Title Schools and post-secondary aspirations among female Chinese, Malay and

Indian normal stream students

Author(s) Trivina Kang

Source IPS Forum: Ethnic Relations in Singapore, 24 October 2002, Singapore

Copyright © 2002 The Author

This document may be used for private study or research purpose only. This document or any part of it may not be duplicated and/or distributed without permission of the copyright owner.

The Singapore Copyright Act applies to the use of this document.

Citation: Kang, T. (2002, October). Schools and post-secondary aspirations among female Chinese, Malay and Indian normal stream students. Paper presented at the IPS Forum: Ethnic Relations in Singapore, Singapore.

This document was archived with permission from the copyright holder.

SCHOOLS AND POST-SECONDARY ASPIRATIONS AMONG FEMALE CHINESE, MALAY AND INDIAN NORMAL STREAM STUDENTS

TRIVINA KANG



IPS Research Forum Ethnic Relations in Singapore

24 October 2002 Orchard Hotel, Singapore

Breakout Session 1: Theme 2 (1)

"Schools and Education – School Children's Backgrounds,
Ethnic Interaction Among School Children"

SCHOOLS AND POST-SECONDARY ASPIRATIONS AMONG FEMALE CHINESE, MALAY AND INDIAN NORMAL STREAM STUDENTS

Dr Trivina Kang

Assistant Professor
National Institute of Education

The contents are not to be cited or reproduced in any form without prior and explicit permission of the author. Views expressed herein are entirely those of the author.

Made possible by

Schools and Post-Secondary Aspirations Among Female Chinese, Malay and Indian Normal Stream Students

Trivina Kang

Abstract

Based on in-depth interviews with 60 Normal stream Chinese, Malay and Indian students, this paper explore some of the factors found located within the family and school that influence their post-secondary aspirations. The concept of *combined familial resources* is proposed to be more analytically constructive than reference to either the family socioeconomic status or ethnicity when accounting for differential aspirations and outcomes. In school, being in the Normal stream limits the post-secondary aspirations of respondents. The "streaming effect" also segregates respondents from their ethnic counterparts in the Express stream. In addition, there is ethnic segregation within the Normal stream. Respondents' preference for mother tongue usage and the sense that they have little in common with other ethnic groups outside the school are factors behind such division. Co-Curricular Activities, especially uniformed groups, can be effective in bridging inter-stream and inter-ethnic group divides. The paper concludes by suggesting some policy implications and recommendations based on these findings.

Introduction

The 1956 All-Party Report on Chinese Education laid the foundation for the principle of equality of treatment of ethnic groups in Singapore schools. This was followed soon after by the first two integrated secondary schools in 1960. The subsequent implementation of a common curriculum and national examinations further reinforced Singapore's meritocratic emphasis. As a consequence of this commitment to provide quality education for students, regardless of their ethnicity, educational attainment of Chinese, Indians and Malays have risen steadily over the years (Wong, 1998). However, statistics show that the academic performance of the Malay and Indian students is still lagging behind that of their Chinese counterparts (Teo, 1997). This has been a cause of concern and this matter has been widely discussed by politicians, community leaders and academics alike. Some have argued that negative cultural values and attitudes are responsible. For example, then Member of Parliament (MP), Dr Ahmad Mattar chided Malay parents for not supervising their children's schoolwork or encouraging them enough (cited in Rahim, 1998:187) and then MP Dr Vasoo, has cited Hinduism and its

"karmatic fixation" as contributing to many Indians being "resigned to their fate" (*Straits Times*, 22 June 1991). Others researchers have been more sensitive to the role of historical and institutional factors (Rahim, 1998; Li, 1989).

Focus and Objective of Research

There has been research on factors accounting for the educational outcomes of Malays, Chinese and Indians but research has largely focused on single ethnic groups (Tan & Ho 2001; Rahim, 1998; Action Committee of Indian Education, 1991). This research aims to understand the post-secondary aspirations and educational outcomesⁱ of Chinese, Malay and Indian students and explores how the family and school, two contexts that research in sociology of education literatureⁱⁱ has shown to be important for educational performance, influence their outcomes.

