Article

The Gender Gap and Career Path of the Academic Profession Under the Civil Service System at a Religious University in Jakarta, Indonesia

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Abstract

In this article I argue that male academics under civil servant system in a religious university still dominate the highest academic positions. This study applies logistic regression (binary and ordinal regression) since the available data, especially for dependent variable, is categorical and it does not fulfil the assumption of ordinary least square. By applying ordinal regression, gender is found to be undetected compared to other variables (age, length of tenure, and educational qualifications). Nevertheless, a statistical analysis utilising binary regression indicates that gender is a significant factor along with length of tenure and educational qualifications. The data obtained from the religious university is made up of the curriculum vitae of 749 academics in 2012 who are nearly all civil servants at the university.

Keywords

gender gap; career path; religious university; civil servant system

INTRODUCTION

The gender gap has been described by Baker (2012, 8) as the difference in qualifications and experiences between male and female academics encompassing numerous aspects such as job security and satisfaction, rank, salary, and length of career. I argue, in this article, that the gender gap, especially for length and rank of career for academics based on the Indonesian civil service system, is sometimes unseen. Educational qualification and seniority are regarded as more significant than gender.

This article provides data pertaining to the gender gap and academic careers acquired from a religious university in Jakarta, Indonesia. Indonesia, as a country with a Muslim majority, has developed a dual system of education wherein the Ministry of Education (MoE) organises the secular education system and the Ministry of Religious Affairs (MoRA) organizes the religious education system. The presence of such dual system of secular and religious universities can be traced back to the fact that it was a quite a lengthy process for the Muslim community to accept a modern, Western style education system because the most important aspect of Islamic education is to attain absolute submission to Allah (God), and the education system is only an instrument for accomplishing that main purpose (Zakaria,

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2007). Religious education institutions such as *pesantren* and *madrasah,* formerly only taught religious subjects, but the MoRA has played an important role in integrating Western education into the Islamic education system (Thomas, 1988: 903), which includes the higher education system. *Pesantren,* the original Islamic education system prevalent throughout Indonesia, and *madrasah,* an Islamic education system found in other Islamic countries, have played a substantial role in developing Islam in Indonesia.

Universities and other tertiary education institutions in Indonesia are indeed a part of the entire education system, in that they must be analysed inherently with other education levels (the primary and secondary systems). Following the dual system discourse of primary and secondary education, the government has also implemented a dual system for tertiary education. On the one hand, the types of post-secondary institutions managed by the MoE are the Universities, Academies, and Institutes; on the other hand, the MoRA managed tertiary level institutions consist of *Sekolah Tinggi Agama Islam Negeri*/STAIN (State Islamic Studies College), *Institute Agama Islam Negeri*/IAIN (State Institute of Islamic Studies), and *Universitas Islam Negeri*/UIN (State Islamic University). This was initially called *Akademi Dinas Ilmu Agama* (ADIA), and it was subsequently called PTAIN (*Perguruan Tinggi Agama Islam)* in the nomenclature (Bull, 2013).

CAREER PATH OF ACADEMIC STAFF IN INDONESIA

Academic life and systems in Indonesia are unlike international systems. Baruch (2003) distinguishes at least thirteen features of a career academic in liberal countries such as: a free agent able to easily move from one university to another for gaining promotion; can accept multi-dimensional career paths involving around four to five stages of promotions (see Table1). In Indonesia's case, academic career advancement follows six civil service career path grades (Clark, Oey-Gardiner, 1991).

Buchori & Malik (2004) say that the management of Indonesian higher education system has been based on three pillars (*tri darma perguruan tinggi)*: education, research, and community service. These pillars were initially contained in Law 22/1961 stipulating that the development of science in Indonesia must benefit the Indonesian society. Its orientation was not only for the advancement of science itself but also for enhancing the quality of Indonesian society. This law specified that academic freedom is acknowledged in Indonesia but it does not afford the freedom to justify subversive activities. The function of higher education was to generate scholars possessing competencies such as problem solving, critical thinking, and ethics, and having emotional and intellectual capability. In order to maintain the state's founding ideology, higher education was required to teach the *Pancasila* (five pillars) and the state's political manifesto; academic staff must, therefore, have the spi-

