

## Streaming and Students' Self-Esteem: A Qualitative Study on Teachers' Correspondence Bias

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### Abstract

This study was aimed to investigate the effect of students' streaming practice in Malaysian secondary on students' self-esteem through teachers' expectancy. 17 teachers and 20 students from art and science streams of secondary schools in Penang, Malaysia were participated in this study. Unstructured interviews were used on teachers to collect the qualitative data of teachers' expectancy. The participating students were from the fourth year of secondary school in Malaysian school system (between 16-17 years old, 10 from science stream and 10 from arts stream) were interviewed in order to collect the qualitative data of teachers' perceived behavior and self-esteem. Result of this study shown that teachers expected science stream students to have good academic performance but expected arts stream students to be involved in disciplinary problems. Furthermore, science stream students perceived that their teachers were academically supportive but arts stream students perceived that their teachers were focusing on controlling their behavior. On the other hand, findings of this study also revealed that science stream students possessed higher level of self-esteem than arts stream students. Accordingly, it was indicated that teachers' perceived behavior and teachers' expectancy are correlated to one another, and teachers' perceived behavior predicts students' self-esteem.

**Keywords:** streaming, students' self-esteem, teachers' expectancy, science stream, arts stream, supportive, controlling.

### Introduction

Students grouping and streaming are common practices in public secondary schools in Malaysia, and practiced in order to give a better quality to the classroom instructions (Hassan, Sulaiman, & Abiddin, 2009; Yahaya, 2005). Streaming practice in Malaysia distributed

students to different classrooms based on their previous academic reports; academically strong students are assigned to the science stream, while academically weak students are assigned to the arts (social science) stream. Therefore, a batch of students contains science stream class at one extreme end, and art stream class at the other. Science stream students study science subjects such as chemistry, physics, biology

and/or additional mathematics. Meanwhile, arts stream students study subjects such as compound sciences, history, geography, language, accountancy and/or commerce (Education in Malaysia, 2010). Science stream students are perceived as good academic performers whereas arts stream students are perceived as weak academic performers (Adnan & Chew, 1998; Chew, 2006; Othman, 1995). Despite such kind of grouping was practiced in every public secondary school in Malaysia for decades, and was applied in order to develop more conducive learning environment for the students, several studies indicated that teachers' different attitude towards each students' group significantly predicted students' academic achievements and non-academic traits (Al-Fadhli & Singh, 2006; Good, 1981; Prihadi, Hairul, & Hazri, 2010; Slavin, 2006; Tong, 2002). Aim of this qualitative study is to investigate how teachers' expectancy in BCAG-practicing schools affects one of students' non-academic traits, which is self-esteem.

Based on attribution theory (Heider, 1958; Stryker, 2002) and the phenomenon of correspondence bias (Ross, 1977), students' label as science or arts stream might affect teachers' expectancy, because 'science stream' label equals to 'high-achievers' and 'arts stream' label equals to 'low-achievers'. Nevertheless, teachers' expectancy would not be able to affect students without being perceived (Myers, 2008; Prihadi, et.al 2010). As explained by the classical theory of Symbolic Interaction (Cooley, 1912; Coopersmith, 1967; Myers, 2008) and Social Learning by Bandura (1997), students use the results of their

observation on teachers' classroom behaviour as a base to predict teachers' expectancy, which in turn, influence their self-esteem.

Thomas L. Good (1981) found that teachers were likely to pay less attention towards slow or low-performing students. Perspectives of the teachers reflected in their instruction and attitudes towards different groups of students, and eventually the students will perform as they were expected (Tong, 2002). It was also reported that towards the students from science stream class, teachers based their expectancy on students' ability, and towards the students from arts stream class, teachers based their expectancy on personal characteristics (Al-Fadhli and Singh, 2006). A quantitative study in Malaysia reported that students' self-esteem was significantly affected by their perception of teachers' classroom behavior (Prihadi, et.al, 2010). Another study in the same context reported that teachers behave differently towards different groups of students in BCAG-practicing schools in Malaysia (Hazri, Prihadi, & Hairul, 2010).

