

THE THWARTING OF YOUTH ASPIRATIONS: A CASE STUDY OF FACTORS ASSOCIATED WITH ACADEMIC DEBILITATION AMONG NINTH GRADERS

Darge Wole*

ABSTRACT: *The crisis regarding the academic attrition of ninth graders was investigated through a case study in a school situated amid a predominantly agricultural low-income locality. The study identified student absenteeism and the 8th Grade National Examination results to be important determinants of ninth grade academic performance. Also, student illness and the need to work for self-support surfaced as the most outstanding reasons for absenteeism. Attendant practical issues, particularly those that relate to absenteeism and the 8th Grade National Examination are raised, and some directions for subsequent investigations are suggested.*

INTRODUCTION

Student progression rates in senior high schools reveal a more precipitous drop at the ninth grade level than at the tenth or eleventh grade levels. For the period 1984/85-1993/94, for example, the attrition rates at grade 9 were mostly twice those at grades 10 and 11 (MOE, 1995). Promotion, repetition and drop-out rates, independently considered, present more specific delineation of the ninth grade syndrome. To wit, in 1994/95, the promotion rate for grade 9 was 67 percent as compared to 62 and 72 percent for grades 10 and 11 respectively (MOE, 1997)¹. Similarly the repetition and drop out rates in senior high school grades for that year were the highest at the ninth grade level, i.e., 24 percent in the case of repetition and 19 percent in the case of drop-outs.²

The notorious gender differential, disfavoring females, is also evident in the holocaust since female ninth graders fare worse than their counterparts with regard to promotion rates and, by corollary, with regard to repetition and

* Associate Professor, Department of Psychology, Addis Ababa University.

drop out rates. In 1993/94 and 1994/95, the repetition rates for male ninth graders were limited to 17 and 19 percent respectively, while the corresponding rates for females rose to 29 and 30 percent (MOE, 1995, 1996 and 1997).³ The drop out rates were also more devastating in the case of female representing 22 percent for females but 15 percent for males in 1994/95, for example.⁴

Evidently, the ninth grade has become a bottleneck in senior high schools. How can one explain its uniquely shackling character?

POINTERS FROM THE LITERATURE

At the experimental level, one widely recognized factor that affects academic progress or achievement is mastery of pre-requisites (White and Gagne, 1974). Field investigation in a variety of settings (Nkinyangi, 1980; Munoz and Arrive, 1987; Makonnen, *et al.*, 1991, McGinn & Borden, 1995) bear out this assertion. Nykinyangi, for instance, found that remedial instruction enabled academically deficient students to acquire pre-requisite skills and get promoted to higher grades. Munoz and Arrive supplied evidence which indicates that disregard for pre-requisite knowledge by enacting automatic or "social" promotion in the primary grades can result in illiterate graduates. The bottom line is that, as in other grades, academic achievement in grade 9 is partly dependent on the student's mastery of the syllabi for prior grades, which, in the present case, is generally assessed by the 8th Grade National Examination. But mastery of pre-requisites is specially important in grade 9 because this grade marks a significant departure from basic education.

A second factor that is likely to influence academic status in grade 9 (or any other grade for that matter) is student absence from class (Levanto, 1973; Peng, *et al.*, 1980; Akins, 1980; Hagborg, *et al.*, 1991; Deschamps, 1992). For instance, Levanto detected a negative relationship between the class rank of senior high school students and their absenteeism. Hagborg, *et al.*, found that high school students who repeat grades were more frequently absent from class than non-repeaters.

A third factor impinging on student academic progress in grade 9 is displacement. Some evidence (Boyer and Sedlacek, 1988; Darge, 1997) suggests that academic performance of displaced students is negatively affected by adjustment problems related to the availability of a supportive person in the new setting, and the ability of the displaced student to forge a reciprocal relationship with new acquaintances. This factor may assume prominence in many semi-rural senior secondary schools where the student body includes a large number of sojourners who leave their homes in search of such schools.⁵

A fourth factor that is relevant to the study of school achievement is study time (Goldstein, 1960; Walberg, 1983, cited in Paschal, *et al.*, 1984; Montero-Sieburth, 1989, cited in McGinn & Borden, 1995). For instance, Montero-Sieburth found a positive relationship between study time for mathematics and achievement in the subject. In fact, the close affinity between study time and achievement is well-anchored in Carroll's fundamental proposition that academic achievement increases as the study time an individual allots to a given type of learning increases, relative to the time he needs for that particular learning (Carroll, 1963).