Methodology

The methodology of this research was in-depth interviews that were conducted from Dec 1999 - April 2000 with 60 Normal stream femaleⁱⁱⁱ students from three neighbourhood schools in Singapore. Interviews were conducted soon after they completed their 'O' Levels and a follow-up phone call was made after they obtained results of their post-secondary posting. The 20 Chinese, 20 Malay and 20 Indians in the sample were randomly selected from a list of names obtained from the schools. The schools were also pre-selected such that they were similar in terms of their school ranking.

Key Findings

Combined Familial Resources

This research suggests that it might be more fruitful to consider *combined familial* resources instead of socioeconomic status (SES) or cultural values when trying to understand how the family influences post-secondary aspirations and outcomes. Combined familial resources include ethnicity and associated cultural conceptions of education, financial, educational, social, and linguistic resources provided by the family.

It is important to consider these resources holistically because they reinforce and compensate for one another. For example, although the respondents come from similar working class backgrounds, the range of opportunity structures (Merton, 1968) that they have access to vary due to their differential familial resources. Parents of Chinese

respondents may be relatively poorly educated, but because they often belong to extended family networks that include more educated relatives, they are able to obtain valuable education-related information for their children. The Indian parents, on the other hand, although less well off than the Chinese, are better educated and more fluent in English and this allows them to be more engaged in their children's learning at home and in school. Like the Chinese and Indian families, Malay respondents also have close ties with their relatives but due to the poorer educational quality of those ties, they do not provide much advantage. Malay parents of the respondents are also further disadvantaged because of their lack of fluency in English, crucial for navigating the education system. Thus, rather than attributing ethnic variation in aspirations and outcomes to cultural values or lower socioeconomic background, this research suggests that combined familial resources within and beyond the family need to be considered as well.

Effect of Streaming

This research also indicates that streaming and being in the Normal stream also shapes the respondents' aspirations. Specifically, the 'N' Level curriculum and structure of the 'N' Level examinations vis-à-vis the 'O' Levels makes it difficult for the respondents to excel in the latter. For example, even though Normal stream Secondary 5 students are supposed to have covered subjects to the same depth as their Express stream Secondary 4 counterparts by the time they sit for the 'O' Levels, teachers and respondents say this is not the case. This is because from Secondary 1-4, Normal stream lessons are geared towards the less rigorous 'N' Level examination. Thus, when Normal stream students enter Secondary 5, they are shocked by the gap in knowledge that they would close in one year. This coupled with the "cooling out" (Clark, 1960) of aspirations that occurs in school from Secondary 1-4, has the effect of capping the respondents' post-secondary aspiration at obtaining entry to the polytechnic.

Streaming also has the additional negative effect of promoting intra-ethnic segregation. The Chinese respondents do not feel that their Express counterparts view them favorably. In fact, respondents recall being called "slower Chinese" or "second class citizens". One respondent (#7/Chinese^{iv}) describes the tension between the Chinese students in the two streams in this way, "They [the Chinese Express students] look down on us Normal people because we are slower. They think we are more stupid and things like that. They give us that kind of "eyesight", like they cannot even glance at you. Sometimes when we talk to them, they ignore us." Malay respondents also express that they do not get along with the Malays in the Express stream because the latter group

refuses to use Malay to communicate with them. Although using English with other ethnic groups is fine, the Malay respondents feel that the Malay language should be used among Malays. This is an unspoken rule that Express stream Malays do not adhere to. As one respondent (#44/Malay) puts it, "The Malay Express students don't even talk Malay to me. They think they are so good, talk only English. When I talk to them in Malay, they talk back to me in English." For this reason, Malay respondents consider Malay students in the Express stream "sombong" (stuck up) and do not include them in their "in group" even though they are also ethnic Malays.

