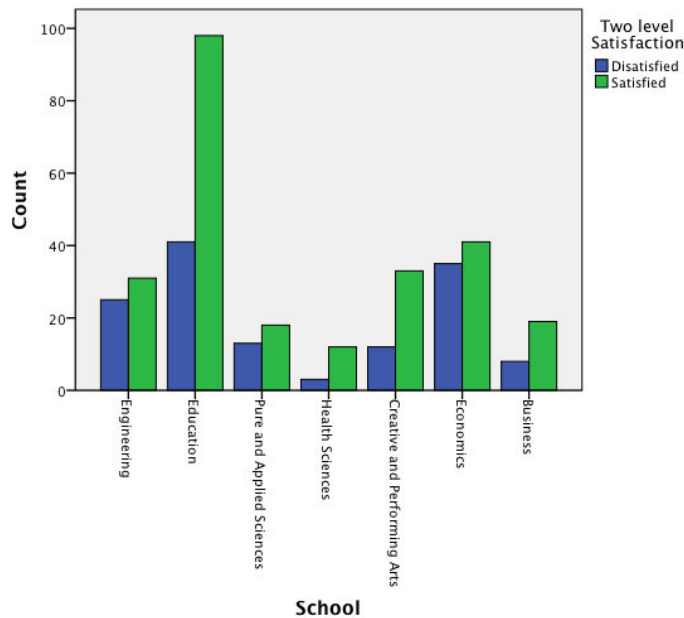


Figure 3 Distribution of satisfaction in schools

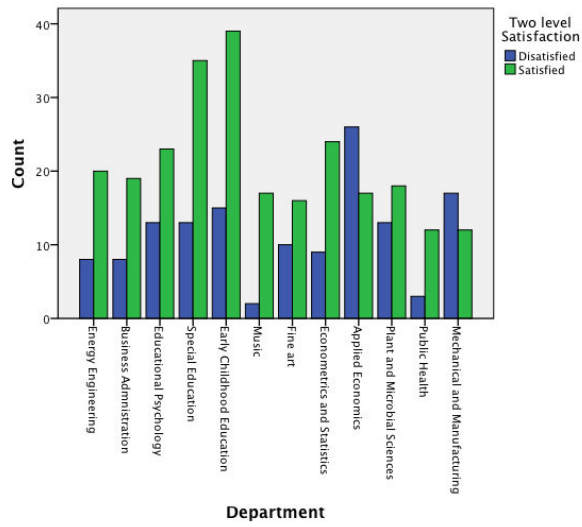


Figure 4 Satisfaction distribution in departments

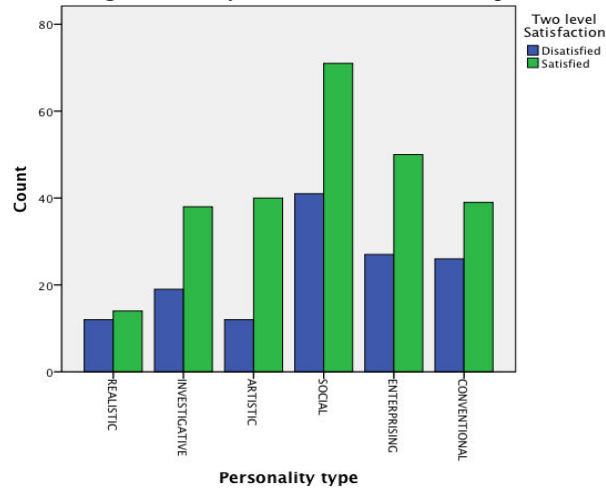


Figure 5 Personality types and satisfaction

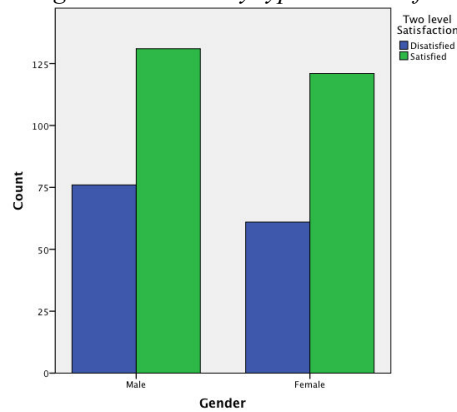


Figure 6: Gender and satisfaction

Table 1. *Congruence distribution in Schools*

School	Congruence				Total	
	Congruent		Incongruent		Total	
Engineering	36	64.3	20	35.7	56	100
Education	120	86.3	19	13.7	139	100
Sciences	37	80.4	9	19.6	46	100
Creative & Performing Art	23	88.5	3	11.5	26	100
Business	43	93.5	3	6.5	46	100
Economic	49	64.5	27	35.5	76	100
<b>Total</b>	<b>308</b>	<b>79.2</b>	<b>81</b>	<b>20.8</b>	<b>389</b>	<b>100</b>



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