Other evidence suggests that the comparative weight of different factors on male and female attrition rates or on their achievement may not be the same. At least in some cases (King and Lillard, 1983, cited in USAID, 1991, for example), school distance seems to be more negatively related to the school participation of females than that of males. Furthermore, in social settings where there is considerable bias against female education, absenteeism is probably more deleterious to the academic achievement of females than to that of males because absentee females generally get relatively less respite at home to study and compensate for their absenteeism from class than their male counterparts. Given that a learning condition may have a differential effect on the achievement of males and females, it becomes imperative to allow for the assessment of the same in such a study.

Generally, the variables identified earlier, namely, prior achievement or mastery of pre-requisites, absenteeism, displacement and outside-class study

time appear to be specially important in assessing student achievement in grade 9 because the grade is a transitional point which benefits from a solid academic background, substantial focus on an unusually high number of subject areas (about 15 per semester), and some competence in adjusting to a new mix of class-mates, teachers and instructional materials that probably excite but also intimidate the freshly initiated.

PROBLEM STATEMENT AND METHODOLOGY

Problem

Based on the rationale described above, the present study explored the relative contribution of the grade 8 examination, absenteeism, residential status (displaced or non-displaced), and amount of outside-class study time to the academic performance of ninth graders. It did so by considering males and females separately.

Since the study focuses on just one school the results may not be adequately informative about the factors that impede the academic progress of ninth graders as a whole, but they are expected to direct attention to those factors that play a prominent role in the process, specially in semi-rural and rural areas. Also, the fact that the ninth grade attrition rate in the school is high affords a reasonably wide latitude to capture important variables involved in such investigations.

Study Site

The study was conducted in the *Arbegnotch* Senior Secondary School in Arsi Zone (Oromia Region). The selection of that particular school for the study was prompted by a previous finding which unveiled a specially alarming rate of attrition among ninth graders of the school.⁶

The site of the study is a predominantly agricultural area. The local people depend mainly on growing seasonal non-cash crops such as barley, beans, chick-peas, and *teff*.⁷ A few also engage in petty trade, which requires long-

distance travel to weekly open markets scattered in the area. Overall, the economy of the locality is limited to the subsistence level, and young members of the family help in preventing total collapse.

Respondents

Initially 106 ninth graders (53 males and 53 females)⁸ who were enrolled in grade 9 in the first semester of 1995/96 were randomly selected for the study after all the 624 ninth graders (391 males and 233 females) were stratified by sex. Ninety-six respondents (44 males and 52 females) actually participated in the study. Out of this, 48 were displaced, and 44 were not.⁹

Data Collection

A questionnaire was administered to all the respondents simultaneously in three specially arranged classrooms. The information thus collected included bio-data, average number of study hours per week, importance attached to class attendance, reasons for absenteeism, and suggestions for reducing absenteeism.

Data regarding the 8th Grade National Examination results (henceforth, 'grade 8 results') were secured from the personal files of the respondents in the school. The residential status of the respondents was also determined from the same files (which indicated the location of the respondents homes). Information on absenteeism was gathered from the rosters of the relevant home-room teachers, and the Records Unit of the school provided the relevant ninth grade results.

Data Analysis

Descriptive and correlational data were pre-viewed as a starting point for a more focused analysis of the information by sex. That was followed by backward regression analysis (Pedhazur, 1982) for the purpose of assessing the relative weight of the identified variables in determining ninth grade results. The stepwise regression procedure was further employed to identify

which of the independent variables contributed recognizably and independently to the prediction.

In all the analyses, the independent variables include the grade 8 results (percentile), absenteeism (semester average-in-days), residential status (displaced, non-displaced), and outside-class study time per week (average number of hours). The dependent variable was the ninth grade result (annual average). Each type of analysis was conducted for males and females separately.

FINDINGS

The profiles of male and female respondents regarding the relevant variables were as follows.

Table 1
Average Scores of the Respondents on Selected Variables

Variable	Average Score		
	Males	Females	Both
Grade 8 result	68.9 (17.9)*	69.4 (19.3)	69.2 (18.6)
Absenteeism	3.6 (3.2)	4.1 (3.4)	3.9 (3.3)
Study hours	21.5 (16.9)	12.3 (8.6)	17.1 (14.4)
Grade 9 result	56.3 (11.3)	50.9 (6.8)	53.3 (9.5)

* The data in parentheses refer to standard deviations. Depending on the variable, $n = 40-44$ in the case of males, and $39-52$ in the case of females.

As shown in Table 1, overall the ninth grade result of the respondents was low with an average that is only marginally higher than 50 percent. Furthermore, although the grade 8 results of the males and the females were similar, the males slightly surpassed the females in their grade 9 results, which suggests greater deterioration in achievement among females than among

males. The table also affords a hint about the disparity in the grade 9 results of males and females since, on the whole, the females were absent from school a little more frequently than the males and, according to the self-reports, they studied for substantially less number of hours.

