

SECONDARY SCHOOL PUPILS' ATTRIBUTIONS FOR SELF-DEVELOPMENT¹

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Eighty 14-year old secondary school boys and girls from four different types of schools within Trinidad and Tobago's stratified secondary school system responded to open-ended questions concerning their attributions for future development. Informal interviews were also held with principals and vice-principals of the participating schools in order to obtain information on the curricular and co-curricular activities of the schools. The assumption was that adolescents from the different schools in this study would have been exposed to different kinds of opportunities, knowledge and skills over a period of three years. It was further assumed that the difference in their experience might be reflected in the kinds of causal attributions to future self-development they make. Results show that pupils from seven-year schools and from single sex schools identified ability, effort and strategy as attributions for attaining self-development more often than did other subjects from other schools. Attributional responses for the pupils from seven-year schools were more often characterized by inner locus of control. It appears that the seven-year single sex schools provided curricular and co-curricular activities which encouraged pupils to make efficient causal attributions for self-development.

Secondary education provides adolescents with the opportunity to tackle a number of developmental tasks (Havighurst, 1974) which they experience during the period of transition from childhood to adulthood. Mastery of these age-specific life-span related tasks requires effort, thinking and planning for the future on the part of the adolescent. Successful accomplishment of these tasks may be regarded as self-development, a lifelong asset. Self-development is not synonymous with economic development; it is a process which enables human beings to

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realize their potential. Individuals who have achieved self-development can be freed from fear of want and exploitation. They have the ability to move away from economic, political or social oppression (World Bank, 1993). Self-development in the adolescent is a process of building for the future through thinking, planning and accumulation of a wealth of appropriate knowledge and skills.

Studies of how adolescents see the future have been carried out, the most recent being by Poole and Cooney (1987), and by Nurmi (1989). No such study has been reported in the Caribbean. None of the previous studies has investigated causal attribution as a factor in the adolescent's thinking and planning about the future. Another important feature of the present investigation lies in the fact that causal attributions for adolescent's self-development are examined within the framework of the differences which exist in the types of secondary schools they attend.

This study points to the role of the school in developing the process of self-development in future citizens. The development of a nation's human resources is indeed sustainable if it is characterized by self-development of the nation's citizens. We argue that the process of self-development can be achieved through the process of education. An appreciation of this fact has been expressed by the World Conference on Education for All (Jomtien, Thailand, March 1990), which urged all countries to contribute to creating and developing possibilities for lifelong learning by drawing attention to the changing nature of basic learning needs of children, youths and adults. More recently, The World Bank (1993) focussed a country study on the Caribbean region and asserts that human resource development merits continued high priority throughout the Caribbean region. The development of human capital is regarded as one of the essential elements in reducing poverty. Education, the report suggests, has a role in improving efficiency in a country and in motivating a nation's work force.

School Differences

The four secondary schools in which this investigation was carried out represent four of the different kinds of secondary schools in Trinidad and Tobago. They have different history; they follow different routines and they have different achievement patterns. The existing variety of secondary schools in Trinidad and Tobago can be described as stratified.

This stratification has been found to influence achievement in science at classroom level (Kutnick & Jules, 1988), and to affect average overall end-of-term test scores, and scores in language arts, social studies, science and mathematics (Jules & Kutnick, 1990). If school differences are known to be associated with academic achievement, then what is the relationship between type of secondary school and the level of self-development of which pupils of these schools are capable?

Psychological Processes Involved in Self-development

A number of different psychological processes such as hopes and expectations, time span, locus of control and affects (de Volder, 1979; Rakowski, 1979; Trommsdorff, Burger, & Fuchsle, 1982) are involved in adolescents' preparation for self-development. Nuttin (1984) reminds us that these processes occur in relational terms, that is, in relation to the person's special circumstances and abilities, and in relation to the available opportunities in the socio-economic context in which self-development takes place. Three approaches are combined for investigating adolescents' psychological processes of self-development in this study. In the first approach, adolescents' motivation, planning and evaluation (Nurmi, 1989) are investigated for relevance and adequacy for self-development. The second approach identifies knowledge, planning and evaluation (Hacker, 1985; Pea & Hawkins, 1987) for the same purposes. The third approach employs causal attribution (Weiner, 1986).

