

The Changing Gender Disparity in Malaysian Higher Education: Where are the boys?

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Abstract

Participation in higher education has traditionally been dominated by males, but over the past decades, gender differentials in higher education have narrowed and reversed in favour of the females. In Malaysia, females now outnumber males in higher education institutions (HEIs) and in most fields of study. This paper seeks to illustrate the extent of the gender gap in Malaysian higher education across different HEIs, levels of study and fields of study. More importantly, this paper argues the need of understanding the underrepresentation of boys, the challenges that impede their transition from secondary to higher education and highlight the possible implications due to gender imbalance and a lack of an understanding of the boys.

Introduction

Traditionally, higher education was dominated by males, and females were significantly under-represented. The oldest university in the English-speaking world, Oxford University, for more than 800 years had only admitted male students, and it was only in 1920 that female students were enrolled as full members of the university. Similarly, females were excluded by statute from colleges and universities in the United States until the 1850s when women's colleges were established (Thelin, 2004).

However, over the past two decades, female participation in higher education has increased tremendously. Females have since overtaken males in higher education, giving rise to a reversed gender gap. In the United Kingdom, females in higher education for the first time equalled males in 1992 and since then, more women than men were enrolled in British higher education institutions (HEIs) and the gender gap continues to widen (Broecke and Hamed, 2008). The dominance of females is not only a trend in developed or Western countries, but also in the Asia Pacific region. More interestingly, even in societies that are known to be dominated by males such as the Saudi Arabia, the gross enrolment ratio for females have been significantly higher than males and women have become the majority group in higher education (World Bank, 2008). Statistics revealed by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2012) indicate that in most Asia Pacific countries, the gross enrolment ratio for females is significantly higher than males and females are the majority in higher education, with the exception of Cambodia, Laos and the Republic of Korea, and to a lesser degree, Indonesia (see Table 1).

In Malaysia, females made up 56 percent of total enrolment in HEIs in 2009, with gross enrolment ratios of 45 percent as compared to 35 percent for males (UNESCO, 2012). The fact that males are lagging behind females raises the question: Where are the boys and why are they not transiting into higher education?

This article attempts to highlight the reversal in gender in Malaysian higher education, which becomes much more critical as we begin to examine the participation of females and males across the types of HEIs, levels of study and fields of study.

Types of HEIs and Levels of Study

In 2011, there were 937,229 students in Malaysian higher education, whereby 54 percent and 46 percent were enrolled in public and private HEIs respectively (see Table 2). Yet, the gender proportion within public and private HEIs differs considerably. In public HEIs, the percentages of male to female were 40 percent and 60 percent respectively. Females outnumbered males at all levels of study, except for the doctorate level. More importantly, as undergraduates pursuing a Bachelor's degree were the bulk of students in public HEIs which amounted to almost 60 percent of the student population, the gender gap at this level was the widest where the percentages of male and female were 38 percent to 62 percent.

Conversely, in private HEIs, the overall percentages of male and female were 49 percent and 51 percent, and females outnumbered the males across all levels of study, except for the 'others' category that include certificate, professional courses, advanced diploma and other qualifications. Interestingly, in the levels classified as 'others', the number of males is higher than females. It was only at the Bachelor's level that the proportions of male and female were level.

In general, the gender gap is a much more serious concern in public HEIs than private HEIs. Particularly at the Bachelor's level in public HEIs, the significantly smaller proportion of males suggests a need to understand why boys are not getting enrolled in public HEIs. The plausible explanations to such a trend: females are more likely to do better academically than males (Broecke and Hamed, 2008), and there is a higher proportion of males as compared to females who stopped schooling at the primary and secondary level (Tey, 2006). Hence, females are more likely to stay on in full time

TABLE 1 Gross Enrolment Ratios and Percentage of Female Students in Tertiary Education across Countries in Asia Pacific