Referring to a statement that a person with high self-esteem in one area also tends to have high self-esteem in the other areas as well (Larsen & Buss, 2008), it could be concluded that self-esteem, in a significant degree, would affect students' academic achievement and future success. Therefore, it is critical to explore the influence of teachers' expectancy on students' self-esteem. However, it is crucial to identify the influence of the teachers' expectancy (which elicited their actual classroom behavior) towards different groups of students. Obtained knowledge of this

study would play significant role as a platform to develop a better learning environment for the students without sacrificing their non-academic traits. Results of this study would as well be important to be informed to teachers in order to provide more sensitive awareness on students' psychological well-being.

This study was conducted in order to answer a main question whether the practice of streaming elicit correspondence bias, affected teachers' expectancy towards their students, and whether their expectancy affected students' self-esteem. The main question was converted into several research questions as follows:

What are the teachers' expectancy on students from science stream and arts stream?

What are the students' perceptions on the teachers' expectancy based on their observation on teachers' classroom behavior?

What are the self-esteem levels of the students in science stream and arts stream?

## **Method**

### *Subjects*

17 teachers and 20 streamed students of public secondary schools in Penang, Malaysia were participated in this study. Unstructured interviews were used on teachers to collect the qualitative data of teachers' expectancy. The participating students were from the fourth year of secondary school in Malaysian school system (between 16-17 years old, 10 from science stream and 10

from arts stream) were interviewed in order to collect the qualitative data of teachers' perceived behavior and self-esteem.

### *Qualitative Data Analyses*

In order to collect the data on teachers' expectancy, interviews have done to participating teachers involving several main questions as follows:

Why do you think your school practice streaming?

How do you describe students from science stream and arts stream?

How do you teach in those different classrooms?

The interview protocols involved some rapport building and probing in order to gain more meaningful understanding from the participants.

In order to collect the data on teachers' perceived behavior, students (who were previously identified whether they came from science stream or arts stream) were interviewed involving several main questions as follows:

Based on your daily observation,

How do you think your teachers expect you to be?

Why do you think your teachers behave in such a way he/she behaves in the classroom?

Afterwards, same students would be given the following questions in order to get the knowledge on their self-esteem level, based on the definition of self-esteem as a discrepancy between ideal-self and actual-self (Larsen & Buss, 2008):

Ideally, as a person, how do you think you should be?

Referring to the previous question, what do you think you should do to be ideal?

How do you evaluate yourself as a person currently?

The interview protocols involved some rapport building and probing in order to gain more meaningful understanding from the participating students.

All the students were coded as S1, S2...S20, while the teachers were coded as T1, T2...T17. The qualitative data obtained were analyzed using coding strategies and thematic analysis, which were the means of sorting the descriptive data collected so that the material bearing on

a given topic could be physically separated from other data. For the purpose of this study, the coding was based on ‘situation codes’ and ‘activity codes’ (Bogdan & Biklen, 1992).

## Results

### *Teachers' Expectancy*

Processes of data analysis on teachers' expectancy were framed by several themes as follows: Occurrence of correspondence bias, Expectancy on academic achievements among student groups, and Expectancy on behavior among student groups.

Schema, such as Table 1, was used to code, arrange, and organize the data.