Usually, causal attributions are made concerning events which have already taken place, the outcome of which a subject would explain by some expressed reasons. In this research, causal attribution was sought for some future events. Seeking adolescents' causal attribution about their future is a meaningful and purposeful exercise. The assumption is that adolescents in the secondary schools in this study have been provided with opportunities, knowledge and skills over a period of three years, and that they should have been able to think about and make some plans for their own future.

Two psychological variables should also serve the process of achieving self-development. They are empowerment and self-efficacy. Empowerment embraces the capacity to think and act appropriately (Giroux, 1984). Adolescents, in learning and succeeding at school, acquire

the skills with which they can challenge fate and do the possible. Self-efficacy is related to how a person judges his or her own effectiveness in getting things done. It is concerned with how well one thinks one can execute courses of action required to deal with prospective situations (Bandura, 1982). On the one hand, a high sense of empowerment and a high sense of self-efficacy are conducive to the achievement of the plans which result in self-development. On the other hand, individuals who have achieved self-development manifest a high sense of self-efficacy and of empowerment.

Causal Attributions

Weiner (1979) describes causal attributions as statements people make to account for their failures or successes. Four attributes are most frequently associated with attributions: Two refer to "ability" and "task difficulty" while the other two allow for diverse equivalences. Thus, instead of "luck" people may respond with "chance," "witchcraft," "obeah," "karma," "the evil eye," "the stars," and other equivalent words depending on their culture. Instead of "effort," they may offer "mood," "speed of work," "preparation at home," "parental support," "behaviour," "time," "age," "other's help," "diligence," and "attention" (Durojaiye, 1991).

All attribution responses can be classified under locus of control, that is, whether a respondent gives reasons for events as caused by factors internal or external to himself or herself. The internal locus of control attribution, claims personal responsibility for the outcome of events. The external locus of control attribution, however, associates causality with some external person, place, thing, event or experience. Responses indicating ability, effort, age, mood, diligence, attention or persistence, are examples of internal locus of control attributions. Responses like task difficulty, luck, chance, teacher's effort, parent's or others' help or support, fate, God's plan are, by contrast, all attributed to factors originating outside the ego. They are external locus of control attributions.

Attribution responses can also be classified on the criterion of stability, that is, whether the response is enduring or transient. Ability is enduring because it normally does not change with time. Sometimes, task difficulty is transient; effort, too may, be transient, but luck should

always be transient. Luck is not a stable attribution commodity. Task difficulty and effort, like luck, are probably unstable as they fluctuate with time. A third dimension, controllability, was added (Meyer, 1980; Weiner, 1986) to differentiate between those attributions a person can control, for example, effort, from those which cannot be controlled such as luck and ability. A final dimension is globality (Weiner, 1979) which has to do with the distinctiveness of the attribution to situations. Ability is a global attribute because it applies to many, if not all, situations; luck might only apply to a few situations.

The Design of this Study

As part of a larger study, 80 14-year old secondary school pupils participated in the investigation. They were drawn from four different types of secondary schools: a girls' seven-year school; a boys' seven-year school; a mixed composite school and a mixed junior secondary school. All third form boys and girls in each of the chosen schools had a chance of participating in the investigation. However, using random selection only 10 boys and 10 girls were chosen from each of the two mixed schools; 20 boys were chosen from the boys' school, and 20 girls were chosen from the girls' school.

The questionnaire method in the open-ended format was used to elicit attribution responses. Questions were put to the students concerning the following:

1. What would you like to know you have done in life twenty years from now? What would you like to achieve in life?
2. What do you think you would need to make it possible for you to do those things?
3. What are you doing now to help you towards what you would like to achieve?
4. What do you think you should be doing in the next five years to help you towards what you would like to achieve?

