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Gender Profiles of Students´ Academic Activity in The Higher Education In Indonesia: (A Study in The University of Muhammadiyah Malang)

Trisakti Handayani [1], Wahyu Widodo [2]

[1]University of Muhammadiyah Malang, Indonesia, Professor at University of Muhammadiyah Malang, Lecturer at University of Muhammadiyah Malang,trisakti@umm.ac.id,
[2]Lecturer at University of Muhammadiyah Malang, Professor at University of Muhammadiyah Malang, wahyu@umm.ac.id

Abstract

This research aimed to describe gender profiles of the academic students´ activity in the higher education in Indonesia. The design of this research was descriptive using a quantitative approach, supported by qualitative approach. This research was conducted in University of Muhammadiyah Malang (UMM), with the heterogeneity of students from all over Indonesia, representing the diversity of cultures. This research was conducted from March to August 2016. Quantitative data were obtained from the documents of the student bureau at UMM in the form of gender education indicators. The interview was conducted to the lecturers and UMM leaders. Qualitative data were in the form of written data, also some supporting sources: books and magazines, official documents from laws and decisions of the government and UMM. UMM has some departments with the unbalanced number of students categorized by sex. Some departments have a higher number of female students, such as: psychology, nursing, English language education, etc. Whereas, some departments have a higher number of male students, such as: engineering, medical science, law, etc. A selection based on sex is still very visible. Women mostly choose study fields according to public perception by nature; while men mostly choose study fields according to their gender.

Keywords: academic activity; students; gender

1. Introduction

Higher education is an academic institution that produces agents of change in all aspects of life. One of them is requested to support gender equality. However, gender inequality is still evident in academic life (California Postsecondary Education Commission 2006, Brown 2014, Ferree & Zippel 2015, Kleinfeld & Andrews 2006, Morley 2008, Ledwith & Manfredi 2000, Vallejo et al. 2016, Dc & John

2012, (Lie & Malik 2014, O'Connor et al. 2015) . One of the actors in higher education is the student. Students, including students in Indonesia, are involved as agents of change, meaning that they are expected to contribute to academic life (especially are involved to overcome gender inequality).

Indonesia has ranked 90 in 2012 in the Global Gender Gap Index, decreasing from 89 in 2011. Although women and men in this country are enrolled in basic education in almost equal numbers, women still make up a fairly low percentage of the workforce, particularly in senior and highly-skilled positions (Rose 2015,Ledwith & Manfredi 2000, Teelken & Deem 2013, Henwood, 2000, Rieglecrumb & Humphries 2012). Higher education in Indonesia has not revealed significant results to produce woman workforce equal with men

There are gender disparities in higher education life in Indonesia and to get a clearer picture about the students' academic activity, it is essential to conduct a research on "Gender Profiles on the Students´

Academic Activity in Higher Education in Indonesia". The formulation of the research problem is as follows: how are gender profiles of students´ academic activity in the higher education in Indonesia? In other words, this current research aimed at describing the gender profiles of the students´ academic activity in the higher education in Indonesia.

2. Literature Review

Research from (Handayani, and Widodo 2017) have investigated and revealed that in University of Minho, Braga, Portugal, there was gender inequality that put male students at disadvantages regarding academic activities. Female students got benefits from a variety of academic activities and academic facilities. Female students were easier to get access to get involved in academic activities and use academic facilities. Male students were less involved in taking part in academic activities and making use of academic facilities. Indirectly, there occurred gender-based marginalization in the academic field. In this case, it can be seen that there was gender-based marginalization that has put male students at disadvantages in academic activities and facilities.

This exploratory study of women students at a university in Delhi showed that the family and the school were the key institutions that shaped their choice of subjects. In the family, the father played a prominent role in deciding the subject choice, and gender mediated the entire decision-making process. At the undergraduate level, women's subject choice was compromised by concerns related to their gender. Priority was given to the institution, to its location and to the availability of an attached hostel, rather than to the subject or discipline (Gautam 2015)

The findings which are conceptually grounded in the distinction between structural/institutional and individual issues facing women in science—have implications for understanding gender, science, and higher education, and for initiatives undertaken to improve the condition of women in scientific fields. The findings may also inform strategic efforts to reduce gender disparity in other organizational contexts (Fox, 2011).

However, we find evidence of a consistent bias against white females, which although relatively small in magnitude, suggests that teachers hold the belief that math is just easier for white males than it is for white females. In addition, we find some evidence of variation across course level contexts with regard to bias. We conclude by discussing the implications of our findings for research on the construction of gender inequality (Riegle-crumb & Humphries 2012)

According to the 2010 national census, the population of Indonesia is 237,641,326 (50.17% men and 49.83% women), with high population growth at 1.9%. The population living in Java Island is about 58%, the world's most populous island. In 1961, the first post-colonial census gave a total population of 97 million. The population is expected to grow to around 269 million by 2020 and 321 million by 2050. Additional 8 million Indonesians live overseas, comprising one of the world's largest diasporas. Most of them settled in Malaysia, Saudi Arabia, United Arab Emirates, South Korea, Japan, Singapore, Netherlands, United States, and Australia (BPS-Statistics Indonesia, 2010).