Correlational data gave the following picture.

Table 2
Inter-Correlational Data for Males and Females*

Variables	(1-5)	1	2	3	4	5
Grade 8 result	(1)	-	-.08	.04	-.32	.54**
Absenteeism	(2)	-.05	-	-.41**	.03	-.48**
Study hours	(3)	-.17	.35**	-	.20	.04
Residential status	(4)	-.49**	.16	.10	-	-.25
Grade 9 result	(5)	-.03	-.37**	-.23	-.25	-

* The figures above the diagonal relate to males and those below refer to females.

** $P < .05$

Table 2 provides pointers regarding the factors that contribute to the academic performance of the respondents. First, it appears that absenteeism is negatively associated with the academic achievement of both male and female students. Second, the grade 8 results seem to be positively related to grade 9 results only in the case of males.

The table also reveals other unexpected or discordant features. For instance, amount of study time does not seem to be relevant to ninth grade performance. Apparently also, in the case of males, as absenteeism increases, amount of study time decreases.

Backward regression analysis using the data for males only produced the following results.

Table 3
Result of Backward Regression Analysis (Males Only)

R^2 (All Variables) = 0.47	
Variables removed /by step/ (1) Residential status (2) Average study hours	Reduction in R^2 .002 .014
Variables retained Grade 8 result and absenteeism ($R^2 = 0.45$; $F = 13.1$, $P < .05$)	

Evidently, among the variables included in the model, it is only the grade 8 results and absenteeism that contribute substantially and reliably to the variation in ninth grade performance among male students. Further analysis using the stepwise procedure provided a more distinct account of the importance of grade 8 result and absenteeism for the prediction (Table 4).

Table 4
Result of Stepwise Regression Analysis (Males Only)

Variable		β	T-value
Constant	38.516		
Grade 8 result	0.318	.49	3.61 ($P < .01$)
Absenteeism	-1.464	-.43	-3.20 ($P < .01$)
n = 33			
Standard error = 8.85			
$R^2 = 0.45$; $F = 12.14$ ($P < .05$)			

Judging from Table 4 (the β 's) absenteeism seems to have a similar weight as the grade 8 result in determining ninth grade performance among males, and both variables contribute importantly and reliably to the determination.

The same operations used in analyzing the data for males were re-applied on the data for the females only. This time the backward regression analysis zeroed in just one variable, namely, absenteeism (Table 5).

Table 5
Result of Backward Regression Analysis (Females Only)

R ² (All Variables)	
Variables removed /by step/	Reduction in R ²
(1) Grade 8 result	0.01
(2) Average study hours	0.02
(3) Residential status	0.03
Variables retained	
Grade 8 result and absenteeism (R ² = 0.14; F = 5.66; P < .05)	

As might be expected from the results of the backward analysis, the stepwise procedure produced essentially the same result by sifting out only absenteeism as a dependable predictor of ninth grade achievement for females ($\beta = -.37$; $t = -2.4$; $P < .05$).

DISCUSSION

Evidence ascribed reliable and substantial weight to absenteeism and the Grade 8 National Examination result as explanatory variables for the variation (or, alternatively, the dilapidation) in the academic performance of ninth graders, while dismissing "study hours" and "residential status" as inconsequential in the process. The demarcation between the consequential and the non-consequential independent variables afforded by the available evidence, together with whatever differential effects the variables may have on the performance of males and females, will now be adopted as a meaningful guide for discussion. Evolving concerns shall be briefly handled subsequently.

Absenteeism and Grade 8 Result as Predictors

Among the factors considered, absenteeism figured prominently as a predictor of ninth grade achievement both for males and females. Evidently absenteeism is one important factor that helps to explain the exceptionally high rate of academic attrition at that grade level.¹⁰

The negative impact of absenteeism on academic performance, in all its variegated aspects, has been acknowledged and deplored elsewhere. Absenteeism has been associated not only with lowered academic achievement (Akins, 1980), but also with grade repetition (Hagborg, *et al.*, 1991) and dropping out of school altogether (Deschamps, 1992). So it would have been surprising if the present results were otherwise.