5. What do you think of your school? How has it helped you towards doing what you would like to do in the future?

Pilot Study

The time lag of 20 years appeared, on first consideration, to be a trifle distant for a 14-year old. However, pilot testing of these questions with a small sample of 20 from three adolescent boys and girls from the sample schools, demonstrated quite clearly that subjects in all four schools had no problem conceptualizing themselves twenty years hence. The pilot study was done by the interview method. Each of the five questions served a distinct purpose. The first question elicited responses which provided insight into the contents of the goals of self-development. Content categories included future occupation, future higher education, family life, leisure activities, travels and other miscellaneous self-actualization activities. Question one tapped pupils' motivation as well as knowledge of possible activities. Question two, on the other hand, described pupils' plans and strategies for achieving the goals identified. These plans and strategies vary in complexities and in levels of realizability. Thus, while continuing education full-time or part-time, on the job training, self-employment, saving, and joining family business seem possible; certainty of winning a lottery and going abroad to seek one's fortune appear somewhat unrealistic.

In response to the third question, the adolescents accurately described the activities in which they were engaged, both inside and outside school, which have bearing on their future. They saw as relevant to their self-development, the details of their academic achievement and technical vocational skills at school. They factored their work in their parents' shops or farms into their planning. Equally frankly, some expressed the need "to begin to get serious," "to get something going," "as it is getting late." I was amazed by the concern all 20 young people demonstrated for their future. The fourth question yielded responses which showed different perceptions on the part of the adolescents about what is required, and the extent to which they believe they can exert control over the realization of what they think they should be doing five years thence. To produce their responses, it became evident that a common strategy the adolescents used was to put themselves in "borrowed clothes," as it were,

of someone they knew very well, who was older than they were, and then conjured up for themselves what they did or did not like about what the person was doing. By contrast, the responses to the fifth question about their school was direct. The adolescents were forthright in their evaluation of the extent to which they believed their schools helped them towards their future goals.

Qualitative Analysis of School Variables

While pupils completed the questionnaires, and on subsequent visits to each of the four schools, informal interviews were held with the principals and/or the vice-principals who provided information on the following:

1. The Mission Statements of the Schools

Only two of the schools had written documents to show the investigator, and in one case, the document was embodied in the school magazine. The other two schools, the composite school and the junior secondary school did, nevertheless, articulate their mission statements in brief but adequate eloquence. In both cases, the principals were of the view that every year during prize giving ceremonies, the mission statement, even though not so labelled, forms part of the principal's report.

Items from mission statements include:

From single sex school - Girls:

- The production of educated young women of character;
- Provision of all-round education: academic, moral, physical, social and spiritual for girls aged 11 to 18 years;
- Preparation of young women for further education at the university and other institutions of higher learning;
- Preparation for employment and on the job training in administrative, technical and service sectors;
- Preparation of young women for careers in banking, nursing and teaching;

- Preparation for different roles, including home maker's role.

From single sex school - Boys:

In addition to relevant statements obtained from the girls' schools, the following were expressed:

- Development of abilities and character;
- Preparation of young men for their social role and social responsibilities in the society;
- Development of leadership skills, moral principles as well as social and spiritual consciousness.

From composite school:

- Provision of all-round education
- Development of character
- Basic literacy and numeracy
- Development of individual potentiality
- Preparation for further education and training
- Acquisition of saleable skills.

From junior secondary school:

- Provision of general education
- Development of basic skill
- Character training
- Preparation for further education in a senior secondary school.

2. Curriculum Offerings

Both single sex schools offered a strong academic curriculum from the first form to the upper sixth form. Most of the subjects classifiable as the Sciences and Mathematics, or the Arts and the

Humanities, were fully represented. Although, by the schools' and the students' admission, the laboratory facilities were not the best, high standards of scientific learning and success rates were produced. These two schools successfully offered two European languages. Apart from geography, which has a multi-faculty classification, only economics featured among the social science subjects. There was a strong fine art tradition and little of performing arts and music. Technical and vocational training and physical education were relegated to the bare minimum frequency.

The composite school had the scope to offer the variety of subjects offered by the single sex schools but, in reality, it offered only a limited range due to staff problems. It prepared students for the Caribbean Examinations Council (CXC) examinations after a five year period of schooling. Integrated science was offered and one European language--Spanish--was taught. A variety of creative and expressive arts and physical education featured regularly. Provision for technical and vocational training was adequate. The junior secondary school had a curriculum programme similar to that of the composite school except that it prepared its students for the 14 plus exams only.