As Malay and Chinese respondents are averse to mixing with their Express counterparts, they unintentionally deprive themselves of a valuable source of educational information as they prepare for the 'O' Levels. There is also evidence that such separation reinforces respondents' insecurities and acts to limit their post-secondary aspirations. For example, most of the Chinese respondents regarded the polytechnic as their "rightful" destination and refuse to consider the 'A' Levels, which was regarded as suitable only for Express students. This aspiration is closely related to their perception of themselves as "second-class citizens" within the Chinese student population. As their self-identity is not framed in relation to their Malay or Indian classmates in their stream but rather the Chinese in the Express stream, the respondents feel that it would be too ambitious to aim for the 'A' Levels.

Ethnic Segregation within the Normal stream

In the classroom, the different ethnic groups are spatially segregated. As one Chinese respondent (#37/Chinese) puts it, "The Malays, they keep to themselves and the Indians also. You can see in our class, there is one special corner where there is 4 Indian girls. The 4 of them can't separate one. There is one corner where Malay boys sit and in front is all the Chinese".

Respondents indicate that teachers do make conscious efforts to assign them to ethnically mixed groups. However, because of the majority of the students are Chinese, groups are Chinese dominated. One of the effects of this is that Chinese students often lapse into Mandarin during group discussions. Some respondents treat this as "Chinese music in the background" but among the Indian respondents the frequency of this occurrence is exasperating. As one respondent (#34/Indian) exclaims, "Doing project work, they would speak in Chinese, even when it is not Chinese class and I am in the group!" Their sense of exclusion is compounded by the sense that they are usually the

last to be consulted on class-related decisions and generally left out by their Chinese and Malay classmates^v.

Although the discussion has mainly been confined to inter-ethnic relations between Chinese, Malays, and Indians, the language-religion heterogeneity among Indian respondents deserves mention as it affects their inter and intra ethnic relations. The ethnic Indians are not only divided by religions - among the 20 Indian respondents, 10 were Muslims, 7 were Hindus and 3 were Christians, but also by language because among the Indian Muslims, some spoke Tamil at home, while others spoke Malay and still others, English. There are too few Indian respondents in each subcategory in my sample to do a rigorous analysis but it appears that ethnic relations vary according to the religious-language affinity of individual ethnic Indians. For example, even though all belong to the same ethnic group, Malay speaking Indian Muslims, non-Malay^{vi} speaking Indian Muslims, and Indian Hindus all have different platforms to establish relationship with other ethnic groups.

The lack of inter-ethnic interaction within the Normal stream could disadvantage some ethnic groups because education related information is not shared. For example, Chinese and Indian respondents, through their more educated extended family networks, have access to information such as how the odds of admission to polytechnic courses are dependent not only on grades but also on the popularity of the courses. Based on what she heard from her cousins, a respondent (#3/Chinese) says, "Actually, I would like to try mass communications, but it's out because the mark to go in there is quite high [low aggregate], especially since students from secondary school who can go to junior college actually purposely choose to go to poly for this course. So I think that it's very difficult [to get into this course]. Depend on my score I will see what I can apply for lor." However, due to ethnic segregation, such details useful for navigating the polytechnic entry system is not shared with schoolmates. As a result, some of the respondents who performed well enough to obtain entry to polytechnic did not gain entry because they selected courses that are extremely popular. They eventually ended up having to reapply for other non-popular courses the following year or enter the Institute of Technical Education (ITE).

Strong Ethnic Peer Groups

Ethnic segregation encourages the formation of strong ethnically homogeneous peer groups. As a respondent (#17/Malay) puts it, "Our school Secondary 5 only have three classes so during recess time, all Malays will join together in a big group. We stick together and than talk, talk, talk. Boys on one side, girls on one side. All the Malay

students in Sec 5 stream, we are only big group." For the Malay respondents, Malay peer groups help them reaffirm their ethnic identity in Chinese dominated schools. Even the Chinese respondents indicate that Malay classmates who are quiet in class become gregarious and lively once they are with the rest of their Malay friends. This tendency to mix within ethnic groups is not confined to Malays alone. Chinese and Indian respondents tell me that they are much more comfortable with "our own kind" and as one respondent (#4/Chinese) admits, "from school, from daily life you can see. We don't really mix well."