Table 1

*Sample Schema of Arrangement of Data According to the Themes of Teachers' Expectancy*

<b>Example excerpts (teacher)</b>	<b>Analyses (Note/comment)</b>	<b>Themes</b>
Science stream students are the hope of the school to produce high-scoring graduates... For the arts stream students, well, let alone to enrich, it is even difficult for them to understand simple basic concept. [T13, Situation]	Labels of arts stream or science stream, supported by school's goal, led teachers to judge the students' capability. The judgment would then drive their expectancy.	Occurrence of correspondence bias
We expect science stream to score as high as we could support; while for arts stream, having them passed the exam would be good enough. [T4, Activity]	Teachers do have different expectancy towards different groups.	Expectancy on academic achievement among student groups
...many of the arts stream students have problems with their behaviour... could be categorized as naughty... [T7, Situation]	Teachers expect students from arts stream to have problematic behaviour.	Expectancy on behaviour among student groups

The first research question could be answered and explained by the result of the presented analyses. Teachers expected science stream students to have a good academic performance, and arts stream students to have disciplinary problems. This difference was a result of correspondence bias -tendency to overestimate the external disposition and underestimate internal disposition (Ross, 1977)- and school managements. Teachers drew their expectations based on students' formal classroom assignment (in arts stream or science stream). School managements played it role to lead teachers to have different expectations towards arts stream

and science stream by setting different goals and different programs for different student groups.

*Perceived teachers' behavior*

Processes of data analysis on Perceived teachers' behavior were framed by several themes as follows: Expectancy on students, Tendency to support academic achievement improvement, and Tendency to control students' behavior.

Table 2 illustrates the schema used to code, arrange, and organize the data.

Table 2

*Schema of Arrangement of Data According to the Themes of Students' Perception on Teachers' Classroom Behaviour.*

<b>Example excerpts (science stream student)</b>	<b>Analyses (Note/comment)</b>	<b>Themes</b>
...they expect us to perform better than before, that's why most of the time they offered us to ask questions [S1, situation]	Teachers expect students to improve their academic achievements	Expectancy on students
...my teachers usually try to re-explain the subject in different way. They are very supportive...[S8, situation]	Teachers spent their time to re-explain, to make sure the students grab the lesson they taught.	Tendency to support academic achievement improvement
... they didn't seem to mind if we make lots of noise, as long as we do our homework and score high in the tests [S5, activity]	Teachers' focus on improving academic achievement swayed their attention from controlling students' behaviour.	Tendency to control students' behaviour : <i>Nonexistent in science stream</i>
My teachers used to prejudge us (from arts stream) as being incapable to score high...[S11, situation]	Teachers didn't expect students to perform well. In some extreme cases, teachers expect students to be problematic.	Expectancy on students
Some teachers, especially new ones, came to our class freaked out (scared), I think they thought that we were very problematic. [S20, situation]		

<b>Example excerpts (science stream student)</b>	<b>Analyses (Note/comment)</b>	<b>Themes</b>
They tried hard to make us understand the subject... but when I saw what other students (from HAC) study, I felt like we were left way behind [S17, activity]	Teachers support the academic improvement. However the level of support was obviously different from what they provided to HAC students	Tendency to support academic achievement improvement
...most of the time, when only one student make trouble, teachers would scold the whole classroom [S12, situation]	Teachers paid more attention to behavioural problems and paid less attention to academic improvements.	Tendency to control students' behaviour

Analyses on students' perception on their teachers could answer the second research question. Students from science stream perceived their teachers to be supportive in term of academic improvements; therefore, they perceived that their teachers expected them to have high academic performance. Meanwhile, even though students from arts stream found their teachers to be academically supportive, they perceived that their teachers did not expect them to have high academic performance. Based on their observation, they perceived that their teachers

were focused on controlling their behavior to avoid disciplinary problems.

*Students' self-esteem*

Process of the data analysis on students' self-esteem was framed by several themes as follows: Actual-self, Ideal-self, and Discrepancy between actual and ideal-selves

Table 3 shows the schema used to code, arrange, and organize the data.

