

How to Cite:

Ahmad, H., Husin, M. R., Mokshein, S. E., Hamdan, A. R., Ghazali, N. H. C. M., & Hassan, N. M. (2022). Measuring teacher profession as career of choice among top fully residential school students. *International Journal of Health Sciences*, 6(S6), 4540–4552.
<https://doi.org/10.53730/ijhs.v6nS6.10459>

Measuring teacher profession as career of choice among top fully residential school students

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Abstract—Fully residential schools (FRS) or boarding schools in Malaysia produce quality candidates with towering personalities. This study seeks to explore the choice of career as well as the parents and gender influences on the career as a teacher among top FRS students in Malaysia. A survey design, which is mainly quantitative in nature, was used in this empirical study. A self-designed questionnaire was used in collecting data from 305 participants from three top FRS in Malaysia. This study revealed that only 6.2% of students selected 'teacher' as a career of choice. Other respondents opted for different professions such as medical doctors, engineers, and scientists. Of the students who chose 'teacher' as their career of choice, 31.6% have one or both parents from a teaching background. The study also found

that the influence of gender on the career as a teacher was not significant with $t(303) = 0.446$, $p = 0.656$. Several recommendations were made. This study suggests further increasing the FRS students' exposure to the teaching career with the recommendations proposed.

Keywords--fully residential school, teacher profession, career of choice.

Introduction

In Malaysian Educational Blueprint 2013-2025, the 4th Shift agenda is 'Transforming a Teacher Profession as a Profession of Choice'. According to researchers, teachers are professionals (Jennifer & Martin, 2017) and mainly provide learning environments for their students in school or other learning institutions (Charlotte & Gerhard, 2018). They play an important role in students' development while the students are in school. In this study, a 'teacher' refers to a school educator (pre-school, primary school, and secondary school) in Malaysia. It is in line with the agenda to produce more literate students as compared to Malaysia's ranking in the Program for International Student Assessment (PISA) 2009 achievement. The assessments have been conducted since the year 2000, with Malaysia taking part for the first time in 2009. In the same year, Malaysia was ranked 54th, 57th, & 52th from the total of 74 countries accordingly in Reading, Mathematics, and Science. Scores for the three aspects were 414, 404, and 422, respectively (OECD, 2010), which were less than the average score of 493 (Reading), 493 (Mathematics), and 501 (Science) as reported by the Organization for Economic Co-operation and Development (OECD). Although the scores were higher in PISA 2018; 415 (Reading), 440 (Mathematics), 438 (Science), the scores were still lower than the previously-mentioned average scores (OECD, 2019).

Several studies found that teachers play a crucial role in students' learning, academic success (Hishamuddin et al., 2019; Hishamuddin et al., 2020), and career ambition (Cochran-Smith & Villegas, 2015). Mohd Razimi, Hishamuddin, Muhammad Bazlan, Ismail, and Ramlan (2020) also revealed that core science subject teachers, for example, should use the most efficient approaches on the students. These approaches includes using existing learning aids, especially for topics closely related to the daily routine and future. Relating teaching to careers will give some insights to the student about their ambitions. At the same time, many have argued that the quality of the education system, and particularly, the quality of teachers, determine a nation's ability to compete in the global knowledge economy (Furlong, Cochran-Smith, & Brennan, 2013), and it includes the nation's competencies in Industrial Revolution (IR) 4.0.

IR 4.0 jobs are characterized by jobs with advances in technologies such as using the internet of things, 3D printing, artificial intelligence (AI), virtual reality (VR), augmented reality (AR), and big data analyses. When adopted in the workplace, these technological advancements will bring new opportunities for value creation to teaching and learning as well as enabling new ways to execute work. It will pave the way for the formation of digital ecosystems and collaborations as well as

teacher-student engagement at a greater scale. IR 4.0 has huge potential to make an impact on our learning environment and societies. Therefore, competent teachers should be trained and prepared for the digital era. The goal for teacher preparation is to provide a foundation for persistence despite challenges, potential setbacks, or failure (Joan, et al., 2017).