As peers are such a strong reference group, its potential for both positive and negative education-related influence is immense (Coleman, 1961). Strong peer dynamics within ethnic groups can influence respondents' decision-making. A Malay respondent (#22/Malay) told me when she aspired to get a lateral transfer to the Express stream in Secondary 2, there was pressure from her Malay friends not to bother. As she puts it, "When I told them I want to try to go to Express in Sec 2, they said, doesn't matter lah, you stay in Normal also, doesn't mean that you are not good, you can also study what, you can also pursue what you want." This respondent stayed on in the Normal stream because it became clear to her that leaving might cost her the support the Malay peer group provides.

Usage of English and Mother Tongue

The most common reason respondents give mixing within their own ethnic group is their preference for using their mother tongue and not being comfortable with English. As one respondent (#29/Malay) puts it, "Getting along with them in class is ok but to really talk, it is sometimes difficult to talk to different races because sometimes their English is not so good and our English is not so good. So when we talk sometimes got Malay, sometimes got Chinese. All mixed together. When I talk to my own race, we talk in Malay and it's so much more easy." Although Chinese respondents acknowledge that English is necessary for inter-ethnic communication, having to "switch from Channel 8 to Channel 5" is seen as inconvenient.

My research suggests that respondents use their mother tongue not only because it is convenient but also because it is a strategic tool used to distinguish "insiders" from "outsiders". For the Chinese respondents, speaking in Mandarin demonstrates to the other ethnic groups that they are the dominant group in school and there is no real need for them to mix with the other ethnic groups if they choose not to. English is thus used selectively when there is a need to include people from other ethnic groups. But even in

such situations, they are in control for they decide when and whom they are letting into their social circle. Similarly, as illustrated above, Malay respondents use the Malay language to differentiate themselves from their Express stream counterparts and decide who are "insiders".

Although the medium of instruction in Singapore schools is English, teachers do at times use Mandarin and other Chinese dialects to expedite communication with their students and this has the effect of reinforcing among non-Chinese the sense that ethnic Chinese students are privileged. The comments of this respondent illustrates this:

My form teacher teach us Maths. When he is teaching Maths and the Chinese students don't understand, he speaks in Chinese and explain in Chinese. We don't understand, so we don't like it. Why doesn't he be fair and speak in English? He always speaks Chinese with them. Sometimes he would even scold the Malay in Chinese when we don't know how to answer. (#58/Malay)

Separate Ethnic Worlds

Although language barriers are evident, my findings suggest that even when respondents are fluent in English, they have trouble communicating with classmates from other ethnic groups. For example, one respondent who says that her English is "better than many Malays", admits that she is still unable to communicate well with her Chinese classmates:

I try and hang around them, go recess with the Chinese but I can't. We have nothing to talk about. Even though we are in the same class, have the same teachers. I just feel that there is nothing much to talk to them. (#36/Malay)

Despite the attempts to foster multi-racialism in Singapore and the establishment of a common Singaporean identity, the respondents indicate that they do not have much in common with students from other ethnic groups as they live separate lives outside school. As a result, their interaction is limited to homework and school-related matters. As one Indian respondent (#42/Indian) puts it, "I don't talk about my personal things [with the Chinese and Malays], I talk about school things that is all". A Chinese respondent told me,

Everything in our life is different. Even TV shows we watch, music, all different. Religion all this also different. My Chinese friends have the same as my religion -

Taoism. Sometimes we talk about going to temple and what and what. The Malays go to mosque and pray so we have nothing to talk about. (#50/Chinese)

