A Study of Individual Differences and Generic Competences: An Evidence from University Students

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Abstract



The study investigated the individual differences and generic competencies of students at university level. The study was descriptive in nature and survey method was used for the collection of data. The population of the study comprised of 5206 students (2902 male and 2124 female) of nine universities. Stratified random sampling technique was used for the selection of sample from the population. A self-developed questionnaire was used for the collection of data from the respondents. Frequency, percentage and mean were applied for the analysis of data in this study. It was found that university students responded positively for the generic response (s) evidenced the individual differences in generic competencies as positively affected the parameters of (a) age of students (b) Understanding the university group tasks, (c) developing competences based on teachers guidance, knowledge including curriculum/syllabi and (d) document based knowledge including ICT and E-learning as well as (e) competence developed for future.

Keywords: Individual Differences, Effects, Generic Competences, University students, ICT, E-learning

1. Introduction

Individual differences are the basic subject area of modern psychology. The literature has mentioned human psychology in many ways. It describes the psychological differences and similarities between people. Some psychologists believe that individual differences are due to the interaction of genetic and environmental factors. We have inherited certain characteristics from our parents through the genetic code. The phenotype or expression of our characteristics depends on the contribution of the social and cultural environment. This is why we are not exactly like our parents, and our parents are not exactly like our grandparents. As discussed by Bygrave (2009) the human beings are similar to their parents in many physical attributes, such as height, eye color, nose shape,

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etc.

also inherit certain cognitive, emotional Humans and other characteristics from our parents, such as intelligence, love for sports, creativity, etc. However, our own characteristics are largely supported by our living environment. In the field of personality development, individual differences are most often studied. Psychologists have collected a lot of data on how people change in traits. Wynder and Laing (2010) and Mehmood et al. (2017) pointed out this further. It is not only necessary to understand the reasons that make people similar to each other, but also the reasons that make people different from each other. By considering the changes that may occur from one person to another, we can best understand the full range of human behavior. We can also understand what are the components of normal variation, such as puberty beginning at 9 years of age instead of 10.5, and which developmental rates may be red flags for intervention, for example, in the case of learning disabilities, even engineering students, by Investigation by Alejandra et al. (2018) in Mexico.

University education is regarded as the center of excellence for our learning system and Higher Education Institutions (HEIs), are playing a vital role in the academic and future lives of students. University education is one of the most important stages in a student's life, and it is supported by many studies, such as Kavangh and Drennan (2008). As Hancock and Freeman (2010) considered, high-quality college courses provide students with the tools they need to learn social, behavioral, and practical skills at their own pace. University education is of great significance in today's life. Where anyone sees a job advertisement, there are certain job/job standards. For example, as reported by Barrie (2006), for marketing executives, employers prefer MBA marketers, while ophthalmologists' hospitals prefer ophthalmologists.

Without a college degree a person is unqualified for such posts whereas some people believe that university graduates should pay the full cost of their education (Casner & Barrington, 2006). On the other hand, there had been problems with students competencies due to individual differences they have as stated by Arkoudis and Starfield (2007), different students have different competencies hence, it is necessary to investigate the relationship with individual differences especially at university level.

Generic competencies are considered as one of the crucial elements in the academic life of the students, as they enter in higher educational institutions. Universities have set generic skills and competencies intended to inculcate in students. But the most important thing is that all students remain not alike. Every student has his/her own unique qualities. This aspect of individual difference is not addressed by universities so this study is an attempt to investigate the relationship between generic competencies and individual differences of the students. The problem to be investigated had been the relation between generic competencies of students and their individual differences and how individual differences effect upon generic competencies towards futuristic approach.

1.1 Objectives of the Study

- 1. To find out the individual differences of students at University level.
- 2. To analyze the generic competencies of students at university level.

2. Literature Review

Galton (2006) was a British psychologist and one of the pioneers who studied individual differences based on Charles Darwin's theory of evolution. He believes that if a person's physical characteristics are determined by genetics, it can be deduced to a similar argument. Although people may have a lot in common, not everyone is the same in every respect. Many data collected over the centuries (mainly data based on observations) lead us to the following conclusion: It is common (common) among people. This means that there are no physical, mental or behavioral characteristics that vary from person to person. The spectacular evidence supporting the universality of Individual Differences (ID). comes from genetics. Although individuals belonging to humans share the same number of chromosomes, their genetics is unique. In all living humans, no two individuals are genetically identical (except for single-egg twins). This statement refers to all other mammalian species and possibly all vertebrates.