As stated by Siti Hajar (2019), educators need to be well-versed in using advanced technology to develop their skills and competency. Therefore, 'teachers' must come from an excellent group of candidates. In Malaysia, aiming for a career as a teacher starts with a Bachelor of Education or equivalent degree. One may also need to do a post-graduate teacher education program if that is not part of one's undergraduate program. Sunaryo Soenarto, Sugito, Suyanta, Siswantoyo, & Marwanti (2020) in their study found that there is still a low number of teachers with a Master's degree. This implies that teachers with higher qualifications are needed. A teacher with a Master's degree may indicate a teacher with a better brain. Future teachers should be competent enough and capable of applying new skills, recognizing, and giving advice on current related jobs in the IR 4.0 era to their students.

For teachers to be successfully recruited and retained, they need to be prepared for the disequilibrium of learning to teach, and to work in an environment where they can find the skills and resources to overcome dissonance, as well as learning from it (Joan, et al., 2017). They also suggest that policy-makers, administrators, and teacher educators must understand the nature of this disequilibrium to help construct and sustain a world of teaching where high-quality teachers can thrive. According to Muhammad Faizal, et al. (2013), fully residential schools (FRS) or boarding schools in Malaysia produce students with towering personalities. They describe the towering personality as knowledgeable, skillful, and ethical. FRS in Malaysia are schools where selected students who excel in their academic achievement in primary schools are grouped in secondary level of high-performance learning institutions. In other words, students who study in FRS are high in quality, bright, or astute individuals. Aurelius Ratu, Ni Gusti Made Rai, and Eka Dian Savitri (2021) found that acknowledging academic achievement is an important variable in students' academic process and intellectual humility to continuously plan, adapt, adjust, and evaluate their set of competencies. In fact, in a situation similar to when the Covid-19 pandemic hit the world, teachers need to be competent and innovative in delivering instruction even online. Therefore, FRS also can be a good source for developing competent teachers in the IR 4.0 age. As stated by Mohd Redzwan, Haryanti, Ridzwan, Mohd Izwan, and Ruhizan (2017), the quality of education depends on the teachers' quality. Additionally, they found that teaching is often regarded as an alternative career, not, the first choice.

Edi Purwanta (2012) in his research found that students' perception of parents' aspirations did not influence their academic achievement. However, it did influence their career exploration behavior. The results of Edi Purwanta's study indicate that students' career choices are influenced by their parents. In other research, Jieun, Dong-Eun, and Robert (2019) found that when taught by a female teacher, girls show a strong boost, particularly in test performance. It potentially indicates that male teachers are less competent than female teachers.

However, male teachers cannot be excluded from teaching and are still needed for various aspects of teaching and learning. Joanne and Revert (2019) stated school teaching as a 'feminine' occupation. Their study showed that female teachers dominated the staff composition of teachers. Therefore, this study seeks to measure the teaching profession as a career of choice as well as the influence of parent and gender among the top FRS students in Malaysia. The investigation serves to establish career guidance that could assist career guidance teachers in FRS and encourage students in FRS to choose 'teacher' as their career of choice.

Method

A survey design that was mainly quantitative in nature was used in this empirical study. A self-designed questionnaire was used in collecting data from 305 participants from three top FRS in Malaysia. The Statistical Package for Social Sciences version 19 calculated the percentages and inferential analysis that were used to analyze the data.

Population and sampling

There are 69 government secondary FRS in Malaysia as shown in Table 1 (Ministry of Education Malaysia, 2017a). According to the Ministry of Education Malaysia, the enrolment from lower secondary (Form 1 to Form 3) across Malaysia was 23,238 students on June 30, 2017 (Ministry of Education Malaysia, 2017b). Meanwhile, the number of students' enrolment in upper secondary (Form 4 to Form 5) was 15,021. Overall, the secondary school enrolment (Form 1 to Form 5) was 38,259 (Ministry of Education Malaysia, 2017b). Based on the SPM results of 2015 and 2016, Negeri Sembilan has three FRSs ranking top 10 among all Malaysian FRSs (Hishamuddin et al., 2019). The three schools are located in Seremban, Negeri Sembilan.