Table 1. A comparison of career rank equivalents within an academic model

Professor	Professor	Professor	Professor	Professor
Reader/senior lecturer	Reader/ principal lecturer	Associate Professor	Professor	Upper-middle level
Lecturer B	Lecturer II	Senior lecturer	Associate Professor	Lower mid-level
Lecturer A	Lecturer I	Lecturer	Assistant/associate lecturer	Junior level
		Assistant/ associate lecturer	Instructor	Teaching staff

Source: Baruch (2003) and Clark, Oey-Gardiner, 1991

rit of *Pancasila* as well. Ideas and thoughts in higher education contradicting the Indonesian state's foundation and ideology were unacceptable, as they should mutually strengthen each other instead (ibid.257).

The ensuing government regulations are Law 30/1990 and Education Law 20/2003. The former was issued under the second President, Suharto, and the latter under the fourth President, Megawati. Based on this regulation, higher education is oriented to both science and the interest of society. Government Regulation 30/1999 mentions that academic freedom is recognised, and academic staff are able to express their opinions unrestrictedly based on scientific norms. However, people in academia cannot abuse academic freedom to conceal personal interests and they are personally accountable for their opinions.

Prior to 1999, all Indonesian permanent academic staff holding academic tenure in public universities were civil servants, and the state controlled the recruitment process, duties, and wages. However, students who have recently graduated from the university are commonly appointed as junior level teaching staff. Academics in Indonesia are required to pass a recruitment process conducted by the various relevant ministries. In addition to the Ministry of Research Technology and Higher Education (MoRTHE) and Ministry of Religious Affair (MoRA), other ministries also have specialist Higher Education Institutions such as the Ministry of Finance and the Ministry of Health. However, since 1999, some universities were granted the *Badan Hukum Milik Negara/BHMN* (State Owned Legal Institutions) status and are expected to establish their own method of recruiting students and academic staff. Tenured-academics in these five universities are, hence, not necessarily public servants. The five universities are: the University of Indonesia (UI) in Jakarta, Gajah Mada University (UGM) in Yogyakarta, Diponegoro University (UNDIP) in Semarang, Bogor Institute of Agriculture (IPB) in Bogor, and Bandung Institute of Technology (ITB) in Bandung.

Indonesia has, generally, developed a different system of promotion for academic staff based on regulations aligned with civil service ranks and regulations about teaching staff. As a civil servant, *Peraturan Menteri Pemberdayaan Aparatur Negara dan Reformasi Birokrasi No.17/2003* (Ministry of State Apparatus Empowerment and Bureaucratic Reform (MoSAEBR) Regulation 17/2013) states that academic staff must hold a Master's Degree. According to government regulation 12/2002 they will initially obtain a rank of at least III b, given based on their educational qualification. They will increase in rank to III c and d, and later IV a, b, c, d, e. In other words, the most recent regulation states that only 8 ranks are available for permanent academics in the civil service system. Nevertheless, academic staff holding the rank of IIIa still remains because the previous regulation allowed Bachelor's degree graduates to apply for academic staff positions.

Table 2. Promotion System Based on Decree 59/1987

Golongan (Level)		*Total KUM* (Amount of required credits)
Asisten Ahli Madya	IIIA	100
Asisten Ahli	IIIB	150
Lektor Muda	IIIC	200
Lektor Madya	IIID	300
Lektor	IVA	400
Lektor Kepala Madya	IVB	550
Lektor Kepala	IVC	700
Guru Besar Madya	IVD	850
Guru Besar	IV E	1000

In terms of income and career patterns, the academic staff *(dosen)* are part of the civil service system. The MoSAEBR Regulation 17/2013 has revised previous regulations pertaining to civil servants formerly under 59/MENPAN/1987. Some regulations did not change, such as that teaching staff holding an academic position are denoted as a functional position. Each academic position has a particular civil service rank, and promotion is based on cumulative credit points (KUM) covering three main activities: teaching, research, and commu-

nity service. Promotion was, previously, dependent on vacancies (Clark and Gardiner, 1991), but for academics it is mostly based on length of service and credit points. Civil servants will continue to work until retirement in their 60s (Clark and Gardiner 1991).