Country	Gross Enrolment Ratio (Male)	Gross Enrolment Ratio (Female)	Gross Enrolment Ratio (Total)	Percentage of Female Students
Australia (2010)	68	92	80	56
Brunei (2011)	15	25	20	62
Cambodia (2011)	18	11	14	38
China (2010)	25	27	26	50
Hong Kong (2011)	57	63	60	51
Indonesia (2010)	24	22	23	47
Laos (2011)	20	15	18	42
Malaysia (2009)	35	45	40	56
Myanmar (2011)	13	17	15	58
New Zealand (2010)	67	99	83	58
Philippines (2009)	25	31	28	54
Republic of Korea (2010)	119*	86	103*	39
Singapore (2012)	n.a.	n.a.	n.a.	50
Thailand (2011)	41	54	48	56
Vietnam (2010)	22	22	22	49

Source: UNESCO, 2012

* Gross Enrolment Ratio can be greater than 100 percent as a result of grade repetition and entry at ages younger or older than the typical age of that grade level.

TABLE 2 Enrolment in Public and Private HEIs by Levels of Study and Gender, 2011

Level	Public			Private		
	Male (%)	Female (%)	Total	Male (%)	Female (%)	Total
Doctorates	12,846 (57)	9,748 (43)	22,594	2,879 (48)	3,071 (52)	5,950
Masters	22,226 (42)	31,041 (58)	53,267	8,124 (57)	6,193 (43)	14,317
Bachelors	112,273 (38)	186,906 (62)	299,179	90,263 (50)	89,802 (50)	180,065
Diploma	43,667 (41)	62,069 (59)	105,736	76,962 (45)	94,235 (55)	171,197
Others	10,721 (39)	16,759 (61)	27,480	31,589 (55)	25,855 (45)	57,444
Total	201,733 (40)	306,523 (60)	508,256	209,817 (49)	219,156 (51)	428,973

Source: MOHE, 2012

education, take up pre-university programmes and pursue higher education. Specifically in the context of Malaysia, given that access to public HEIs is much more competitive with a strong emphasis on academic performance in secondary schools and pre-university programmes, the selection criterion results in more females being enrolled in public HEIs. Moreover, it may be also for the same reason that there are relatively more males in private HEIs than public HEIs, where access to private HEIs is less competitive and is more flexible to accommodate different routes into the Bachelor's programme.

Fields of Study

There is a clear gender pattern across the fields of study and the gender gap in some fields of study is even wider (see Table 3). In technical disciplines such as engineering, manufacturing and construction, the number of males significantly outnumbered females. Yet, the gender gap in

technical disciplines has reduced between 2008 and 2011 and the reduction has been much more significant in public HEIs than private HEIs.

Apart from the technical disciplines and non-disciplinary basic programmes in private HEIs, the gender gaps in education, humanities and social sciences, and sciences are skewed heavily towards females. Between 2008 and 2011, the percentages of male and female across these disciplines were relatively constant, except for sciences in private HEIs where the gap has reduced from 38 and 62 percent to 44 and 56 percent respectively.

The fields of study also reflect the gender gap from a different perspective. Among the twenty public HEIs in Malaysia, there are six HEIs where the number of male students is higher than female students. Interestingly, five of the six HEIs specialise in engineering and technology, while the other HEI specialises in defence studies. In these

six specialised HEIs, the percentages of male and female were 56 percent and 44 percent (see Table 4). However, the gender gap in the remaining 14 public HEIs pictured a contrasting scenario that underline an alarming trend in Malaysian higher education. The percentages of male and female across these 14 public HEIs were 25 percent and 75 percent, or simply a ratio of one boy to three girls.