Co-curricular Activities

Although inter and intra-stream ethnic tensions are widespread, there are some students who manage to bridge the Express-Normal stream divide and the ethnic segregation within the Normal stream. In the arena of co-curricula activities (CCA), respondents are at times given opportunities to prove themselves as equals with their Express counterparts and school mates from other ethnic groups. This is especially the case for respondents, who are active participants in uniformed organizations like the National Police Cadet Corp and the Girl Guides. There are three primary reasons for this. First, members of uniformed groups usually spend much more time together than members of other CCAs, thus fostering interaction among the members. Second and more importantly, students in these CCAs may be conferred titles like staff sergeant and drill instructor, based on their performance and seniority. Normal stream students who spend five years in secondary school are advantaged in this arena, often graduating with a higher rank than their Express counterparts. Lastly, students in such positions of authority in these groups are required to present a united front to their junior members, regardless of their streams or ethnic group, thus further encouraging camaraderie.

One of the biggest advantages of such inter-stream interaction is that Express students become an additional source of information for respondents. This is especially so in the case of uniformed group organizations where students who enter junior college return to continue their service to the organization. Other clubs with strong group identity like the military band also have a lot of graduates, both from the Express and Normal stream, who return to help out either in weekly activities or in ad-hoc projects like camps or competitions. These graduates provide an important source of peer-level educational information for respondents. According to a respondent (#3/Chinese), "Sometimes we get together to study after ECA so when I was having my exams, they start to talk. So good lah, they start to talk about their JC thing, I'll be the one asking all the things lor. How to do this, how to do that." Besides sharing the goings on in their post-secondary lives, these "seniors" also advise students on examination techniques for the "O" Levels and in the choice of post-secondary institutions.

When one considers how Express and Normal students are segregated, the role CCA in promoting inter-ethnic and inter-stream interaction deserves attention, especially since it

has an additional effect of giving students a broader perspective of post-secondary opportunities available.

Policy Implications and Recommendations

The inter-ethnic segregation that occurs is largely due to the respondents' unwillingness to use English, preference for mother tongue as well as the fact that they believe that they have nothing in common with their schoolmates from other ethnic groups. This can be addressed on two fronts. Firstly, much more effort can be done to encourage students to speak English instead of mother tongue in school and other public places. This emphasis must be role modelled by the teachers. Often teachers do not realise that when they use their own mother tongue, even if it makes instruction more effective for some students, they are unintentionally marginalizing students from other ethnic groups. Since the majority of teachers in schools are ethnic Chinese, such behavior would not only deprive non-Chinese of opportunities to learn, it may also alienate them. Secondly, it might be fruitful to consider providing avenues for students to learn the language of other ethnic groups. For example, expose Chinese students to the Malay language. Schools could even encourage students of different ethnic groups to become peer language tutors. As students teach each other, there would be opportunities for them to get to know each other better. This is also an avenue for students to be introduced to aspects of other cultures in a deeper manner. Although it is important for students to be exposed to English and the language of other ethnic groups, we need to balance this with the continual emphasis on mother tongue. This is because speaking in one's mother tongue allows one to draw on the ethnic group's cultural heritage. This is integral for the development of one's ethnic identity and sense of self.

The research findings suggest that through co-curricular activities, inter-ethnic and interstream friendships are forged and this has a positive effect on aspirations. The positive
relationships build through having fun and working together in CCA, especially uniformed
groups, is important and more students should be encouraged to participate in them. It
might also be helpful for ethnic clubs, often the domain of students from that particular
ethnic group, be opened to other ethnic groups. Schools could even have a structured
programme where students are attached to various ethnic clubs on a rotational basis. Not
only would this allow students from different ethnic groups to interact, but it would also
introduce students to cultural elements like music, dance, drama etc of other ethnic
groups. My research shows that among Indian respondents, there is a tendency for them
to flock to ethnic clubs because, due to their small numbers in school, such CCAs offer

them a sense of security. Such a trend should be discouraged as it serves to isolate them and deprives them of opportunities to interact and learn from other ethnic groups.