Individual differences are a phenomenon. In the same phenomenon, individuals (humans and animals) belonging to the same group will be different from each other in physical, behavioral, and psychological characteristics. The people I'm referring to may be of different types and sizes (for example, all people currently living, men in a particular community are allowed, or all students in a particular middle school). Since individual differences are universal and can be seen everywhere in various processes, reactions, behaviors, states and characteristics. However, Psychological Individual Differences (PID) only include those parameters that can be described as relatively stable and will not change or change over time. Considering this standard, PID covers areas such as intelligence, ability, cognitive style, and temperament. Due to space limitations, this article believes that temperament is one of the basic areas of trait personality. PID concentration may be mainly described by units such as layout, characteristics, factors, size, style, and type.

Although they have different states, all of these states are based on the assumption that the phenomenon referred to by PID is relatively stable (called temporal stability). The concept of type and characteristic has a special status. Type refers to the main feature or configuration of features that distinguishes one

group of people from another, and must be regarded as a unit of classification. Type is not attributed to individuals, but a category that allows us to classify individuals according to given criteria. Individuals have no type, but belong to a given type. Depending on the context, the construction of features may be replaced by all units other than the type. Therefore, we often use these terms (1) Dimensions-the quantitative aspects of ID; (2) Factors-when the process of feature separation is based on factor analysis; (3) Personality-when we emphasize the endogeneity of traits; (4) Style considers the style of elements ("methods"))aspect. One of the basic problems of PID is the cause of ID. Classification based on dichotomy can reduce all the factors that determine I.D. Heredity and environment. Behavioral genetics provides the main evidence for the contribution of genes and environment (including its specific components) to I.D. In behavior and traits. The twin approach, adoption studies, and family studies are the main sources of genetic data on human behavior. This article cites selected results that show the importance of genes and environment in determining I.D. temperament

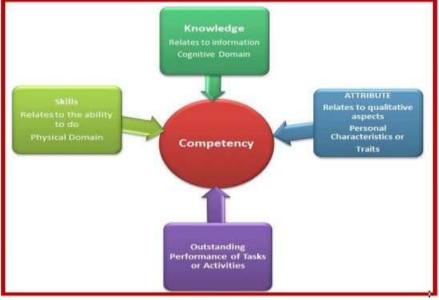
Tectonic features are understood as the basic unit of personality, which is most systematically introduced by Gordon All. Most trait-oriented personality psychologists believe that traits are the relatively stable and universal trends of a particular individual, and this trend will be manifested in a certain way under various circumstances in a given category. From several perspectives, the concept of traits is the object of comprehensive criticism. The attack on this concept originated from data collected by Hartshorne and May. Their research in the 1930s focused on measuring honesty as a trait. The results show that when measuring the same personality (honesty) on different occasions, especially when giving children the opportunity to deceive, the consistency between children is not consistent. High. Using this research as a starting point, Walter Mischel posed the most severe challenge to trait theory. He proved that the data showed that different actual behavioral measures assumed to be expressions of the same personality were not related to each other.

People can learn and develop transferable abilities and skills in different ways in various learning environments. Generic abilities are abilities and skills that can be transferred to new situations (Oliver, Whelan, Hunt & Hammer, 2011). General functions (also called general functions or horizontal functions) are not designed to perform any specific functions or tasks; they are important in most industries and can be used in various situations. These skills include communication skills, problem-solving skills, reasoning skills, leadership skills, creativity, motivation, teamwork skills, especially teaching skills (Ernst & Young, 2012).

General skills can be transferred to various functions and tasks, enabling

students to successfully integrate into employment and the social environment. They are not limited to any specific field of expertise, and can be applied to many different situations and areas of knowledge (Fortin & Legault, 2010). There have been many debates about whether competence is unique for a particular job or exists in nature (Peters, 2003). In addition, (Sloan & Porter, 2009) discovered seven threshold functions.

The equality required for a person to do a job; it may speak its mother tongue. It differs from function in that it cannot distinguish excellent performance from average performance and poor performance. Competence includes the following elements as indicated in the following management research guidelines:



(Source: http://www.managementstudyguide.com/what-arecompetencies.htm)

Therefore, every job at any level in the organization will have a threshold capability, which is the minimum required to complete that job (Poutvaara, 2004). To better understand competencies, it will be interesting to look at the work of some pioneers in this field. First, one can always refer to McBer's example. Some of the general capabilities included in the list are:

- a. Achievement-oriented
- b) Analytical thinking

- c) Conceptual thinking
- d) Customer Service Oriented
- e) Develop others
- f) Defect
- g) Flexibility
- h) Influence
- i) Information Search
- j) Proactive Integrity

There are several others, but as can be seen from the above list, these capabilities are applicable to all businesses and functional departments, so they are called general capabilities. The best conclusion above is an obvious conclusion that there may still be certain types of abilities, and these abilities can also be classified as: Leadership: A management and cognitive ability, such as analysis and problem solving, management execution, adaptability and learning ability, etc. (Vu, Wood, Rigby & Daly, 2011).