TABLE 3 Enrolment in Public and Private HEIs by Field of Study and Gender, 2008 and 2011

HEI	Field	2008			2011		
		Male (%)	Female (%)	Total	Male (%)	Female (%)	Total
Public HEIs	Education	12,682 (31)	28,828 (69)	41,510	12,867 (30)	29,957 (70)	42,824
	Humanities & Social Sciences	61,033 (33)	126,350 (67)	187,383	81,890 (34)	157,986 (66)	239,876
	Science	36,105 (37)	61,090 (63)	97,195	40,293 (36)	70,215 (64)	110,508
	Technical	57,130 (62)	35,375 (38)	92,505	66,683 (58)	48,365 (42)	115,048
	Others	341 (45)	421 (55)	762	n.a.	n.a.	n.a.
	Total	167,291 (40)	252,064 (60)	419,355	201,733 (40)	306,523 (60)	508,256
Private HEIs	Basic Programme	5,393 (48)	5,894 (52)	11,287	9,889 (51)	9,427 (49)	19,316
	Education	8,190 (31)	18,469 (69)	26,659	10,694 (31)	23,715 (69)	34,409
	Humanities & Social Sciences	72,348 (40)	108,183 (60)	180,531	100,143 (47)	112,948 (53)	213,091
	Science	46,041 (38)	75,358 (62)	121,399	45,710 (44)	59,212 (56)	104,922
	Technical	46,391 (77)	13,585 (23)	59,976	43,381 (76)	13,854 (24)	57,235
	Total	181,547 (46)	214,439 (54)	399,852	209,817 (49)	219,156 (51)	428,973

Source: MOHE, 2012

TABLE 4 Enrolment in Public HEIs by Gender, 2011

Public HEIs	Male (%)	Female (%)	Total
Universiti Pendidikan Sultan Idris	6,259 (28)	15,955 (72)	22,214
Universiti Sultan Zainal Abidin	1,855 (29)	4,456 (71)	6,311
Universiti Sains Islam Malaysia	2,711 (29)	6,679 (71)	9,390
Universiti Malaysia Terengganu	2,248 (31)	5,015 (69)	7,263
Universiti Malaysia Kelantan	904 (33)	1,866 (67)	2,770
Universiti Malaysia Sarawak	3,631 (33)	7,296 (67)	10,927
Universiti Malaysia Sabah	6,396 (35)	11,621 (65)	18,017
Universiti Kebangsaan Malaysia	9,346 (37)	15,647 (63)	24,993
Universiti Putra Malaysia	11,462 (37)	19,718 (63)	31,180
Universiti Utara Malaysia	11,629 (37)	19,988 (63)	31,617
Universiti Teknologi MARA	68,673 (37)	116,349 (63)	185,022
Universiti Sains Malaysia	11,648 (41)	16,629 (59)	28,277
Universiti Malaya	10,957 (42)	15,384 (58)	26,341
Universiti Islam Antarabangsa Malaysia	12,709 (43)	17,093 (57)	29,802
Sub Total	160,428 (25)	273,696 (75)	434,124
Universiti Malaysia Pahang	4,068 (51)	3,935 (49)	8,003
Universiti Tun Hussein Oon Malaysia	6,773 (54)	5,761 (46)	12,534
Universiti Malaysia Perlis	4,121 (55)	3,317 (45)	7,438
Universiti Teknologi Malaysia	19,153 (55)	15,465 (45)	34,618
Universiti Teknikal Malaysia Melaka	5,321 (59)	3,685 (41)	9,006
Universiti Pertahanan Nasional Malaysia	1,869 (74)	664 (26)	2,533
Sub Total	41,305 (56)	32,827 (44)	74,132

Source: MOHE, 2012

Discussion and Conclusion

This article has highlighted two significant gender gaps in Malaysian higher education. One, which concerns the overall gap in Malaysian public HEIs, and two, the fields of studies specifically in public HEIs. These gender gaps reaffirmed the need to address an important and critical question of: Where are the boys and why are they not transiting to public HEIs? This article does not attempt to answer this question, but instead, aims to argue the need to focus on understanding boys and how they transit from secondary education into higher education. More importantly, there is also a need to understand the barriers that discourage or hinder boys from progressing into higher education and public HEIs across different fields of study. Without a thorough understanding of boys, their participation and the underlying reasons of their underrepresentation in higher education in public HEIs and in non-technical disciplines, policy interventions may not be effective, or worse, may be detrimental to the Malaysian higher education.