Table 1
Government Fully Residential Secondary Schools in Malaysia

No.	State	Numbers of FRS
1	Perlis	1
2	Kedah	5
3	Pulau Pinang	2
4	Perak	7
5	Wilayah Persekutuan Putrajaya	1
6	Wilayah Persekutuan Kuala Lumpur	3
7	Selangor	9
8	Negeri Sembilan	8
9	Melaka	2
10	Johor	7
11	Pahang	7
12	Terengganu	6
13	Kelantan	5
14	Sabah	2
15	Wilayah Persekutuan Labuan	1
16	Sarawak	3
Total		69

This research considers several key terms: the data collection that needs to be conducted at the beginning of the year; the incompatibility of respondents among the newly-enrolled Form 1 students with the FRS school system; and the prohibition of involving students of the 'examination class' such as Form 3 and Form 5 in researches (Ministry of Education Malaysia, 2018a). Hence, this study focuses on only students in Form 2 classes. During the data collection management phase, researchers had requested permission from four FRS in Seremban to conduct the data collection procedure. However, one school had withdrawn its participation from this study because of some technical reasons. The three schools willing to collaborate with this study are not only categorized as FRS but are listed in the High Performance Schools (HPS). According to the Ministry of Education Malaysia, HPS is defined as a school with an ethos, character, and unique identity in all aspects of education (Ministry of Education Malaysia, 2018b). HPS has a high-performing cultural tradition of developing the holistic and sustainable human capital of the country, which is competitive in the international arena. Furthermore, HPS is also a well-known school choice among the general public in Malaysia.

The population distribution of Form 2 students at FRS 1, FRS 2, and FRS 3 are shown in Table 2. Because only a part of the students could become respondents due to constraints in learning activities in schools, the sample was taken from 305 students for the population of 389 Form 2 students in the three schools. According to Krejcie and Morgan (1970), the minimum sample required for the population of 389 respondents at the 95-percent confidence level is 194 respondents. However, a bigger number of samples resembling a real population or close to the actual population could better generalize the obtained analysis results.

Table 2
Population and Sampling

No.	FRS in Seremban	Population	Sample
1.	FRS 1	143	105
2.	FRS 2	119	109
3.	FRS 3	127	91
	Total	389	305

Findings and Discussion

Findings

Career of choice

As presented in Figure 1, this study also revealed that most of the respondents (29.8%) wanted to be medical doctors, followed by engineers (18.4%) and scientists (8.1%). Only 6.2 percent of the respondents chose 'teacher' as a career of choice. At the same time, only 0.7% or two of the respondents aspire to have a job in line with IR 4.0. The two students' ambition is to be computer programmers, which is highly related to IR4.0. Other students' aspired careers gained from the data include aircraft pilot, accountant, architect, astronaut,

lecturer, artist, football player, novelist, lawyer, pharmacist, and dentist.

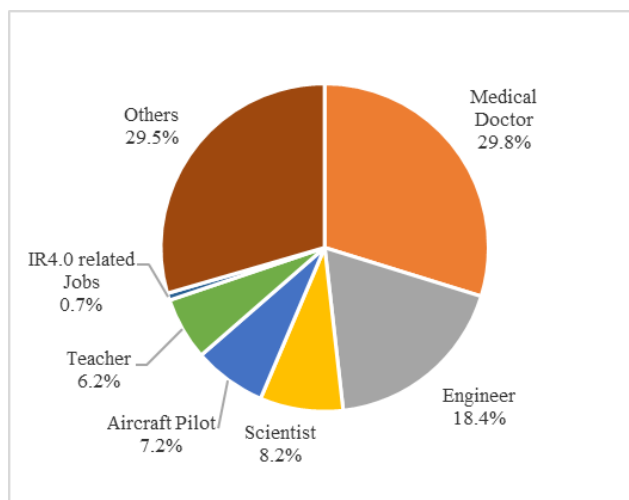


Figure 1. Respondents' career of choices

Parent's influence

Of the 6.2% of respondents who chose 'teacher' as their career of choice, 31.6% (6 of 19) of them have one or both parents with a background as a teacher (Table 3). The data also shows that respondents whose mother/father/parent is from a teaching background tend to choose careers such as aircraft pilot, engineer, and scientist. In addition, the results of the study also showed that 73.4 percent of respondents who enrolled in the FRS do not have a mother/father/parent with a teaching background while only 26.6 percent of them have a mother/father/parent with a career background as a teacher.