Competence is a specific function (such as product knowledge, labor laws, inventory distribution systems, local food safety and handling regulations (Stoner & Milner, 2010). Capacity building is a comprehensive work involving multiple steps. It will be interesting to look at the basic structure of competency development provided by training companies and the Education Bureau of the UK Employment Department.

Competence has become an indispensable part of human resource management. It can help HR practitioners to establish and share understanding of the actors and thus perform well in the workplace. It enables incumbents to better understand their roles and expected performance, which in turn helps them plan their learning during gland growth.

Writing a complete list of meaningful common skills may not work. What is needed is a list of the most important skills that should attract immediate attention. The following is a job list that covers all the points in the list previously mentioned. Therefore, general skills are divided into four categories under the following headings:

1. Organizational ability

- a) Access and manage information
- b) Set goals and monitor progress
- c) Time management and deadlines
- d) Adapt to the new situation

2. Interpersonal skills

- a) Listen and give instructions
- b) Written and oral communication skills

- c) Job gap
- d) Pay attention to people's health and safety
- 3. Cognitive ability
- a) Define the problem and evaluate alternatives
- b) Decision making.
- c) Imagination, abstract thinking and self-learning
- d) Appreciation of the interdisciplinary attitude of subject content
- e) Self-confidence and initiative
- f) Moral awareness and social responsibility
- g) Respect for culture and heritage
- h) Pay attention to ecological and environmental issues

3. Research Methodology

3.1 Research Design

This study was descriptive and quantitative in nature and survey method was applied for the collection of data. Moreover, questionnaire was used for the collection of data from the respondents.

3.2 Population of the Study

All (16463) MA, MSc level students enrolled in these 09 Universities were the population of the study. These universities were (i) Allama Iqbal Open University (AIOU)=12196, (ii) Islamic International University Islamabad (IIUI) 251, (iii) National University of Modern Language (NUML) 489, (iv) University of Punjab Lahore (PU) 365, (v) University of Karachi (UK) 365, (vi) University of Peshawar (UOP) 1315, (vii) University of Balochistan, Quetta (UOB) 1154, (viii) University of Azad Jammu and Kashmir-Muzaffarabad (UOAJK) 280 and (ix) Mohi-ud-Din Islamic University Nerian Sharif AJK (MIU)= 48.

3.3 Sample and Sampling Technique

Stratified random sampling technique was used for the purpose of sample selection. The researcher selected 5026 university students by using proportionate random sampling technique. The sample from each group was selected according to the Krejcie and Morgan (1970) sample table.

Table 3.1

| S.No | Universities | Questionnaire Distributed | Respondents | Male | Female |
|------|--|------------------------------|-------------|------|--------|
| 1. | Allama Iqbal Open University | 1800 | 1776 | 926 | 850 |
| 2. | International Islamic University | 2 | 206 | 124 | 82 |
| 3. | National University of Modern Language | 290 | 301 | 166 | 135 |
| 4. | University of Punjab | 320 | 308 | 136 | 172 |
| 5. | University of Karachi | 360 | 347 | 128 | 219 |
| 6. | University of Peshawar | 1000 | 920 | 626 | 294 |
| 7. | University of Balochistan | 900 | 819 | 574 | 245 |
| 8. | University of AJK | 350 | 308 | 200 | 108 |
| 9. | Mohi-ud-Din Islamic University, Neran AJK | 48 | 41 | 22 | 19 |
| | Total | | 5026 | 2902 | 2124 |

Summarized Quantum Sampled array of University Students, Query Surveyed for Generic Competence (2017)

The 95% respondents revealed their interest in understanding the issue of generic competence with 57.74% male and 42.26% female students showed interest for response in this investigation. As the students of the universities (i) through (ix) were 926, 124, 166, 136, 128, 626, 574, 200 and 22 whereas the female students who responded to this study were recorded 850, 82, 135, 172, 219, 294, 245, 108 and 19 respectively as presented in table No.01.

3.4 Instrumentation

A questionnaire based on five point Likert scale specifically designed for university students based on individual differences and generic competencies. The questionnaire was prepared after reviewed extensive review of related literature. The questionnaire was validated from three experts of the field. The suggested changes were made before conducting the final survey. Cronbach's alpha statistical technique was used for measuring the reliability of the instrument. The reliability of the instrument was found 0.82, which was appropriate for conducting the survey.

3.5 Data Collection

The researcher sent questionnaire through electronic email to all the sampled university students. First the researcher took the consent and then sent

the questionnaires to all the respondents. 95% responsiveness was recorded by all the MA, M.Sc student (soft-copies) along with hard copies by posted mail.

3.6 Data Analysis Techniques

The researcher applied mean, frequency and percentage for the analysis of data by using Statistical Package for Social Sciences (SPSS).