(3) Perceived Ethos of the Schools

Question number five was aimed at pupils' perceived ethos of the school. An overwhelming majority of pupils in the single sex schools were of the view that their school was one of the best. They believed that the schools helped them to prepare for their future self-development. There were complaints, but pupils from the seven year schools were generally of the view that their schools were better than most. Students from the composite and the junior secondary schools, on the other hand, all complained about their schools. Some praised some teachers; none praised their schools. Some said some teachers helped to prepare them for their future. Examples of statements relating to the pupils' perception of the ethos of their school are:

Single sex schools - Girls:

"This school is kind of all right."

"I just can't think of any other school I would rather go to, I mean it is o.k. here, just fine. The lab stinks, the library is great."

"The way you get rules, sometime you feel it is a prison, but then it is great really, not so bad."

"Some teachers are in the dark ages, but I suppose they know what they are about. They don't bother you too much."

Single sex schools - Boys:

"My parents think it is a great school. I am not sure, but then I can't say what is really wrong with it."

"I wish some teachers will get their acts together, but there is just no other school round here that I would rather go."

"This school is one of the best. The lab has no stuff in it, the library too can be better, some teachers are terrible, some kids are horrible, but the school is great. You just know it is. You just feel good being a student here."

Composite school

(Girl) "It's kind of all right here. I mean there is nothing else. I suppose that's why one just keeps coming, just so so. Some teachers try to help you, but the school is just not o.k."

(Boy) "What? I can't wait to get out of here. It's great to see your friends at school, that's about all."

(Girl) "Some teachers try to help you, but you feel you kind of lost in the school. I wish I could go somewhere else."

(Boy) "The school does not bother me really". I have to, so I come."

Junior secondary school

(Boy) "Sometimes I like my class. There are some teachers who do their best for us, others don't care. I can't say anything about the school really. It is not where I'd like to be."

(Girl) "Maybe the senior comprehensive will be better than this, but from what I know of the one round the corner there isn't much hope."

(Boy) "Mr ... and Miss ... are two teachers who make me continue to come to this school. That's all I can say about the school."

(Girl) "School? Just boring."

Scoring, Reliability and Validity

Responses to each of the five questions were analyzed and categorized on the basis of their content. Self-development is considered to have more than one direction. Thus, in response to question one, some of the responses include (a) profession/occupation, (b) education/training, (c) marriage/family, (d) ownership of properties and (e) community/political/civic responsibility. A score of 5, 4, 3, 2 or 1 was recorded depending on the kinds of directions an adolescent indicated. Question two relates to causal attribution. A score of 1 was awarded to a response which indicated ability, effort, or strategy. A response indicating luck, difficulties or others' help was scored zero. For question four, realistic plans of the adolescent were considered. Where a realistic plan was indicated a score of 1 was recorded; where none existed, zero was recorded. The fifth question relates to the near future. Knowledge of realistic expectation was the condition of scores. A 14-year old who expected to be in further education or training, apprenticeship or a junior employment position five years later scored 1 point. An indication of marriage, property ownership or a political career resulted in a score of zero. On-going experiences of the adolescents were recorded for question three. Reliability was determined by the re-administration of the questionnaire to the entire sample in the four schools two months after the first administration. Test/re-test reliability coefficient ranged between 0.69 and 0.85 for the responses to the five questions. There was ample evidence from the relevance and details of the adolescents' responses to each of the questions asked to satisfy the criterion of empirical validity.

Results

Table 1*

Pupils' Attributions for Self-Development

Causal Attributions	Schools					
	Seven Year		Composite		JSS	
	Boys only N = 20	Girls only N = 20	Boys N = 10	Girls N = 10	Boys N = 10	Girls N = 10
Ability	18	20	4	3	2	2
Effort	15	18	5	6	3	2
Strategy	18	12	7	4	5	3
Help	15	18	4	6	2	5
Difficulty	5	10	8	9	9	10
Luck	0	5	4	6	6	8

*T-test is significant at $P=0.05$ when the single sex schools are each compared with each of the two other schools, except for two cases of boys in composite school making causal attributions of strategy and luck.

Analysis and Discussion of Results

The second stimulus question demanded attribution statement. The question asked was:-

What do you think you would need to make it possible for you to do those things (i.e., specified intended future achievements)?