Although the illiteracy rate has been decreased annually, the literacy rate among female (94.96%) is lower than male (98.30%) in 2013. The government aims for zero illiteracy and is implementing the activities for illiteracy eradication in areas with high illiteracy rates. In vocational schools, women take courses on domestic and dependent works (such as administrative); whereas men choose technical and industrial majors (BPS-Statistics Indonesia, 2011).

According to the report by United Nations Educational Scientific and Cultural Organizations (UNESCO), in 2008, the enrolment rate in higher education was 21% in total, 22% for boys, and 20% for girls; therefore, more boys have taken higher education than girls. Students tend to take courses in accordance with gender roles, for example girls choose social sciences and boys choose technical sciences.

According to BPS-Statistics Indonesia (2011), the literacy rate among over 15-year-olds is 92.58% (in 2009). The literacy rate among young people (15-24 years old) is over 98% both in urban and rural areas. However, there are still disparities by gender and region. While the literacy rate among males aged over 15 is 95.65%, the rate for females is 89.68%. In particular, there is a wide gap between men and women in rural areas, with a 93.46% literacy rate among men and 85.62% for women.

3. Methodology

The design employed in this research was descriptive using a quantitative approach and was supported by qualitative approach. Both were intended to reveal the marginalization of gender issues holistically. Quantitative terms were expected to reveal how severe gender marginalization occurred; while qualitative terms were expected to reveal why the marginalization of gender occurred on students' academic culture. This research was taken place in Malang City, to be specific in University of Muhammadiyah Malang (UMM). This research was conducted in UMM. UMM was chosen as it is one of the big universities in Indonesia. UMM also has heterogeneity of students who come from all over Indonesia, so it can represent the diversity of cultures in Indonesia.

The main data in this research were the quantitative data; while the qualitative data were the supporting data in the form of words and verbal or written statements related to the marginalization of gender on students' academic activity. The data in this research were deriving from two sources, namely primary and secondary data. The Primary data were derived from informants in the form of words, indepth interviewing the lecturers and university leaders in UMM. Secondary data were collected in the form of documentations or records including legislations, books, journals, modules, magazines, newspapers, the internet, and other supporting information about the marginalization of gender on students' academic culture in UMM. Quantitative data were obtained from the documents of the student bureau at UMM in the form of gender education indicators. The interview was conducted to the lecturers and UMM leaders to tap further information about gender problems. Qualitative data were in the form of written data and photographs. This current research also used some supporting sources, namely: books and scientific magazines, archives and official documents originating from laws, regulations, and the decisions made by the government and UMM.

There were four criteria that can be used in the technical data validity, namely: a) credibility; b) transferability; c). dependability; and d. conformability. The validity test of this research was credibility test. Test of credibility was performed by extending the observation activities, increasing diligence in research, triangulation, discussions with colleagues, negative case analysis, and member check. Triangulation is a technique to check the validity of the data by using something other than the data itself, for the purpose of checking or as a comparison against the data. Triangulation can be done by variety of ways, namely source triangulation, technique/method triangulation, time triangulation, theory triangulation, and researcher triangulation. This research used two kinds of triangulation, namely source triangulation and technique triangulation.

4. Findings and Discussion

Based on the information from University of Muhammadiyah Malang, this University has three main buildings: Campus I located on Jl. Bandung, Campus II located on Jl. Bendungan Sutami, and Campus III, as the main campus, located on Jl. Raya Tlogomas. University of Muhammadiyah Malang is currently one of the most prestigious institutions of higher education in the country, Indonesia, and it has also gradually come to assert itself into the international academic world.

University of Muhammadiyah Malang has vision to become the leading university in the development of science, technology, and art (IPTEKS) based on the Islamic values. The mission is (a) to conduct quality education; (b) to conduct research and community service to improve human welfare; (c) to carry out

trustworthy university management; (d) to organize the academic community to live Islamic life, so as all academia can be good role models for others (*uswah khasanah)*; and (e) to organize mutual cooperation with other parties in the development of science, technology, and arts.