Table 3
Respondents' Careers of Choice

Ambition	No. of Respondents	%	One or Both of Parent as Teacher	
			Yes	No
Medical Doctor	91	29.8	27 (29.7%)	64
Engineer	56	18.4	20 (35.7%)	36
Scientist	25	8.2	3 (12%)	22
Aircraft Pilot	22	7.2	8 (36.4%)	14
Teacher	19	6.2	6 (31.6%)	13
IR4.0 related Jobs	2	0.7	0 (0%)	2
Others	90	29.5	17 (18.9%)	73
Total	305	100	81	224

Gender influence

According to data from the Ministry of Education Malaysia (2017), there were 421,259 teachers at the pre-school, primary school, and secondary school levels.

Of the total, male teachers were 125,834 (29.9%), and female teachers were 295,425 (70.1%). This data aligns with the study by Joanne and Revert (2019) that stated that school teaching is a 'feminine' occupation since female teachers dominated the staff composition of teachers. However, this study contradicts such findings by revealing that more male respondents (68.4%) chose 'teacher' as a career of choice compared to female respondents (31.6%). Although research in the tertiary education level found that male and female students had an advantage in certain topics (Hishamuddin et al., 2018) or fields, this study revealed that there is no significant difference in scores for the male ($M=0.06$, $SD=0.23$) and female ($M=0.05$, $SD=0.21$) conditions; $t(303)= 0.446$, $p = 0.656$ (Table 4). In other words, gender does not influence the students' choice of a career as a teacher.

Table 4
t-test Results Comparing Male and Female Respondents Toward 'Teacher' as a Career of Choice

Gender	<i>n</i>	Mean	SD	df	<i>p</i>
Male	200	0.06	0.23808	303	0.656
Female	105	0.05	0.21398		

Furthermore, this study found that gender does not influence the students' choice of careers as a teacher. This finding shows that among the top FRS in Malaysia, 'teacher' is not perceived as a 'feminine' occupation despite the finding by Joanne and Revert (2019). Although Jieun, Dong-Eun, and Robert (2019) revealed that female teachers are more competent in teaching, this study shows that male teachers are still available for recruitment.

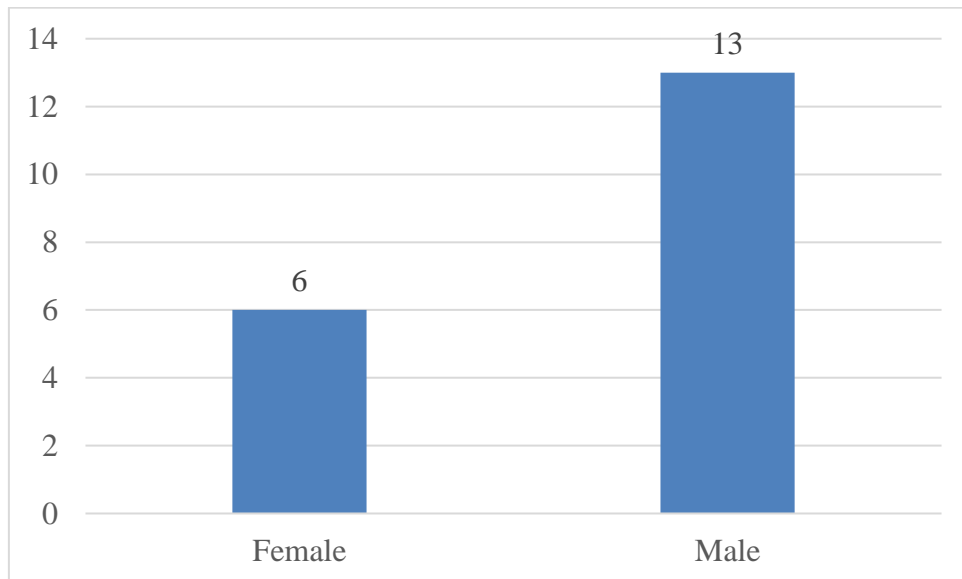


Figure 2. Respondents' gender toward choosing 'Teacher' as a career of choice

Discussion

The data analyses show that 81 from 305 (26.6%) respondents have one or both parents with a background as a teacher. However, only six (7.4%) of them aspire to become teachers. This study shows that a parent's career as a teacher does not significantly influence their children to become a teacher.