4. Data Analysis and Interpretation

Table 4.1

Average age(s) of respondent students across gender of various universities

| <i></i> | <u> </u> | | Stuc | lents | 0 | 0/ | 1 | 0./ | | 0/ |
|-----------------|------------|-------------|------|-------|-----|----|---------|-------|----------|----|
| S# | University | Respondents | М | F | а | % | b | % | с | % |
| 1 | | 1776 | 926 | - | 556 | 60 | 278 | 30 | 93 | 10 |
| 1. | 1. AIOU | 1776 | - | 850 | 468 | 55 | 221 | 26 | 161 | 19 |
| 2. | IIUI | 206 | 124 | - | 79 | 64 | 32 | 27 | 11 | 09 |
| ۷. | IIUI | 200 | - | 82 | 39 | 48 | 29 | 35 | 14 | 17 |
| 3. | NUML | 301 | 166 | - | 113 | 68 | 33 | 20 | 20 | 12 |
| 5. | NUML | 501 | - | 135 | 76 | 56 | 41 | 31 | 18 | 13 |
| 4. | U/Pb | 308 | 136 | - | 91 | 67 | 30 | 23 | 15 | 11 |
| | | | - | 172 | 126 | 70 | 31 | 18 | 15 | 12 |
| 5 | 5. U/Kchi | 347 | 128 | - | 69 | 54 | 23 | 18 | 36 | 28 |
| 5. | | 547 | - | 219 | 156 | 71 | 48 | 22 | 15 | 07 |
| 6. | U/Pesh | 920 | 626 | - | 457 | 73 | 94 | 15 | 75 | 12 |
| 0. | 0/1 CSII | 920 | - | 294 | 194 | 66 | 89 | 20 | 41 | 14 |
| 7. | U/Bal | al 819 | 574 | - | 345 | 40 | 126 | 21 | 103 | 18 |
| /. | 0/Dal | | - | 245 | 137 | 56 | 49 | 20 | 59 | 24 |
| 8. | U/AJK | 308 | 200 | - | 104 | 52 | 60 | 30 | 36 | 18 |
| 0. | OTIM | 500 | - | 108 | 71 | 66 | 16 | 15 | 21 | 19 |
| 9. | MIU,N/AJK | 41 | 22 | - | 11 | 52 | 06 | 27 | 05 | 21 |
| | | | - | 19 | 13 | 68 | 03 | 18 | 03 | 14 |
| Т | otal | 5026 | 2902 | 2124 | | | =65.98% | | | |
| | | | | | F= | | =60.26% | | | |
| b- M=682=23.50% | | | | | | | | | | |
| | | | | | | | F=527= | - | | |
| | | | | | | | | | 1=13.589 | |
| | | | | | | | | F=347 | =16.349 | % |

As mentioned the parameters categories of age(s) of the study were categorized (a) 20-24 years, (b) 25-30 years and (c) 31 years and above. The results already summarized in table No.02 when subjected to statistical analysis showed significant difference at P 0.03 and further support with F-Crit. value of 6.1 (which is more than 1.96 (as per theoretical reference) in category (a) while

the category (b) was non-significant at P 0.08 (little above than P 0.05 (as per theoretical reference) while the statistical evidence of category (c) was highly significant at P<0.002.