A common proposal to address gaps and disproportions is the use of a quota system. Historically, ethnic quota was introduced in Malaysian higher education in 1971 to address the ethnic imbalance. While the quota system has successfully redistributed the ethnic balance in public HEIs, the same quota has contributed to a different form of imbalance in the form of ethnic imbalance between public and private HEIs (Ahmad and Noran, 1999; Wan, 2007). In the context of gender gap, the use of a quota system without understanding the boys, their participation, the barriers and their underrepresentation, can be detrimental. First, assuming *ceteris paribus*, the introduction of a quota for males in public HEIs or in a particular field of study, would be at the cost of the females. In other words, without increasing the number of students, a gender quota will increase the number of males at the expense of females. Second, the introduction of a quota and to ensure the reserved allocations are filled up will create a vicious circle that is detrimental to the quality of higher education. To ensure males are enrolled in public HEIs, the requirements for entry may have to be lowered. This, in turn, may create a perception that students and graduates produced by the public HEIs through a quota system are poor in quality.

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Conversely, this article argues the need to understand boys and their transition into higher education, because such understanding has vast policy implications in addressing the gender imbalance. By identifying the barriers and factors

resulting in the imbalance, policy interventions can focus on addressing specifically these barriers and factors. Broecke and Hamed (2008) claimed that girls tend to outperform boys in school and therefore a rigid and examination-oriented entry may favour girls rather than boys. Hence, effective intervention in this respect may focus on, for example, diversifying the entrance requirements, reducing the emphasis placed upon academic performance and taking into account work experiences for entry into higher education. At this point in time, Malaysian public HEIs, and to a large extent private HEIs, are predominantly focused on students transiting directly from secondary schools into higher education, and the entry requirements tend to put mature students with relevant working experiences and without necessary academic credentials at a disadvantaged position.

“The widening gender gap, and specifically the disproportion of males to females, is not only about access and equity to higher education, but more critically if left unattended, have vast social and economic implications.”

In addition, the gender gap in Malaysian higher education may imply inequitable access in terms of monetary and financial considerations. The relatively different size of gender gaps between public and private HEIs may suggest that families prioritise the education of sons over daughters. This proposition is further reaffirmed using the Malaysian census data that focused on the cohorts of graduates between 1946 and 1980, whereby it was found that a higher proportion of male graduates were trained overseas or in private HEIs, as compared to female graduates who are more likely trained at local public HEIs (Tey, 2006). As it is significantly more expensive to pursue higher education overseas or in private HEIs as compared to public HEIs, the wider gender gap in public HEIs may therefore imply some degree of inequitable access to higher education at the individual household level. Hypothetically, if gender gap is related to inequitable access, policy intervention may instead divert the attention to address the funding mechanism that could have indirectly led to this gender imbalance. The National Higher Education Fund Corporation (PTPTN) was created in 1997 to provide financial support for students into higher education. Since its establishment, RM 44.62 billion has been disbursed to 1.99 million students. Proportionately, 53 percent of the fund was disbursed to 1.37 million students in public HEIs (The Star, 2012), but interestingly, the proportion of students from private HEIs have been increasing. In 2000, there were 8,956 students from private HEIs funded by PTPTN, and in 2009, the number has increased to 76,454 (Tham, 2011). Hence, if the gender gap in public HEIs has been a result of inequitable access due to families' monetary and financial prioritisation,

policy intervention that is better-informed of the underlying reasons of this phenomenon is important to address the issue of inequitable access in higher education and gender gap in public HEIs.

Through the statistics presented, this article argues the need and importance to focus on boys and their participation in higher education. The widening gender gap, and specifically the disproportion of males to females, is not only about access and equity to higher education, but more critically if left unattended, have vast social and economic implications. Among the social implications include delayed marriage, increased non-marriage and women marrying 'downward' (Tey, 2006), while economic implications are disproportion of the graduate labour market and widening wage disparity between males and females that favour the males due to a perceived oversupply of female graduates. However, without adequate understanding of boys and their underrepresentation, effective policy intervention to address such a gap may be found wanting.

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