University of Muhammadiyah Malang was founded in 1964 and initiated by the figure of Muhammadiyah Leadership in Malang. University of Muhammadiyah Malang has

Undergraduate/Bachelor programs (10 faculties), Graduate Study/Master Programs, and PostGraduate/Doctorate Programs. In detailed, there are: 38 Undergraduate/Bachelor Programs, 11 Graduate Study/Master Programs, 3 Post-Graduate/Doctorate Programs, and 4 Study Programs of Profession. The lecturing processes are conducted in the 3 campuses; these are: Campus 1 (Master and Doctoral Program), Campus II (Faculty of Medical Science and Faculty of Health Science), and the rest is conducted in Campus III. UMM has several faculties, they are: Islamic Studies, Social and Political Science, Teacher Training and Education, Law, Economics and Business, Engineering, AgricultureAnimal Husbandry, Psychology, Health and Medical Science. Besides, it also manages Master and Doctoral programs.

Institutionally, University of Muhammadiyah Malang is accredited"A"by National Accreditation Board of Higher Education (BAN-PT) Ministry of Education and Culture Republic of Indonesia in

2013. Before that, in 2008, UMM was accredited "B". Beside BAN-PT, UMM has also got Two Stars from QS star (England), accredited by KNAPP (Accreditation National Commission of Research and Development Institution), and accredited "Good" (BS EN ISO 9001) from NQA Global Assurance for Financial Bureau, Academic Administration Bureau and Bureau Student Affairs, Audited Financial Affairs from MTD Registered Public Accountants (MTD No. AU-050/MTD/MLG/VI/2012), etc. Beside the accreditation in university level, almost all existing study programs have gained accreditation from BAN-PT.

At this time, University of Muhammadiyah Malang educates in total of 28,110 students in Diploma, Undergraduate, Graduate, and Postgraduate programs. The students study in various study fields; they are: social, exact, and religious studies. UMM students come from almost all provinces in Indonesia; even several of them come from foreign countries such as: Malaysia, Singapore, Timor Leste, Australia, and some Middle-East countries. Especially for foreign students, some of them study within the schemes of ACICIS, BIPA, and Darmasiswa program. They are spread across 58 departments of both undergraduate and postgraduate programs. The number of male students is 14,712 while the number of female students is 13,398 students. The spread of students in each department can be seen in Table 1.

Table 1 Student Body at University of Muhammadiyah Malang in the Year 2016

FACULTY	DEPARTMENT	TOTAL NUMBER			FACULTY	DEPARTMENT	TOTAL NUMBER		
		M	F	T			M	F	T
Engineering	Electronic	111	7	**118**	Medical Science	Medical Education	189	571	**760**
	Electrical	699	48	**747**		Medical Department	97	189	**286**

	Industrial	418	127	**545**		Medical Profession	86	215	**301**
	Informatics	1084	235	**1319**	Social and Politic Science	International Re.	392	468	**860**
	Mechanical	813	32	**845**		Social Welfare	141	156	**297**
	Civil	755	164	**919**		Communication	980	764	**1744**
Psychology	Psychology	343	925	**1268**		Governmental	407	208	**615**
Law	Law Science	880	476	**1356**		Sociology	214	153	**367**
Agricultural and Animal Husbandry	Agribusiness	297	254	**551**	Teacher Training and Education	Indonesian Ed.	164	362	**526**
	Agro-technology	312	252	**564**		English Ed.	390	756	**1146**
	Fishery	205	80	**285**		Biology	131	493	**624**
	ITP	120	358	**478**		Mathematics	162	460	**622**
	Forestry	212	75	**287**		PGSD	322	842	**1164**
	Animal Science	370	89	**459**		Civic Education	112	77	**189**
Economics and Business	Accounting	655	779	**1434**	Graduate and PostGraduate	Social Sci (Doctoral)	28	6	**34**
	Finance and Bank.	129	235	**364**		Islamic (Doctoral)	40	5	**45**
	Developmental Economics	565	352	**917**		Islamic Studies	30	8	**38**
	Management	1200	705	**1905**		Agribusiness	36	24	**60**
	Accounting Prof.	5	8	**13**		Indonesian Ed.	24	30	**54**
Islamic Studies	Sharia	128	56	**184**		English Ed.	20	42	**62**
	Sharia Economics	131	132	**263**		Law	46	25	**71**
	Arabic Language Education	29	22	**51**		MKPP	78	41	**119**
	Tarbiyah (Islamic Teaching)	221	142	**363**		Management	93	61	**154**
Health Science	Physiotherapy	143	199	**342**		Mathematics Ed.	67	67	**134**
	Nursing(D3)	79	164	**243**		Psychology Prof.	19	31	**50**
	Pharmacy	175	795	**970**		Psychology	22	47	**69**

Nursing (S1)	232	468	**700**	Sociology	52	27	**79**
Nursing Profession	59	91	**150**	**TOTAL NUMBER**	**14712**	**13398**	**28110**

Based on the presented data, there are some departments that have unbalanced number of students categorized by sex. Some departments have a higher number of female students, such as psychology, nursing, English language education, and primary school teacher education. Whereas, some departments have a higher number of male students, such as: electrical engineering, industrial engineering, informatics engineering, mechanical engineering, civil engineering, medical science, and law. Noticing the science fields, a selection based on sex is still very visible. Women mostly choose study fields according to public perception in accordance with nature; while men mostly choose study fields according to their gender.