Table 4.2

Assessment of Students Generic Competence towards understanding their University

| S# | University | Respondents | No | . of | А | % | b | % | с | % | d | % |
|-----|-------------|-------------|------|-------|----------------|----------|-----------|----------|-----------|----------|-----------|----------|
| | 5 | 1 | Stuc | lents | | | | | | | | |
| | | | М | F | • | | | | | | | |
| 1. | AIOU | 1776 | 926 | | 185 | 20 | 222 | 24 | 232 | 25 | 287 | 31 |
| | | | | 850 | 179 | 21 | 212 | 25 | 221 | 26 | 238 | 28 |
| 2. | IIUI | 206 | 124 | | 22 | 18 | 25 | 20 | 35 | 25 | 42 | 34 |
| | | | | 82 | 17 | 21 | 19 | 23 | 21 | 26 | 25 | 30 |
| 3. | NUML | 301 | 166 | | 14 | 23 | 14 | 24 | 15 | 25 | 16 | 28 |
| | | | | 135 | 27 | 20 | 34 | 25 | 35 | 26 | 39 | 29 |
| 4. | U/Pb | 308 | 136 | | 33 | 24 | 35 | 25 | 37 | 28 | 32 | 23 |
| | | | | 170 | 20 | 22 | 4.4 | 24 | 15 | 26 | 40 | 26 |
| 5. | U/Kchi | 347 | 128 | 172 | 38 26 | 22 20 | 44 33 | 24 26 | 45 33 | 26 26 | 40 36 | 26 28 |
| 5. | U/Kelli | 547 | 120 | 210 | | | | | | | | |
| 6. | U/Pesh | 920 | 626 | 219 | 44 144 | 20 23 | 55 150 | 25 24 | 05 163 | 27 26 | 61 169 | 28 27 |
| 0. | U/Pesh | 920 | 020 | 294 | 68 | 23 22 | 130 74 | 24 25 | 74 | 20 25 | 109 79 | 27 |
| 7. | U/Bal | 819 | 574 | 294 | 126 | 22 | 138 | 23 | 144 | 25 | 166 | 28 29 |
| /. | 0/Dui | 017 | 571 | 245 | 56 | 23 | 61 | 25 | 64 | 26 | 64 | 26 |
| 8. | U/AJK | 308 | 200 | 210 | 48 | 24 | 50 | 25 | 50 | 25 | 52 | 26 |
| 0. | U/AJK | 308 | 200 | 108 | 48 24 | 24 | 26 | 23 24 | 27 | 23 25 | 32 31 | 20 29 |
| 9. | MIU,N/AJK | 41 | 22 | 100 | 05 | 22 | 05 | 24 | 67 | 26 | 16 | 2) 27 |
| 9. | WIIU,IN/AJK | 41 | 22 | 19 | 03 | 23 21 | 05 | 24 24 | 05 | 20 | 05 | 27 |
| Tot | al | 5026 | 2902 | 2124 | | | =20.78 | | 05 | 21 | 05 | 20 |
| 100 | | 2020 | 2902 | 2121 | | | = 21.5 | | | | | |
| | | | | | | | M=672 | | 16% | | | |
| | | | | | F=530=24.95% | | | | | | | |
| | | | | | c-M=776=26.74% | | | | | | | |
| | | | | | | | F=4 | 97=23 | 3.40% | | | |
| | | | | | | | | | 816=2 | | | |
| | | | | | | | | F= | 582=2 | 7.40% | Ď | |

This parameter, along with other 07 parameters of the study was categorized in four scoring achievement as 20-25% for (a), 26-50% for (b), 51-75% for (c) and 76-100% for (d) score evaluated in the total respondent students (n-5026) across gender with M=2902 and F=2124.it was found that 603 M students showed scoring mean value as 20.78% in (a) 672 students as 23.16 in (b), in (c) 497 as 23.40% and in (d) 816 students were recorded with 28.12% respectively. Simultaneously the females recorded as 457=21.52 in (a), 530=24.95% in (b), 497=23.40% in (c) while 582 27.40% in (d) category,

respectively as displayed in table No.4.2.

Although we will discuss the statistically evaluated evidence in the later part later, yet it can be seen that the students gained generic competence in their institutions (Universities) with successes increase both in M and F from 70.88% to 93.00% and from 48.48% to 63.77% indicates a positive impact on the students' generic competence.

Table 4.3

| Evaluation of Students | annania anna | notowaa through | on uni on la una | and cullabi |
|------------------------|--------------|-----------------|------------------|-------------|
| Evaluation of Students | generic comp | selence inrough | curriculum | ana synadi |

| S# | University | Respondents | No | . of | a | % | b | % | с | % | D | % |
|--------|------------|-------------|------|-------------|---------------------------------|------|-------------------|----|-----|----|-----|----|
| | | | | lents | | | | | | | | |
| | | | М | F | | | | | | | | |
| 1. | AIOU | 1776 | 926 | | 185 | 20 | 241 | 26 | 278 | 30 | 222 | 26 |
| | | | | 850 | 153 | 18 | 20 | 24 | 272 | 32 | 221 | 26 |
| 2. | IIUI | 206 | 124 | | 25 | 20 | 31 | 25 | 33 | 27 | 35 | 25 |
| | | | | 82 | 17 | 21 | 18 | 22 | 23 | 28 | 24 | 29 |
| 3. | NUML | 301 | 166 | | 38 | 23 | 38 | 23 | 43 | 26 | 47 | 28 |
| | | | | 135 | 30 | 22 | 34 | 25 | 36 | 27 | 35 | 26 |
| 4. | U/Pb | 308 | 136 | | 29 | 21 | 33 | 24 | 35 | 26 | 39 | 29 |
| | | | | | | | | | | | | |
| _ | | | | 172 | 31 | 17 | 43 | 25 | 48 | 28 | 50 | 29 |
| 5. | U/Kchi | 347 | 128 | 2 10 | 24 | 19 | 33 | 26 | 35 | 27 | 36 | 28 |
| 6 | | 020 | (2)(| 219 | 53 | 24 | 55 | 25 | 55 | 25 | 56 | 26 |
| 6. | U/Pesh | 920 | 626 | | 138 | 22 | 157 | 25 | 163 | 26 | 168 | 27 |
| _ | TT/D 1 | 010 | | 294 | 59 | 20 | 71 | 24 | 79 | 27 | 85 | 29 |
| 7. | U/Bal | 819 | 574 | 2.45 | 132 | 23 | 144 | 25 | 149 | 26 | 149 | 26 |
| 0 | TT/ A TT | 200 | 200 | 245 | 51 | 21 | 56 | 23 | 67 | 27 | 71 | 29 |
| 8. | U/AJK | 308 | 200 | | 48 | 24 | 50 | 25 | 50 | 25 | 52 | 26 |
| | | | | 108 | 22 | 20 | 28 | 26 | 29 | 27 | 29 | 27 |
| 09 | MIU,N/AJK | 41 | 22 | 10 | 04 | 29 | 05 | 23 | 06 | 25 | 07 | 30 |
| TT / 1 | | 5026 | 2002 | 19 | 04 | 21 | 05 | 24 | 05 | 27 | 05 | 28 |
| Total | | 5026 | 2092 | 2124 | | | 21.47% = 19.77 | | | | | |
| | | | | | | | | | | | | |
| | | | | | b- M-732=27.29% F=330=15.54% | | | | | | | |
| | | | | | c-M-792=27.29% | | | | | | | |
| | | | | | F=641=30.18% | | | | | | | |
| | | | | | | | 26.02% | | | | | |
| | | | | | | 0=24 | | | | | | |
| | | | | | | | | | | | | |