Based on previous research regarding remuneration practice, Hill and Wie (2013, 170) conclude that the Indonesian incentive systems are complex and poor. However, the study refers to the civil service system based on 59/MENPAN/1987. Several problems were shown in the study relating to incentives and promotion for academic staff in Indonesia which are different from other countries. Among them are that performance does not correlate with reward; peer review procedure is not implemented; numerous issues arise from internal university governance and there is a lack of supportive academic environment. Clark and Oey Gardiner (1991, in Hill & Wie 2013) found that academics only spend 30% of their time on tasks relating to their university. Another research, (Suryadarma, et al. 2011 in Hill & Wie, 2013), shows that a large portion of academic staff income was obtained from outside of their academic work such as paid research projects, consulting, and additional teaching activities. The Academic promotion system, supervised by the Directorate General of Higher Education, is exceptionally complex, and promotion at the middle and senior levels requires recommendations from the directorate.

Table 3. Promotion System Based on Decree 38/1999

Academic Rank		*Total KUM (Amount of required credits)*
Asisten Ahli	IIIB	150
Lektor Muda	III C	200
Lektor	IIID	300
Lektor Kepala	IVA	400
Professor (Guru Besar)	IV E	800

Decree 38/1999 distinguishes four ranks for teaching members: *Asisten Ahli* (junior level), *Lektor* (lower mid-level), *Lektor Kepala* (upper-mid-level) and *Professor/Guru Besar* (senior level).

As previously discussed, *dosen* commonly has other jobs beside teaching and conducting research. As they go up in rank and reach III D, they would more likely secure a second job as a university administrator, government position, or in the private sector. Clark & Gardiner (1991) classified seven types of additional work and additional income alligned with each type. Additional work such as that in administration alone will not significantly contribute to their income. However, other combinations such as teaching only, other work only, administration + other work, administration + other teaching, other teaching + other work, and administration + other teaching + other work may lead to income increase of 52% to 113%. While recent comprehensive data on academic salaries is unavailable, Hill & Wie (2012), using reflections based on field interviews and limited literature, found that actual income did not correlate with official salaries because a significant part of their income was from off-campus activity.

THE GENDER GAP IN THE ACADEMIC PROFESSION IN INDONESIA

The most recent research in Indonesia indicates a trend where the effect of gender on the success of academic staff career is similar to the trend in liberal countries (Kholis, 2013; Dzulhayatin & Edward, 2010). Some studies concerning the advancement of women's career in the Indonesian Public Service, including academic careers, provided quite a different perspective (for instance Azmi, Ismail, Basir, 2012 and Murniati, 2012). It is shown that gendered career advancement is unavoidable, yet they emphasise the fact that academic careers and the Indonesian Public Service are an arena in which women can achieve a balance of career and family.

Males and females are considered to be quite equal in most aspects of their academic careers, the gender gap, however, remains significant in some of them. A past study on the gender gap and academic

careers in Indonesia led to the conclusion that women and men show considerable difference only in their publication (Kholis, 2013). Other indicators (thesis supervision, committee appointments, teaching, research, and scholarly presentations) are not statistically significant. As for career success, men acquire higher academic ranks as well as salaries, and they attain better leadership positions than women. Regarding career satisfaction, the mean for women has a higher score, although the difference is statistically insignificant. Likewise, men have a better mean score for work engagement, but the difference is statistically insignificant as well. Kholis (2013) has, thus, concluded that there is nearly equal scoring between men and women for subjective measurements covering career satisfaction and work engagement. The variables observed to bear influence were age, the spouse's education, and the spouse's occupation. Marital status, on the other hand, was only slightly significant. Factors not significant for career productivity were gender, respondent's level of education (educational qualification), and parental status. However, the location of Kholis' study covered a huge Islamic higher education institution with a presence in seven Indonesian provinces and 221 respondents, but it did not include Islamic higher education in the Indonesian capital of Jakarta, which has witnessed more progress than other regions in terms of development and social characteristics.

In Indonesia, leadership is the most important aspect in which the gender gap is highly predominant in Islamic higher education. Dzulhayatin and Edward (2010) argue that women's participation in leadership and decision-making positions in Islamic higher education is as low as in Islamic schools *(madrasah).* The obstacles women confront in acquiring leadership positions are their being side-lined from the decision-making process, lack of opportunity to participate in capacity building training, and a culture that positions women in caring and domestic roles. Additionally, some consider that Islam discourages women's leadership.