Respondents' career of choice

Students in FRS are considered an excellent group. They are hoped to be the teachers for the nation's next generation to further enhance the country's advancement. At the same time, they should also be interested in choosing a teaching career. The president of the National Union of Teaching Professions of Malaysia (NUTP) said that the government needs to select quality graduates who are genuinely interested in this field of teaching (Kosmo, 2021). He also added that currently, there are many qualified candidates, but the Ministry of Education needs to prioritize quality candidates first. However, this study shows that only a handful of quality candidates chose to be teachers. Most respondents from this excellent group prefer other careers such as medical doctors, engineers, scientists, and other professions besides teaching. This may be due to the lack of teaching career exposure highlighted by teachers in schools while teaching or the attitude of their teachers who made them uninterested in becoming like their teachers. In addition, careers such as medical doctors may seem more promising because they seem more prestigious with a lucrative salary and have ample opportunities to work with government or private clinics/hospitals, all besides having the title 'Dr' at the base of their name. A career as an engineer is also a top choice, also because similarly, it seems more respectable on top of a lucrative salary. Respondents were also found to be more interested in becoming aircraft pilots, accountants, architects, astronauts, lecturers, artists, football players, novelists, lawyers, pharmacists, and dentists.

Furthermore, although the world is now heading towards IR4.0, very few of these astute students chose a career in the field. This could be due to their peer influence that prefers careers other than those related to IR 4.0. According to Rezki Suci Qamaria and Fidia Astuti (2021), Focus Group Discussions (FGD) with students, implementing career counselling, and carrying out career socialization will allow students to experience a significant boost in their career maturity. It means that students will have more insights into their future careers rather than just following their friend's ambition. In schools, there are various co-curricular activities related to future careers such as *Persatuan Bulan Sabit Malaysia* (medicine) and *Kadet Remaja Sekolah/Pengakap/Pandu Puteri* (military/security). All these programs aim to provide exposure or experience to students in preparation for entering the working world in the future. However, to encourage students to choose 'teacher' as a career, the school needs to provide more exposure to students such as giving them the opportunity to teach their peers or juniors at school. This is because Low, Ng, Hui, and Cai (2017) found from their study that most interviewees had had prior teaching experiences, mostly relief teaching in local schools or private tuition, before joining the initial teacher education (ITE) program.

Teacher as a career of choice

This study shows that career choices as a teacher among the respondents are very minimal. It indicates the low interest among these astute students in becoming a teacher. This finding is aligned with the research by Mohd Redzwan et al. (2017), who similarly found that teaching is often regarded as an alternative career, not as the first choice. In fact, more of these respondents are expected to fill the positions of teachers. As noted by Muhammad Faizal, et al. (2013), respondents are a group with towering personalities. It means that the respondents should be the top choice in filling positions as teachers in the future on top of the towering personality traits they have. This is because teachers' personality is a key factor for excellent subject achievement and students' attitude. Shaista Noreen, Akhtar Ali, and Uzma Munawar (2019) also stated that teachers' personality plays a significant role in accomplishing students' educational achievement as well as has a direct influence on students' way of thinking, inspiration, attitudes, and their academic achievement. Therefore, when this group of excellent respondents becomes a teacher in the future, it is hoped that their good personalities and attitudes can inspire their future students' educational achievements.

Parents' influence on the career of choice

The influence of parents with a teaching career in encouraging their children to become a teacher is relatively low. This means that although a respondent's parent has a career as a teacher, the respondent has little interest in becoming a teacher. In other words, parents with a teaching career do not necessarily encourage their children's interest in becoming a teacher. This finding aligns with Edi Purwanta's (2012) study that mentioned that students' career choices are not influenced by their parents. Parents usually encourage their children to find better jobs with better incomes than theirs especially when they feel that the salary they earn is fairly lower than other careers such as doctors, engineers, dentists, and pilots. Apart from the influence of parents, career choice also depends on the students' interests, the results of the *Sijil Pelajaran Malaysia*, Foundation, Matriculation, Diploma, Form 6, and studies at the graduate level. However, it is good for students to identify their ambitions so that they can strive to achieve them.