The cumulative response(s) of male students of 623,732, 792 and 755 in a,b,c and d category showed scores of 21.47%, 25.22%, 27.29% and 26.2% respectively female students 420,330, 641 and 755 of four categories showed 19.77%,15.54%, 30.18% and 24.95% generic competence developed through academic material respectively as appear in table No.4.4

Apparent individual difference can be seen in M-Students towards increase an decreasing number of F-Students in all the four categories of a,b,c and d but the average mean value cane be observed towards successive increase in one category after the other. The statistical analysis evidence has been discussed in the last paragraph of this write-up on academic competence of the students. Table 4.4

| Individual Differences | Scoring of | [°] University | Students | generic | Competence | in | | | |
|------------------------------------|------------|-------------------------|----------|---------|------------|----|--|--|--|
| utilizing documents based learning | | | | | | | | | |

| S# | Universities | Respondents | No. of | | А | % | b | % | с | % | d | % | |
|----|--------------|-------------|---------------|------|-------|-----------------|--------|----|-------|------------------------------|--------|----|--|
| | | | Students | | - | | | | | | | | |
| | | | М | F | | | | | | | | | |
| 1. | AIOU | 1776 | 926 | | 139 | 15 | 222 | 24 | 278 | 30 | 287 | 31 | |
| | | | | 850 | 119 | 14 | 221 | 26 | 238 | 28 | 272 | 32 | |
| 2. | IIUI | 206 | 124 | | 20 | 16 | 31 | 25 | 36 | 29 | 37 | 30 | |
| | | | | 82 | 11 | 13 | 22 | 27 | 23 | 28 | 26 | 32 | |
| 3. | NUML | 301 | 166 | | 28 | 17 | 36 | 22 | 46 | 28 | 55 | 33 | |
| | | | | 135 | 20 | 15 | 34 | 25 | 39 | 29 | 42 | 31 | |
| 4. | U/Pb | 308 | 136 | | 19 | 14 | 38 | 28 | 38 | 26 | 41 | 39 | |
| | | | | | | | | | | | | | |
| | | | | 172 | 31 | 18 | 41 | 24 | 48 | 28 | 52 | 30 | |
| 5. | U/Kchi | 347 | 128 | | 21 | 16 | 33 | 26 | 36 | 28 | 38 | 30 | |
| | | | | 219 | 37 | 17 | 50 | 23 | 50 | 27 | 72 | 33 | |
| 6. | U/Pesh | 920 | 626 | | 88 | 14 | 157 | 25 | 174 | 28 | 207 | 33 | |
| | | | | 294 | 45 | 15 | 76 | 26 | 85 | 29 | 88 | 30 | |
| 7. | U/Bal | 819 | 574 | | 75 | 13 | 143 | 25 | 155 | 27 | 201 | 35 | |
| | | | | 245 | 39 | 16 | 66 | 27 | 71 | 29 | 69 | 28 | |
| 8. | U/AJK | 308 | 200 | | 34 | 17 | 50 | 25 | 56 | 28 | 60 | 36 | |
| | | | | 108 | 16 | 15 | 26 | 24 | 28 | 26 | 38 | 35 | |
| 9. | MIU,N/AJK | 41 | 22 | | 03 | 13 | 06 | 26 | 06 | 29 | 07 | 32 | |
| | | | | 19 | 03 | 18 | 05 | 25 | 05 | 27 | 06 | 30 | |
| | Total | 5026 | 2902 | 2124 | a- M. | a- M-427=15.11% | | F | =321= | =11.069 | 0/ | | |
| | Total | 2020 | 2702 | 2121 | | | 24.67% | | | - | 26.32% | | |
| | | | | | | | 28.43% | | | | | | |
| | | | | | | | 32.15% | | | F=587=27.64% F=665=31.31% | | | |