The research suggests that streaming not only limits post-secondary aspirations but also promotes intra-ethnic ethnic segregation. Regardless of ethnicity, being in the Normal stream limits what respondents perceive as their world of post-secondary opportunities. However the "streaming effect" is accentuated because of the differential familial resources that various ethnic groups possess. In other words, although respondents are all in the Normal stream, the ethnic Chinese respondents who possess better resources are better able to negotiate the Normal stream to obtain more favourable educational outcomes. This finding is important because since a large percentage of Malay and Indian Primary 1 cohort, 65.1% and 58.9% respectively, compared to 32.5% of the Chinese cohort (Teo, 1997) are streamed to either Normal Academic or Normal Technical stream, schools need to be careful that Malay and Indian students are not further disadvantaged by their lack of familial resources. If left unchecked, a higher proportion of Chinese Normal stream student could conceivably make it to the polytechnic not because of better ability but because of better resources. In the long run this could affect the ethnic distribution of students in tertiary institutions and has larger implications for social cohesion. To avoid such a scenario, schools have to ensure that their post-secondary/career counselling programmes are comprehensive so that all students, regardless of ethnicity and familial resources, are provided with information that would help them realise their aspirations.

References

- Action Committee for Indian Education. (1991). *At the Crossroads*. Singapore: Ministry of National Development.
- Alexander, K.L., Eckland, B.K., & Griffin L.J. (1975). The Wisconsin Model of Socioeconomic Achievement. *American Journal of Sociology*, *81*, 324-42.
- Blau, P., & Duncan O.D. (1967). *The American Occupational Structure*. New York: John Wiley & Sons.
- Clark, B.R. (1960). The Open Door College: A Case Study. New York: McGraw Hill.
- Coleman, J.S. (1961). The Adolescent Society. New York: Free Press.
- Kao, G., Tienda, M., & Schneider, B. (1996). Racial and Ethnic Variation in Academic Performance. *Research in Sociology of Education and Socialization*, *11*, 263-97.
- Li, T. (1989). *Malays in Singapore: Culture, Economy and Ideology*. Singapore: Oxford University Press.
- MacLeod, J. (1987). Ain't No Making It: Aspirations and Attainment in a Low-Income Neighborhood. Boulder, CO: Westview Press.
- Merton, R. K. (1968). Social Theory and Social Structure. New York: Free Press
- Rahim, L.Z. (1998). The Singapore Dilemma. Kuala Lumpur: Oxford University Press.
- Sewell, W. H., Haller, A.O., & Portes, A. (1969). The Educational and Early Occupational Attainment Process. *American Sociological Review, 34*, 82-92.
- Shavit, Y., & Blossfeld, H. (1993). Persistent Inequality: Changing Educational Attainment in Thirteen Countries. Boulder, CO: Westview Press.
- Tan, J. (1997). Improving Malay Educational Achievement in Singapore: Problems and Policies. *Asia Pacific Journal of Education*, *17*, 41-57.

- Tan, J. & Ho, B.T. (2001) 'A' Levels or A Polytechnic Diploma? Malay Students' Choices of Post-Secondary Options. In J. Tan, S. Gopinathan & K.W. Ho (Eds.), Challenges Facing the Singapore Education System Today, (pp. 207-223). Singapore: Prentice Hall.
- Teo, C.H. (1997). Keynote address by Rear-Admiral Teo Chee Hean, Minister of Education. Second Malay Execute Committee Co-Ordinating Council National Education Seminar on 27 December 1997. Singapore: Ministry of Education.
- Straits Times. (1991). Shared Values Should Help Us Develop a Singaporean Identity. *The Straits Times*, *January 5*, 16-17.
- V.ong, A. (1998). Speech by Dr Aline Wong, Senior Minister of State for Health and Education. Launch of Hindi Teaching Materials and Hindi Centre Day on 11 July 1998. Ministry of Education, Singapore.

¹ In this paper, "educational outcomes" refers to the post-secondary institutions respondents gain admission into.