Table 3  
*Schema of Arrangement of Data According to the Themes of Students' Self-esteem.*

<b>Example excerpts (science stream student)</b>	<b>Analyses (Note/comment)</b>	<b>Themes</b>
In general, I feel like I am capable of delivering good results, not just academically I mean. However, I don't have any objection to learn more to get better [S7, activity]	Science stream Students indicated the existence of self-belief and the capability to improve.	Actual-self
Ideally, I should be a nice person, have lots of friends, lots of money... and be successful in life [S5, situation]	The students' ideal-selves refer to a personal success. Most of the science stream students related the overall success to academic success.	Ideal-self

Example excerpts (science stream student)	Analyses (Note/comment)	Themes
I think I'm a hard worker. I believe that everything will be done nicely if you work hard [S2, activity]	Discrepancy between actual and ideal-self is reachable through hard works, and there is a belief that they are capable of working hard. Hence, the discrepancy is somehow reachable.	Discrepancy between actual and ideal selves
I don't feel that I'm a loser. But I do feel that sometimes I am not as good as others too [S13, situation]	Students' self-evaluation showed some feeling of 'losing', but overall, they did not perceive themselves as 'the worse'. There are tendencies for arts stream students to compare themselves to others who are better.	Actual-self
...people use double standards, they compare my weakness to other people's strength [S11]	Arts stream students tend to have their 'ideal-self' as a socially functional person. Somehow, there are some hints that they don't believe that they can make it. None of them talk about the effort they should have in order to be 'ideal'.	Ideal-self
Ideally, I have to be the best students at school, go study overseas, came back and become a prime minister (laughing)[S17]	The discrepancy between ideal and actual self were perceived to be very large, and there is no explanation on how to minimize it.	Discrepancy between actual and ideal selves
I think we should all make our parents proud... in any way we can... but... I don't know. I don't think I could make it that way...[S12, situation]		

Analyses on students' self-esteem revealed the fact that both groups have their own perspective in drawing their ideal-selves, and both groups are influenced by the society in order to evaluate their actual-selves. In general, arts stream students perceived that their actual-selves are less able to come closer to their ideal-selves. Science stream students perceived that their ideal-selves are more reachable. Thus, the third research question could be answered and explained. Science stream students possess higher level of self-esteem compared to their counterparts in arts stream, and the influence of teachers' expectancy played important role in determining their self-esteem through teachers' perceived behavior.

## Discussion

Findings of this research could be summarized to a single statement that streaming practice in Malaysian public secondary schools played significant roles in determining students' self-esteem through teachers' expectancy. Streaming practice by school managements provided dispositions to the students by giving them attributes as 'high-achievers' or 'low-achievers', the labels led the teachers to fall into correspondence bias, attributing students based on their streams. School managements set different goals and different programs to each group of students, and the overall situation drove

teachers to set different expectancies towards science stream and arts stream students, which eventually led them to behave differently in the classroom. Their classroom behaviours were perceived by the students, which then used the result of their perception to conclude their teachers' expectancies. Students from science stream perceived that they were expected to have high academic ability while the arts stream students did not. Students from arts stream perceived that they were expected to have problematic behaviour while the science stream students did not. Differences of these perceptions led students to have different kinds of actual-self and ideal-self, followed by different discrepancies between those traits.

According to Larsen & Buss (2008), individuals tend to be influenced by their own personal traits in order to picture an ideal person. Thereby, influenced by their perception on the expectancy of their teachers (and other society members), science stream students pictured their ideal-selves as a character with overall success (which is achievable by having academic excellence they believed they have), while arts stream students pictured their ideal-selves as a socially well-functioned characters. Nevertheless, arts stream students still perceived that the discrepancy between their ideal and actual selves to be larger than their counterparts from science stream.

These findings are in line with the theories of social cognitive (Bandura, 1997), theory of attribution (Heider, 1958; Stryker, 2002) and correspondence bias (Ross, 1977) which summarized that evaluation of oneself alone would not generate self-esteem; instead, it is

how a person thinks others value him/her would generate his/her self-esteem. Other studies by Al-Fadhli & Singh (2006), Good (1981), Prihadi, et.al (2010), Slavin (2006), and Tong (2002) also noted that teachers assigned to teach academically-stronger students seemed to have lower expectations on the students than those who teach academically-weaker students. The latter presented findings were as well in line with the findings of this study, which showed that teachers tend to believe that science students are academically potential, while arts stream students are potentially be involved in disciplinary problems.