Based on documents/ literature learning as well as E-learning one of the parametric aspect of the study targeted as parameter for response of University students in achieving generic competence M students percentage as 15.11%, 24.67%, 28.43% and 32.15% (c) and (d) whereas the female students numbering 321, 559, 587 and 665 scores 11.06%, 26.32%, 27.64% and 31.31% respectively.as appear in table No.05 respectively. It can be observed that in both male as well as female students, the generic competence developed evidenced a successive increase, not only in number of students but the percentage scores as well, based on documents/literature as well as e-learning in all the University

Table 4.5

Individual differences of generic competence of university students towards independence and future utilization

| | | | | | | 0 / | | 0 (| | | | | | |
|---------------|------------|-------------|------|----------|--------|----------------------------------|-------|--------------|--------|--------------|-------|----|--|--|
| S# | University | Respondents | | . of | А | % | В | % | с | % | d | % | | |
| | | | | Students | | | | | | | | | | |
| | | | М | F | | | | | | | | | | |
| 1. | AIOU | 1776 | 926 | | 185.2 | 20 | 231 | 25 | 250 | 27 | 260 | 28 | | |
| | | | | 850 | 187 | 22 | 221 | 24 | 238 | 26 | 204 | 28 | | |
| 2. | IIUI | 206 | 124 | | 26.04 | 21 | 28.52 | 23 | 31 | 25 | 38.44 | 31 | | |
| | | | | 82 | 16.4 | 20 | 18.04 | 22 | 19.68 | 24 | 27.88 | 34 | | |
| 3. | NUML | 301 | 166 | | 33.2 | 20 | 39.84 | 24 | 28.22 | 27 | 48.14 | 29 | | |
| | | | | 135 | 25.65 | 19 | 31.05 | 23 | 35.10 | 26 | 43.20 | 32 | | |
| 4. | U/Pb | 308 | 136 | | 29.92 | 22 | 32.64 | 24 | 35.36 | 26 | 38.08 | 28 | | |
| | | | | | | | | | | | | | | |
| | | | | 172 | 39.56 | 23 | 43 | 25 | 43 | 25 | 46.44 | 27 | | |
| 5. | U/Kchi | 347 | 128 | | 29.44 | 23 | 30.72 | 24 | 33.28 | 26 | 34.56 | 27 | | |
| | | | | 219 | 45.99 | 21 | 52.56 | 24 | 59.13 | 27 | 61.32 | 28 | | |
| 6. | U/Pesh | 920 | 626 | | 125.2 | 20 | 137.7 | 22 | 150.2 | 24 | 212.8 | 34 | | |
| 0. | en esti | 920 | 020 | 294 | 55.86 | 19 | 67.62 | 23 | 85.26 | 29 | 85.26 | 29 | | |
| 7 | U/D-1 | 910 | 571 | _,. | | | | | | | | | | |
| 7. | U/Bal | 819 | 574 | | 86.1 | 15 | 137.7 | 24 | 172.2 | 30 | 172.2 | 30 | | |
| | | | | 245 | 34.3 | 14 | 68.6 | 28 | 68.6 | 28 | 73.5 | 30 | | |
| 8. | U/AJK | 308 | 200 | | 30 | 15 | 52 | 26 | 58 | 29 | 60 | 30 | | |
| 0. | 0,11011 | 200 | 200 | 108 | 15.12 | 14 | 29.16 | 27 | 31.32 | 29 | 32.4 | 30 | | |
| 9. | MIU,N/AJK | 41 | 22 | 100 | 4.18 | 19 | 5.5 | 25 | 5.94 | 27 | 6.38 | 29 | | |
| | | •• | | 19 | 3.42 | 18 | 4.56 | 24 | 5.51 | 29 | 5.51 | 29 | | |
| Total 5026 29 | | 2902 | 2124 | a-Male | -548-1 | | | F=414=19.49% | | | | | | |
| 1 | | 2.520 | 2702 | 2121 | b-M=6 | | | | F=537= | | | | | |
| | | | | | | | | | | F=587=27.59% | | | | |
| | | | | | | c-M=763=26.29% d-M=870=29.98% | | | | F=580=27.31% | | | | |
| | | | | | | | 1 .1 | | | | | 6 | | |

Although the individual differences existed in the generic competence of (i) thorough (ix) universities across gender the cumulative percentage scoring achievement of male categories of (a), (b) , (c) and (d) were found as students numbering 548, 698, 763 and 870 in 18.88%, 24.05%, 26.31% and 29.98% while the averaged percentage scores of F-students appeared as categorized as presented in table No.08. 19.49%, 25.28%, 27.59%, out of 414, 537, 587 and 580 students respectively presented in table No.08. It is also observed as recorded the percentage scores evidenced a successive increase both male and female students in developing generic competence, for future use.