Dependent and Independent Variables

The dependent variable determined for this research is academic career advancement only, while the independent variables are mainly demographic variables found in the academic personnel's curriculum vitae such as gender, length of career, age, educational qualification, type of university, marital status, and number of children.

Advancement of Academic Career

Advancement of academic career is measured by one's academic rank in the civil service system. Decree 38/1999 distinguishes five academic ranks: *Tenaga Pengajar* (teaching staff), *Asisten Ahli* (junior level), *Lektor* (lower mid-level), *Lektor Kepala* (upper-mid-level) and *Professor/Guru Besar*(senior level). The lowest level is coded 0 for *Tenaga Pengajar,* 1 for *Asisten Ahli,* 3 for *Lektor,* 4 for *Lektor Kepala,* and 5 for *Professor/Guru Besar.*

Length of tenure and age

Length of tenure has become an arguable independent variable for assessing career advancement since it is, theoretically, not considered as a criterion for career advancement in numerous countries. The literature, however, indicates that it has substantial influence (Pezzoni, et al., 2012). Similarly, age formally has no effect on career advancement, yet this variable is apparently influential. For that reason, this study employs age and length of tenure as control/covariate variables. Both variables possess characteristics as variables with ratio scales, and can, therefore, be directly incorporated in the model.

Educational Qualification

Educational qualification is required for representing field-relevant capital for an academic career. The educational qualification recently stipulated for an academic career in Indonesia is a Master's degree. However, since a few academic staff in the data still hold Bachelor's degrees, the educational qualification variable still includes the three levels of tertiary education coded as follows: 1 for a Bachelor's degree, 2 for a

Master's degree, and 3 for a PhD/doctoral degree. As each type of degree indicates that one is higher than the other, the coding can also signify their respective value. However, two categories of educational qualification were used in the binary analysis wherein low level coded 1 for Bachelors and Masters and high level coded 2 for PhDs.

University Type

The most frequently utilised means of measuring university type is the university rank system along the three levels of international, regional or national. Having a degree acquired at international universities may be considered as gaining a better level of social capital for academics in Indonesia, due to the fact that they have expanded their networks to other countries and learnt to communicate in a non-native language. Concerning local universities, research modelling in this study is based on the assumption that acquiring a degree from a public university is better than from a public religious or private university. A number of Indonesian public universities have been ranked among the top 300 universities in Asia, but public religious universities have yet to achieve such position. Nevertheless, a public religious university is regarded to be better than a private university as it is a public university, and the percentage of academic staff having just a Bachelor's degree is lower than private universities.

As previously argued, private higher education quality has been challenged by the lower percentage of, formally qualified, competent staff. By 1990, the percentage of academic staff in private tertiary education institutions holding degrees higher than a Bachelor's was a mere 11% (Buchori & Malik, 2004; Welch, 2007). Despite the weaknesses of university classification, the data is categorised based on three types of university: foreign, public, and private universities. Academic staff who held Master's or Doctoral degrees from a foreign university are regarded to have gained better networks and experiences than those acquiring them in Indonesia. Similarly, the measurements

Table 4. Measurement of Dependent Variable

Dependent Variable			
Rank of Career	0= teaching staff 1= junior level 2= lower mid-level 3= upper-mid-level 4= senior level	Based on the civil service system. It is categorised into high and low rank; or three ranks consisting of low, middle, and high.	Ordinal/binary

Table 5. Measurement of Independent Variable

Name of Variable	Category	Explanation	Scale
Independent Variable			
Gender	0=Female 1=Male		Dummy
Length of career		Based on the civil servant identity number which informs the year of initial employment	Ratio
Age		Based on the civil servant identity number which informs the year of birth	Ratio
Educational Qualification	1=Bachelor Degree 2=Master Degree 3=Doctoral Degree	It can be categorised into high and low level	Ordinal/ binary
Type of University	1= Private 2= Public 3= Overseas	It can be categorised into national and overseas	Ordinal/ binary
Marital Status	0=No 1=Yes	No includes single, divorced and widow/ widower	Dummy

used in this article are based on the assumption that academic staff who graduated from an Indonesian public university retain better social capital than those who graduated from a private university. However, for the purpose of binary regression analysis, the type of university is categorised into national coded 1 and overseas university coded 2.