That statement is also supported by the opinions of 3 out of 10 academic staffs. One person told "By preference, we see their interest on the field of study of male students inclined more to the field of politics; and female students prefer the realm of education. However, all of them must actually be taken by all students here." The other person told "Most male students prefer the specializations that require physical forces, such as emergency in medical science. By preference based on various considerations, all students (male and female) are choosing medical science because of its potential to get higher income and greater prestige." The third person told "Their preference is because of gender bias from hiring companies. Large companies, such as mining and timber companies, request male workers."

The aforementioned results are supported by Anonymous (2015) that women are still "underrepresented" in jobs related to science, technology, engineering and mathematics, which can be one of the highest earning careers. Gender differences can be the key issue. Although women may achieve better academic results, there is still a reluctance to apply for certain jobs. Parents may be more likely to urge their boys to careers in science and technology. Girls received a very poor portion in science than boys, with a far greater gap than most other countries. This has nothing to do with genetic issue; this is more to cultural issues.

There is a long-term international trend regarding that girls achieve better results at school, and young women are more likely to continue their education to university than young men. Boys more likely perform poorly in mathematics, reading, and that underachieving boys are more likely to drop out of school and become the men that have no ability whatsoever. Boys tend to spend more time playing video games than girls and are less likely to take the time to do homework. However, boys also generally tend to stand out among those who excel in math and science. Girls who emulate boys in these subject areas still tend to be reluctant to continue to pursue expertise in math and science, or choose a career in those fields. In developed countries, among students with similar abilities, boys are four times more likely to consider a career as a computer expert or engineer or an expert in technology.

Susanti (2015) has proposed a solution to the problem about gap in the selection of department with her statement that gender has to be included in higher education curriculum, such as gender as a course of its own, according to the knowledge, such as Sociology of Gender, Anthropology of Gender, Gender and Psychology, as well as the Gender and Development. Gender is integrated in certain areas (official policy, course materials, scholarship opportunities, research, etc). The development of gender matter in each college/faculty/department is specifically and highly dependent on the creativity and the "struggle" of each academia. It is of urgency to develop modules for gender-related courses in higher education. We can compile gender course textbook for higher education. An understanding on gender issues requires the further deeper study on the field of gender specific issues and in service learning activities. It is not necessary to merely use Woman Study Center, but we can take advantage of other relating institutions. We can look for a contact person as a gender focal point in each faculty and attend special meetings of gender teaching groups.

In the other research was found the results support our research as what was particularly interesting about the findings of our research was the contradiction between women's competence, as measured via assessments and the judgement of an outside observer, and their own subjective experience of technical competence, which, as I have suggested, was undermined by the existence of dominant discourses that continued to assert women's technical incompetence. Rather than leaving individual women to struggle with this tension alone, I suggest that education has a key role to play in the identification and deconstruction of such discourses. Furthermore, I would argue that it is precisely by exploring the tension between the structural, the individual and the symbolic aspects of gender that arise when women acquire technical skills that a productive starting point for such deconstructionist approaches in IT education can be found (Henwood, 2000.)

From result above there is suggest from Ferree & Zippel (2015) universities are unlike either state bureaucracies or private businesses in that they "are important sites where knowledge is defined and reproduced, and it is also here that the contestation of meanings and significations of the symbolic order comprising knowledge systems is manifest." Academia is an unusually inward-looking, self-reflexive, and socially powerful site of contestation over the meanings and values of societies' institutions, and struggles over what kind of knowledge matters are played out especially openly and extensively in its precincts. Thus, it may be most useful for Cassandra and Pollyanna to sit down together and reflect on the different perspectives they bring to gender transformation. This would retrieve gender knowledge from the realm of "expertise" and return it more explicitly to the domain of politics, reducing the effects of technological managerial expectations and reviving feminists' propensity for disruption and provocation.

5. Conclusion

University of Muhammadiyah Malang has some departments with the unbalanced number of students categorized by sex. Some departments are detected to have a higher number of female students, such as: psychology, nursing, English language education, and primary school teacher education. However, some departments have a higher number of male students, such as: electrical engineering, industrial engineering, informatics engineering, mechanical engineering, civil engineering, medical science, and law. Regarding the choice of science fields, students' preference based on sex is still highly noticeable. Women mostly choose study fields according to public perception in accordance with nature; while men mostly choose study fields according to their gender.

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