5. Discussion

The findings indicated that the independence or future utilization of generic competence achieved in the universities whereas independent/future utilization of their competences acquired in the universities, was very close to the males. Interestingly why there appear the slogan of equal opportunity to gender-

issue, in every nook and corner, competencies, since existed across gender, this parameter provided a crux of this study, as can be seen the closely related percentages of both males and females students, in a handsome representative sample of universities of Pakistan. The findings have been in closely reciprocal findings in various researchers' work like Diaz et.al (2016) and Velenicia, Ali, Jandra, Garcia and Sema (2018).

Researchers have shown reservation not only in Pakistan by Shah et.al (2017), researchers from abroad (the work of whom has been referred to above), have critical approach as to how university graduated (or post-graduated) students' (both males and females) get adjusted to relevant jobs, in their specific fields of specialization (mostly in Masters of Arts despite generic competence towards independence and for future utilization. The Universities categorized as institutions of Higher Learning (IHLs) and/or Institutions of Higher Education (IHEs), both in private and public universities. Tang et.al (2013) stressed in producing graduates using Information Communication and Technology (ICT) skills. The findings of lee Lai Fong et.al (2013) out of 99 graduates showed reservations in Malaysia, as Not developed competence for (a) employability and leadership skills, together with (b) English Language Skills and next confident with regard to the (c) acquisition of critical and creative thinking skills.

In addition to futuristic approach, as development of individual and independent competence acquired in the institutions of higher learning, one of the important factors, although not included in the parametric scoring, but indicative in the response(s) of students had been the employability oriented competence which the majority of respondents, had reservations, as such skills were taught in the curricula or syllabi, in any of the institutions of Higher Learning. Gilmore (2018); Mak et.al (2016); Fransisco et.al (2018); Singham et.al (2014); Padmakali and Kamar (2016) worked on MBA students making them more employable while Patil (2012) had also reservations on the employability (as 23% of 100,000 MBAs produced in India) form Morera (2012) referring to conference Board of Canada's Employability Skills (CBCES-2000). Referring to Socio-Technical E-Learning Employability System of measurement (STELEM) to cope with the large amount of challenges that currently existed.

Azmi et.al (2018) showed optimism towards preparation of students of Higher Learning towards competencies be developed with lesser percentage with futuristic approach of employability. Advocating to skill enhancement and skill development towards employability attributed to work-Integrated learning (WIL) considered as key strategy targeted as futuristic approach. Researchers such as Lee Lai Fong et. al (2013) producing students competent, enabling them excel in the era of 21st country.

The employability skills that have been investigated are enumerated as 12 by Azmi (2018). These skills were counted as 07 in their study by Fong (2013) while, these parameters defined were 06 found by Mok et.al (2017). Furthermore, Jayasingham et.al (2016) found 06 parameters investigated towards employability.

6. Conclusions

Following were the conclusions of the study:

- 1. It is concluded that that the generic competence in students are increased with the duration of time spent in Universities. Furthermore the generic competencies of male students were better than females.
- 2. It is concluded that major competencies are developed in early phase, and average competencies developed in the mid phase and least competencies developed in the last phase of the students' life in University.
- 3. The institutional based generic competencies was recorded as successively increasing with passage of time, during the study. The academic based generic competence was recorded minimum in early university life to maximum in the final stages in the university. The generic Competence outcomes were found better with teachers' guidance and patronage as respondent by waste majority of the students. The academic competencies was recorded average (as per respondents view) indicating a sufficient quantity of texts of syllabus and curriculum set forth for then by the university academia.
- 4. Generic competence developed as respondent by students, based on learning through documentation (published Journals ICT, E-learning and computer mediated) with the passage of time in the university. The futuristic approach and independence in generic competence as responded lesser in female students while the males was found better in the duration of their studies in the university.
- 5. It is concluded from the study that the generic competence the subject of generic competence is needed to be taught at university level. It is further concluded that since many countries provide generic competence training skills towards employability be included as an additional effort towards employability.

7. Recommendations

Following recommendations are made on the basis of conclusions:

- 1. It is recommended that the subject of generic competence be included in the core courses of taught material at the University level.
- 2. It is also recommended the generic competence towards futuristic

approach and specifically the employability competence be added as a short training skills program which can be offered as obligatory, to outgoing students across gender.

3. It is suggestively proposed in this context that the lecture materials can be got prepared from subject specialist which may be used for providing generic competence and training skills towards employability oriented (TCP) oriented subject to pass the examination given by the teachers (the pass scoring may not be less than 80%). As for example now a days all the written test examination (screening tests) not only by NTS Pakistan Testing Service (PTS) as well as Federal Public Service Commission (FPSC) Tests clearly notify on the top of the Question paper that qualifying marks are 80%.

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