GENDER AND STATUS OF MARRIAGE

Gender is a demographic variable and for statistic analysis gender is the same as sex. Gender is a dummy variable as it represents two different categories male and female wherein male is coded 1 and female 0. Likewise for marital status in which married is coded 1, and single, divorced and widow/widower are coded 0. Meanwhile, the number of children academic staff have is a ratio scale variable.

DATA ANALYSIS

There are at least two strategies that can be employed for analysing the data. First is the descriptive method; to present data based on gender and related percentages using means analysis, graphics and tables to illuminate the gender gap. Second is the statistical method which includes binary and ordinal regression. The two methods are considered to be the most appropriate since the characteristic of data does not satisfy the requirement of ordinary least square regression. The purpose of employing binary and ordinal regression is to answer the following question: does gender matter for career advancement in Indonesia? Both descriptive and statistical analysis are aimed at testing the following hypothesis:

(1) Based on the Gender Gap Index, it can be assumed that the gender gap in the career path of academic profession between men and women at the religious university in Indonesia is very significant.
(2) Based on past literature, the gender gap will be prevalent and gender is expected to be a significant factor for career advancement in Indonesia.

Binary regression is utilised to compare contributing factors when dependent variables are categorised into two different classifications, and in this study, academic rank is distributed into low and high rank. Those classifications were developed from five ranks for academic careers. Ordinal regression is used when dependent variables are categorised into three: low, middle, and high rank. SPSS is used to analyse data using both binary and ordinal regression to find the score of Standard Error (SE), the score of p (value) labelled by Sig. SPSS provides the score of *odd ratio* labelled by Exp B for binary regression but not for ordinal regression.[1] Accordingly, for ordinal regression the score of p-value (Sig) is used to determine whether independent variables, particularly gender and other independent variables (length of tenure, age, and educational qualification), are significant factors correlating to the dependent variable (academic career advancement) and the significance level is fixed at 5% (α=0.05).

Given that ordinal regression possesses similarity to linear regression, the multicollinearity among the independent variables is assessed using linear regression. Multicollinearity is a condition of interdependency between independent variables. Previous arguments state that multicollinearity has caused a very serious threat in influencing independent variables, it must, therefore, be checked prior to running the regression test (Farrar & Glauber, 1967: 93). Multicollinearity is detected using the score of the variance inflation factor (VIF), and when the score of VIF is <10 this shows that the parameter of estimate is not significantly affected by the presence of multicollinearity (Dilman 1991 in Griffit & Harvey 2001: 602). If the VIF score is closer to 0 this indicates that the level of multicollinearity is lower: by contrast, if the score is closer to 10, this indicates that multicollinearity level is higher.

1 http://www.ats.ucla.edu/stat/spss/faq/oratio.htm

FINDINGS

The research is based on the available data for 749 academics from a religious university in Jakarta consisting of 282 female (38%) and 467 male academics (62%). However, there only 736 pieces of data are available for the variables of age and length of tenure, and 526 pieces of data are available for age of marriage.

DESCRIPTIVE STATISTICS

The following table (Table 6) shows means, standard deviation (SD), and standard error of means (SEM) for numeric variables consisting of academic rank, age, length of tenure, educational qualification, and university type.

Table 6. Means, Standard Deviation, and Standard Error of Means

Variable	Gender	N	Means	SD	SEM	Min	Max	Mode
Academic Rank	Female	282	2.51	.88	0.052	1	9	3
	Male	467	3.17	1.06	0.049	1	5	3
	Total	749	2.92	1.04	0.038	1	5	3
Age	Female	277	39.23	7.61	0.458	26	65	33
	Male	459	46.91	9.44	0.441	28	70	37
	Total	736	44.02	9.55	0.352	26	70	41
Length of Tenure	Female	277	9.34	7.83	0.470	1	46	3
	Male	459	16.62	10.75	0.502	1	50	9
	Total	736	13.88	10.36	0.382	1	50	3
Educational Qualification	Female	282	2.02	.36	0.022	1	3	2
	Male	467	2.28	.54	0.025	1	3	2
	Total	749	2.18	0.49	0.018	1	3	2

Based on the proportions of males and females, the data corroborates the past literature regarding the gender gap in academic careers. The literature has reported similar trend in various countries where there has been apparent progress in the area of educational achievement for women. More women are gaining access to tertiary education in universities; however, the trend is less encouraging for women in relation to their academic careers. The data will, presumably, confirm the Gender Gap Index and past literature about the gender gap in academic careers. Table 2 shows that male academics on average acquire a higher score than their female counterpart for five variables: academic rank, educational qualification, age, length of tenure. On average male academics in the data are approximately 7.68 years older and are tenured approximately 9 years longer than female academics. However, females got married younger and also have fewer children. Only for education type variable do female academics have a higher mean score than male academic.