Gender influence on the career as a teacher

The study also found that gender does not influence the students' career choice as a teacher. Although the data from the Ministry of Education Malaysia (2017) shows that female teachers are dominant in number for schools in Malaysia, the finding in this study shows that the perceptions of 'teacher' occupation among the top FRS are it is not a 'feminine' occupation as stated by Joanne and Revert (2019). The data of this study had shown that the ambition of being a teacher is more popular among male students than female students. As the data had shown that there are already many female teachers, female students may think that the chances or probability for them to be appointed as teachers are lower than male candidates. Thus, female students should aspire to pursue other careers than the teacher profession. Although Jieun, Dong-Eun, and Robert (2019) revealed that

female teachers are more competent in teaching, this study shows that male teachers are still available to be recruited because there are male respondents who aspire to become a teacher. Nevertheless, regardless of gender, teachers have to acquire the necessary skills for their job, including continuous learning to be more competent.

Conclusion

In Malaysia, teacher as a profession is still one of the most rewarding career choices. Most teachers still love their role of working with those who are eager to learn new knowledge. This study shows that in the context of top FRS, it is still far off from the Malaysian Educational Blueprint 2013-2025, 4th Shift agenda, which is 'Transforming a Teacher Profession as a Profession of Choice'. Students in top FRS mostly prefer 'medical doctors' or 'engineers' as their careers of choice. Although their mainly-preferred careers validated the findings of Muhammad Faizal et al. (2013) who stated that FRS produce students with towering personalities, they are also needed as teachers to develop the future of the nation and fulfill the national agenda. It implies that current stakeholders should take some proactive actions to ensure that the agenda of 'Transforming a Teacher Profession as a Profession of Choice' can be achieved. Stakeholders will need to proactively explicate and encourage the 'bright' students while these students are still in school regarding choosing 'teacher' as a career. Additionally, only trained career guidance teachers should be allowed to offer career guidance. This also infers that Malaysia will have 'teacher' as a career of choice among the bright students in the future if the stakeholders can reset the minimum requirement to be a teacher.

At the same time, this study also shows that parents with a teaching background do not essentially influence their children's future career of choice of becoming a teacher. Parents seem to encourage their children to choose other professional careers more, such as medical doctors, engineers, scientists, and aircraft pilots. From this finding, stakeholders need to show the current and future parents that 'teacher' is one of the most demanding professions in Malaysia. Therefore, the 'power to choose' has increased where the focus should be given more to the best candidates with a 'better brain'. As observed by Mohd Razimi et al. (2020), the mean score of the career goals learning method is higher than the learning through other methods. That means that teachers in schools can also relate a career aspiration into teaching while they are with the students to give them a picture of the profession of a teacher. This will help students in determining their future profession. Rami, Zaini, and Aziz (2021) found that although students are undergraduates at the university level, career decision-making is a huge challenge for students. Hence, it is not surprising if secondary school students also face the same problem. But, based on several studies, schools had an impact on high school students' choice of careers. Career guidance, especially school career days, was cited as having a positive impact on students' choice of careers. Nonetheless, it was also recommended that only trained career guidance teachers could provide career guidance for students. This study suggests further increasing the FRS students' exposure to the teaching career with the recommendations proposed in order to achieve the Malaysian Educational Blueprint 2013-2025 agenda, 'Transforming a Teacher Profession as a Profession of Choice'.

Recommendation and Limitation

Following practical implications, there are two points to recommend. Based on the results of the study, first, the Government needs to create a special program/preparation/foundation at the tertiary level to place students who excel holistically from the early stages of schooling to be pierced as experts in the field of education. Second, excellent schools need to expose the students to the career of a teacher as a good choice apart from being doctors, engineers, and other professions. For future research, the use of a larger sample size to include students in all boarding schools such as Maktab Rendah Sains MARA (MRSM) in Malaysia is recommended.

Acknowledgements

This study is part of the research 'Measuring the Academic Success of Students with ASICS using Polytomous Item Response Theory' (2017-0276-107-01) and funded by Universiti Pendidikan Sultan Idris, Malaysia. Special appreciation is also dedicated to the Ministry of Education, Malaysia, and related schools for giving us the opportunity to carry out this research project in their amenities.

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