Results of this study supported the previous study in Malaysian context (Prihadi, et.al, 2010), which reported that teachers' perceived behavior predicted students' self-esteem. In this study, it was indicated that the discrepancy between ideal and actual selves of the students are related to students' perception of their teachers' behavior.

## **Conclusions**

However, findings of this current study indicated that arts students are in the same boat with science students in perceiving that their teachers are academically supportive. The difference between those two students group is that arts stream students perceived that their teachers expect them to be involved in disciplinary matters, while the science stream students did not. This difference is enough to elicit different level of self-esteem between two groups of students.

Furthermore, difference in patterns of self-evaluation was indicated from the research findings. Science students tend to describe their ideal-self as a successful individuals, where academic performance are required to achieve such success. Arts students tend to describe their ideal-self as a well-functioning individuals, where their success are not necessarily related to academic achievements. These different patterns indicates that science students obtained stronger beliefs in their academic potential, and it can be explained as the influence of their perception that teachers and the society believe in their academic abilities. On the other hand, even though arts students perceived that their teachers are academically supportive, they also perceived that their teachers believe that they are likely to be involved in disciplinary problems. This perception led arts students to avoid involving academic success in picturing their ideal-self. It could be concluded from this finding that arts students tend to have lower belief in their academic abilities.

### *Practical Implications*

Different approach is required in order to cater the difference between arts and science stream students in terms of their self-esteem and self-evaluation patterns. Teachers should at least try not to let themselves biased by the dispositions given to the students by the school managements through their goal settings, programs, and the grouping practices. Understanding that students' self-esteem levels are relied on their perceptions on teachers' classroom behavior, balance between controlling students' behavior

and supporting academic achievement in both groups should be kept in existence. Due to their differences in term of academic ability, the instructional method might be different between high and low-achievers' students; nevertheless, some efforts should be done in order to keep the students from perceiving that their teachers have no high expectancy toward their academic improvements. As previously mentioned by Ferkany (2008), some specific methods to improve the self-esteem levels of the students are as well important to take into consideration. Referring to a cross-regional study by Ding, Kuo, and VanDyke (2008), where school psychologist in Hong Kong have been involved in curriculum development, and provide services for students both directly and indirectly, it is suggested that educational or school psychologists should be involved in order to develop better approaches to be combined with the existing BCAG practices in Malaysia.

Regarding their difference in picturing ideal-self, it is clearly indicated that there is a gap between science and arts students in believing their own academic abilities. Therefore, it is important to cultivate an understanding that arts subjects are not necessarily mean less-important that science subjects. Teachers, students, school managements, and parents should be reminded that arts stream holds the same significance as the science stream, in terms of the future success. False belief that science stream students have higher potential for future success should be regarded as an obsolete concept. Successful individuals from arts streams with high academic achievements, namely lawyers,

psychologists, accountants, or social scientists should be highlighted and edified to the arts students, in order to let them have stronger belief that being in arts stream is not necessarily means to have lower academic abilities. Overall, active participation of the entire educational stakeholders is important in order to develop higher equality for every students.

#### *Future researches*

Research in similar field might be conducted in other countries that practice similar streaming

system in their schools. Some extraneous variables that might influence the results that have been excluded in this study might as well be investigated. It would be as well considerable to include demographic factors such as gender, socio economic status, parenting styles, places (urban or rural area), temperament styles, and school status (government or private). Another important issue to be addressed is the stability of the streamed students' self-esteem along the academic years, due to its importance in develop a higher understanding in elevating and maintaining students' self-esteem.

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