CORRELATION AND REGRESSION

From the previous descriptive analysis, data from the religious university is not normally distributed. The mean of academic rank (2.92) is close to the mode (3.00). However, the means and mode of career advancement is skewed. For independent variables such as educational qualification,

the mean (2.18) is close to mode (2), as is the mean and mode for university type at (2.80) and (3.00). The data confirms the findings of Finney and DiStefano (2006) stating that data modelled in social science often do not follow a multivariate normal distribution. Likewise, Micceri (1988) maintains that non-normal data was frequently found on data gathered to measure variable achievement and other variables as well (p.270).

Following the contention that it is extremely difficult to find normally distributed data for social science, hence, despite existing data not being distributed normally, some methods such as correlation can still be utilised to understand the relationship between gender and career advancement. Another reason of using these tests is that the study uses nearly all cases in a population and the data is fairly large. In other words, this research can be categorised as a population based study.

Another issue faced by standard regression is multicollinearity as gender correlates to all of the other variables of age, educational qualification, type of university, and tenure.

Table 7. Correlation between independent variables

IV	DV (Type of university)	DV (Educational Qualification)	DV (Length of Tenure)
Gender	-.100**	.254**	.338**
Age		.346**	.903**

The matter of multicollinearity is assessed and determined but it was not an issue in the analysis as the score of tolerance is>0.10 and the VIF (Variance Inflation Factor) <10.00.

As previously stated, gender and other independent variables (type of university, educational qualification, age, and length of tenure) were expected to significantly correlate with career advancement in Indonesia. Table 6 demonstrates the correlation test result, and as expected, gender and all of the independent variables have significant correlation to the dependent variable.

Table 7. Correlation between independent variables and assessment for career advancement

IV	N	DV Academic Rank
Gender	749	306*
Type of University	749	-.108**
Educational Qualification	749	.573**
Age	736	.595**
Length of Tenure	736	.624**

**. Correlation is significant at the 0.01 level (2-tailed).

Unlike the correlation test result, gender influence on career advancement using ordinal regression shows a different result. Based on the ordinary regression, it can be assumed that being a male academic does not afford the probability to advance their academic career faster than their female counterpart because p=0,348 > α=0.05 means that the Exp (B) score is not statistically significant.

Table 8. Factors contributing to academic career advancement by applying ordinal regression

IV	B	SE	Sig
Gender	-.159	.170	.348
Age	.043	.019	.023
Length of Tenure	.098	.019	.000
Educational qualification 1	-4.600	.494	.000
Educational qualification 2	-2.063	.223	.000
Educational qualification 3			

However, a statistical analysis using binary regression indicates that gender is a significant factor along with length of tenure and educational qualification. On the other hand, the age variable is not statistically significant because p=0.056, and this p-value is higher than α=0.05. However, as age and length of career contain multicollinearity, both are significant factors if analysed separately using regression.

Gender influence is significant in the binary regression as p-value score is 0.043 <α=0.05. A positive impact for high rank is indicated for male academics by 1.701 and the Exp (B) of gender is higher than the

length of tenure. Longer tenure improves the probability of attaining high rank by 1.078. On the other hand, being older is seen to raise the tendency of having high rank by 1.046, but this is not statistically significant.

Table 9. Factors contributing to academic career advancement by applying binary regression

IV	B	SE	Sig	Exp (B)
Gender	.531	.262	.043	1.701
Age	.045	.023	.056	1.046
Length of Tenure	.075	.022	.001	1.078
Educational qualification 1	1.914	.215	.000	6.779

Based on the descriptive analysis, ordinal and binary regression, it can be concluded that the gender gap is significant at the highest rank and less significant at middle and low rank positions. If the classification of academic rank is distributed only into two, that is low and high, gender influence becomes more prevalent. On the other hand, statistical analyses introducing middle rank category cause gender influence to become invisible. It is shown in the following table (Table 10) that type of university (national and overseas university) does not significantly correlate with academic career because the p value=0.531 and the score is >α=0.05. However, type of university is not comparable across universities because there is too much missing data from the secular university.