The family is considered to play a crucial role in the process of aspiration formation and subsequent educational performance of individuals. There exists in sociology, a well-established association between socioeconomic background and educational outcomes (Blau & Duncan, 1967; Shavit & Blossenfeld, 1993). The Wisconsin model (Sewell, Haller & Portes, 1969) has specified social psychological predictors of attainment such as aspirations and expectations that mediate the educational attainment process. Others have demonstrated clear links between socioeconomic status, educational aspirations and outcomes, with parental encouragement and school performance mediating these effects (Alexander, Eckland & Griffin, 1975). There is no doubt that socioeconomic status has an important role but other sociological research has suggested that ethnicity and cultural values affect how parents orient their children's educational lives as well (MacLeod, 1987; Kao, Tienda & Schneider, 1996).

Male students were excluded from this study because their post-secondary aspirations may differ from females. This is because many of the Normal stream students are between 17-18 years old and are due for National Service after graduation from secondary school.

This format is used to identify the respondents. The respondents' ethnicity is highlighted as this is a key focus of the study.

Although there are fewer Malay students in the Normal stream than Chinese, given the overrepresentation of Malays in the Normal stream, there are usually more Malays in each Normal class than Indians. Hence, in group work, each group usually has more than one ethnic Malay.

^{vi} Some are non-Malay speaking Indian Muslims because even though they may attend religious classes at the mosque, the language of instruction is Arabic, the formal religious language, not Malay.

- Tan, J. & Ho, B.T. (2001) 'A' Levels or A Polytechnic Diploma? Malay Students' Choices of Post-Secondary Options. In J. Tan, S. Gopinathan & K.W. Ho (Eds.), *Challenges Facing the Singapore Education System Today*, (pp. 207-223). Singapore: Prentice Hall.
- Teo, C.H. (1997). Keynote address by Rear-Admiral Teo Chee Hean, Minister of Education. Second Malay Execute Committee Co-Ordinating Council National Education Seminar on 27 December 1997. Singapore: Ministry of Education.
- Straits Times. (1991). Shared Values Should Help Us Develop a Singaporean Identity. *The Straits Times*, *January 5*, 16-17.
- Wong, A. (1998). Speech by Dr Aline Wong, Senior Minister of State for Health and Education. Launch of Hindi Teaching Materials and Hindi Centre Day on 11 July 1998. Ministry of Education, Singapore.

ⁱ In this paper, "educational outcomes" refers to the post-secondary institutions respondents gain admission into.

Male students were excluded from this study because their post-secondary aspirations may differ from females. This is because many of the Normal stream students are between 17-18 years old and are due for National Service after graduation from secondary school.

This format is used to identify the respondents. The respondents' ethnicity is highlighted as this is a key focus of the study.

Although there are fewer Malay students in the Normal stream than Chinese, given the overrepresentation of Malays in the Normal stream, there are usually more Malays in each Normal class than Indians. Hence, in group work, each group usually has more than one ethnic Malay.

^{*} Some are non-Malay speaking Indian Muslims because even though they may attend religious classes at the mosque, the language of instruction is Arabic, the formal religious language, not Malay.

The family is considered to play a crucial role in the process of aspiration formation and subsequent educational performance of individuals. There exists in sociology, a well-established association between socioeconomic background and educational outcomes (Blau & Duncan, 1967; Shavit & Blossenfeld, 1993). The Wisconsin model (Sewell, Haller & Portes, 1969) has specified social psychological predictors of attainment such as aspirations and expectations that mediate the educational attainment process. Others have demonstrated clear links between socioeconomic status, educational aspirations and outcomes, with parental encouragement and school performance mediating these effects (Alexander, Eckland & Griffin, 1975). There is no doubt that socioeconomic status has an important role but other sociological research has suggested that ethnicity and cultural values affect how parents orient their children's educational lives as well (MacLeod, 1987; Kao, Tienda & Schneider, 1996).