The focus of attribution analysis was, therefore, directed to that second statement. Table 1 shows the results of the analysis of the attribution statements. In the boys' school, subjects appeared to rely more on ability, strategy, effort and help, in that order. Girls from the girls' school also appeared to rely first of all on their ability, but effort and help superseded strategy as causal attributions. Girls, too, tended to anticipate

difficulties and to expect some element of luck, more than did boys in single sex schools. A different pattern was identified for the students of the composite and junior secondary schools. Boys and girls from both schools regarded "difficulty" as, by far, the major encounter on their road to their desired goal. Luck was indicated by proportionately more, and strategy by proportionately fewer of the girls in both the composite and the junior secondary schools than did girls in the seven-year school.

Analysis of variance was employed to examine the relationship between the type of schools pupils attend and the kind of causal attributions for the future that they make. Table 2 shows the result.

Table 2
Analysis of Variance of Pupils' Causal
Attributions for Self-Development

	Source of Variation	F-Value	Df.	P.
1.	Causal Attribution	8.262	1	0.01
2.	School	12.731	3	0.01
3.	Sex	1.985	1	NS
4.	Sex x School	6.322	3	0.05

Table 2 shows that the null hypothesis that there are no differences in the students' causal attribution for future development should be rejected. It is, therefore, concluded that differences exist at 0.01 level of probability. The null hypothesis that types of schools have no effect on students' causal attribution is similarly rejected. However, the differences in the causal attribution of boys and girls do not reach significance at 0.05 level unless the interaction of sex and school is examined.

Discussion of Results

Pupils from single sex schools made more attribution statements which have inner locus of control and are more stable in their dependability than did pupils from the composite and the junior secondary schools.

Equally, the dimensions of attributions of the single sex schools' subjects indicated more globality and controllability than did those of the subjects from the other schools. It is interesting that 75% of the boys and 90% of the girls in the single sex schools identified "help" as causal attribution for the achievement of their future goals. This compared with between 20% and 60% of pupils from the composite and junior secondary schools who also said they would rely on help. However, a world of difference informed the meaning of help from the two sources. A follow-up interview of 20% of subjects from each group revealed that "help" for the single sex school subject invariably meant to consult the library or other sources of information on how to go about it. Help for the junior secondary school and the composite school students in this study, more often than not, meant to get someone to "get it done for you."

The key to education for self-development would, therefore, appear to lie in empowerment. Strategy is a technique understood by many of the subjects of this study. Secondary schools should empower pupils in their school years, say from age 12 onwards, on the strategies for developing awareness about their future needs by helping them to make their goals concrete; by guiding them about values associated with such goals, and by giving them information and life skills orientation about themselves, others around them and their outside world, within the context of their chosen goals. By so doing, pupils may gradually develop a sense of their own ability to achieve what they want to achieve (self-efficacy), as well as a sense of their capacity to think and act appropriately to make their intended achievement possible (empowerment).

Significantly, more from three boys and girls in the seven-year single sex schools indicate ability, effort and strategy as causal attributions for their future achievement and self-development than do boys and girls in the composite and the junior secondary schools. Inner locus of control characterizes the causal attributions of the seven-year school pupils. This is true for their indication of "help" as causal attribution because they seek to help themselves to achieve their future self-development. Difficulty and luck, on the other hand, which were indicated by many of the composite and junior secondary school students, show external locus of control.

The relationship between the mission statements of the schools, their curriculum offerings and the students' perception of the ethos of their

schools is not explicit. Despite clear and articulate differences in the mission statements of the schools, and the similarities between the statements from the single sex schools, on the one hand, and the two other schools, on the other hand, there is no way of making a direct connection between the school variables and the students' attributions. One great barrier disallowing such a kangaroo jump is the gulf created by the characteristics of most of the children in the single sex schools compared to those in the junior secondary and composite schools. It may well be that this factor, more than any other, accounts for the differences of attribution responses of these subjects. Nevertheless, a message from this study is that all schools, including the junior secondary and composite schools, should encourage pupils to emphasize effort, strategy and help seeking approaches in their thinking, planning, preparing and working towards their goals of achieving self-development.

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