Table 10. Contribution of type of university with binary regression

IV	B	SE	Sig	Exp (B)
Gender	.516	.263	.050	1.675
Age	.044	.023	.061	1.045
Length of Tenure	.075	.022	.001	1.078
Educational qualification	1.926	.216	.000	6.863
Type of University	-.080	.127	.531	.923

DISCUSSION AND CONCLUSION

Based on the statistical analysis results regarding the two hypotheses, it can be stated that *firstly,* the gender gap in the career path of academic profession between men and women at a religious university in Indonesia is highly significant, and *secondly,* the expectation that gender significantly correlates to career advancement in Indonesia has been proven by three statistical analyses (descriptive, correlation, binary regression). However, ordinal regression fails to prove the second hypothesis because gender is found to be significant in the secular university but not so significant in religious university.

The descriptive analysis indicates that male academics on average acquire a higher score than female academics for all related independent variables: academic rank, educational qualification, length of tenure (Table 2). Concerning academic rank, the gender gap between males who are granted higher civil service ranks and females who are granted lower ranks in the religious university in Indonesia is too extreme. Likewise, in terms of academic rank, female academics were found to dominate the lowest level of academic rank, which is the position of teaching staff. The amount of male academics in the second highest position were more than six folds that of their female counterparts.

The binary regression statistical analysis used indicates that gender is a significant factor along with length of tenure and educational qualification. Age and length of career has a multicollinearity, wherein both are significant factors when analysed separately using regression. Gender influence is observed to be significant because p value score is 0.043 <α=0.05 with the ExpB of gender variable being 1.703. Similarly, by applying binary statistics, gender coupled with age, length of tenure, and educational qualification is a significant factor, this is because the p value score is 0.000 accordingly, ExpB 1.698 is meaningful.

On the other hand, a statistical analysis using ordinal regression in the religious university confirms that gender as an independent variable has p value=0.348 > α=0.05 meaning that it is not statistically significant. Gender influence on academic careers

is sometimes undetected in statistical analysis, which is not extraordinary because past researches found similar data (for example Nielsen 2015; Aksnes et al. 2011; Mairesse and Pezzoni 2013). Based on crosstab, it can be construed that the gender gap in low and middle positions is not prevalent in the religious university but it is prevalent in the high rank positions. The gender gap is exceedingly prevalent at the highest rank and that those with the highest rank positions are more likely to be male academics who are older in age and longer in their tenure period. While age and length of tenure are indicated to be significant factors for academic career advancement, most female academics are aged under 40, and male academics are in their 40s and 50s. Similarly, the average age of females is 7.68 years younger than that of their male counterparts. It can be implied that the gender gap is highly prevalent among the senior generation and less so among the younger generation. It correlates the fact that the religious university is a new university that underwent change from an institute for Islamic studies formerly focusing on religious study and it has subsequently expanded to secular studies since 2000. It seems that numerous women have been recruited as new academic staff and they, accordingly, are filling low and medium rank positions, rendering gender as an insignificant factor in academic career advancement.

My findings extend previous research by Kholis (2012) because gender is a significant factor when tested as a single independent variable, by using MANOVA in his research and binary regression in my research. Likewise, my study corroborates a similar conclusion by using descriptive and binary regressions. However, this research proves that gender influence on career advancement is less significant compared to other variables (age, educational qualifications, and length of tenure) through the use of ordinal regression.

My research is also in accordance with Nielsen's (2015) findings indicating that the impact of gender in her research of Danish universities is unclear. She reinforces past findings from Aksnes et al. (2011) wherein gender impact has been ambiguous. Nevertheless, the most recent literature regarding science productivity remains consistent about the negative effect that having a family has on science research productivity (Mairesse and Pezzoni 2013 in Nielsen 2015). It is, hence, unsurprising that the quantitative data analysis from a religious university, shows various results and ordinal regression analysis fails to explain gender influence, despite descriptive statistics and binary regression indicating that the prevalence of the gender gap. The gender gap in Indonesia relates to the fact that most women involved in the career path of academic profession are relatively new to the occupation so their length of career is usually shorter than male academics. Seniority, age, and educational qualification are shown to be significant for career advancement. Arguably, female academics with better educational qualifications and longer period of tenure will almost certainly have a better chance of advancing their careers.

It is interesting to note that gender influence for academic career advancement is unseen when ordinal regression is employed. Further information is required to clarify whether a significant change has occurred pertaining to the gender gap in academic career, because in the Indonesian case, academic profession refers to the civil service career path. Given that career advancement in academia complies with the regulation of the civil service, this occupation is not perceived as a prestigious one in terms of remuneration. In addition to that, past research findings show Indonesian tertiary education in Indonesia is challenged by a low quality of academic staff coupled with low incentives (for example Hill and Wie 2012; Welch 2007, 2011).

Female academics are more concerned about subjective career success that emphasises the personal aspect of success such as the accommodation of work and family. Kholis (2012) found that male and female academic staffs in Islamic higher education were equally content with their careers, with slightly higher mean for females than males

(scored 3.52 and 3.45 respectively). Accordingly, a civil service career with a modest income is highly suitable for women living in country with very strong patriarchal culture, because it facilitates a working environment that allowsto balance one's career advancement and family life (Azmi et.al 2012).

Based on my research, academic career advancement in Indonesia is found to be more likely to follow female career advancement in the public service. It has been said that the Indonesian Public Service facilitates women with a working environment that balances career advancement and family life (Azmi et al. 2012). Furthermore, Azmi et al. mention that a Muslim female public servant should be treated equally as their male counterpart because their religion (Islam) recognises that their rights to lead the organisation are the same. Both females and males have good prospects for promotion to advance their career in the public service every 3-5 years. Female public servants are quite keen on making use of the regulations to advance their careers by furthering their studies, participating in courses, developing networks, and building cooperation, but Azmi et al. (2012) underline that female civil servants consider family to be more important than their career. Accordingly, I believe that the occupation does not strongly advocate for gender equality with a strong emphasis on women's independence. Likewise, based on an economic perspective, it does not support their productivity due to the fact that government institutions employ civil servants, and in Indonesia civil servants are heavily restrained due to inefficient, bureaucratic and procedural principles.

Despite the culture in Indonesia favouring men more than women in career advancement, there is a growing literature demonstrating women's agency where numerous women can challenge the gendered role expectations as well as women's stereotypes that can undermine their competence (Syed 2010). Generally, the societal structure is based on culture and religious belief which consider women as being responsible for domestic roles and being socially and economically dependent on males (Omar and Davidson 2001). They are expected to behave modestly and submit their life to their father and husband (Syed 2010). However, human beings as agent and actor, according to Giddens (1984), are to some extent powerful when dealing with structure and culture. An agent bearing a particular capital will not fully adapt to the structure, but will make alterations to the situation. Likewise, religion as a societal tradition can be construed as strengthening a different way of life such as to strengthen women's participation in public life and career.

Recently, more and more women are challenging these structures by negotiating with their husbands and their families and striving to convince them that they are able to manage both career and family. Past research shows that numerous women benefit from family support and their socio economic status when advancing their careers, yet they need to put in twice as much effort as men to attain better positions in their careers (Murniati 2012; Tlaiss 2011). Murniati (2012) studied the motivating factors for senior women in academic careers. She maintains that senior female lecturers were able to attain the highest academic position because of their individual commitment, strong determination to succeed, and personal initiative. They have adapted to the rules in a male-dominated culture. On the other hand, women confront various barriers including heavy workload and institutional policies. Culture and religious beliefs can be viewed to either be enabling or constraining factors.

Academic career in Indonesia is perhaps comparable to the situation of academic advancement for women in Turkey and Malaysia. Academic careers in the history and social context of Turkey have become "safe", "secure", "esteemed" types of professional careers for women. Men would tend to choose non-academic careers since, academia is not as financially promising as other professions. Likewise, it has been argued that the pattern of female participation in Malaysia is not unlike Turkey. While female

participation in high-level management in universities in Malaysia is constantly low, women's career advancement at professorial levels has witnessed significant increase (Omar 1993; Luke 2001).

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