In the present context, which marks an important threshold into senior high school, adequate reasons exist to appreciate the special importance of absenteeism in determining ninth grade achievement. First, textbooks particularly those required for science subjects are in short supply, and students can borrow such books not individually but in groups.¹¹ Under such conditions, class attendance offers a useful compensatory forum for greater exposure and familiarity with the contents of a lesson. Second, unlike their experience in junior high school grades (where they study 11 subjects or less) ninth grade students are required to study 14 or 15 subjects per semester, and some of the subjects (like Production Technology) are new to them. If students miss classes allocated to such subjects, they are likely to show considerable deficiency in basic concepts or ideas. Third, to students who embark on a new academic cycle and who place a high premium on attendance, as in the case of the present sample, missing classes is likely to induce substantial anxiety, which in turn affects their study activities.

As indicated above, cogent reasons exist for appreciating the relevance of absenteeism in determining achievement. But why do the students become absent from class in the first place?

Rank-ordering the reasons for absenteeism that were cited by the respondents indicated the three most prominent reasons for absenteeism to be illness, the need to work for self-maintenance, and distance of school from home. Cited by 37 percent of the male respondents, the need to work for self-support emerged as the most frequent reason for absenteeism for this group. Illness assumed that status among female respondents as indicated by 52.5 percent of them.

The fact that the respondents needed to earn some income is readily understandable from the subsistence level income that characterizes the predominantly agricultural communities to which they belong. Indeed, the ever-rising prices of materials the students require, particularly stationery and shoes, put a heavy toll on their meager resources.¹² In addition cost sharing by secondary school students for running school programs continued to be practiced at a level which most parents would find demanding.¹³

As suggested by the data, parental expectation for self-support through work is greater in the case of males than in the case of females. This is probably due to the fact that many of the income-generating activities (like petty trade in open markets, and work on the farm) are less condoned among females than among males since these engagements involve some travel and a good deal of interaction with unfamiliar people, and may therefore expose the girls to sex-linked risks. In addition, by tradition, females are generally regarded to be home-bound in their roles, and more dependent than males.

Apparently illness also deters the class attendance of females more frequently than that of males. Why that is so is unclear. However, among the displaced, some evidence¹⁴ suggests that homesickness and associated psychological disturbances are more prevalent among females than among males. It is also plausible that the female students, who should be at the pubertal or early adolescence stage, misconstrue the normal menstrual periods as times of "illness" due to the unwholesome social outlook beclouding the phenomenon, and shame-facedly avoid school at those periods.¹⁵

Regarding the 8th Grade National Examination, it appears to be a reliable predictor of ninth grade performance only in the case of males. In the search for an explanation for the discrepant finding, it was initially proposed that perhaps, just by coincidence, a special group of female respondents with extreme scores on the grade 8 examination or with limited score variance were involved in the study, and that restricted the correlation between the grade 8 and grade 9 results in the case of the females. However, the speculation proved abortive because the grade 8 results of the female respondents were well spread out (range = 41.9-99.3; mean = 69.4; SD = 19.3)

Another more general line of thinking suggested that since the evaluation system concerning the grade 8 examination is norm-referenced (using percentile) instead of criterion-referenced, it does not provide an adequate estimate of the degree of mastery of previously taught content areas. In that case there will be little or no basis to expect a systematic relationship between grade 8 results (as a measure of pre-requisite knowledge) and grade 9 results. But this notion immediately faced counter-checks because if that line of thinking was tenable then the grade 8 results should not have figured as an important predictor of grade 9 results for the male respondents (unless of course one attributes that to statistical vagaries). In addition, even if the grade 8 examination adopts the norm-referenced approach, the results of the examination should relate to some extent with grade 9 results in as much as the examination rank-orders students in terms of achievement.

Further consideration of the issue regarding the relationship between grade 8 and grade 9 results is curtailed by the scantiness of literature about the content validity of the examination, or about its temperamental cousin, the examination's predictive validity. One analysis (NEB, 1983) suggests that the examination does not adequately discriminate between students in terms of their mastery of pre-grade 8 subject matter. According to the analysis, the discrimination indices of the sub-tests¹⁶ administered in 1981 and 1982 were all 0.35 or below. In addition, only 20 percent of the questions in the 1982 examination were determined to be "comprehension" type (while 61 percent of them were identified as "recall" type).

Generally, the inconsistent finding about the usefulness of the grade 8 examination in predicting ninth grade achievement is not readily explicable by design considerations, except possibly by the ubiquitous sampling error (which is associated with sample size). Relevant literature, scanty as it apparently is, offers no weighty contribution to the resolution of the issue either.

Amount of Study Time and Residential Status as Predictors

According to the present results, outside-class study time does not seem to relate to ninth grade achievement. This finding defies expectations.

By way of explanation it appears that, impelled by the social desirability factor, a good number of the present respondents gave an exaggerated account of their study time. More concretely, the average number of study hours (per week) cited by the respondents was 17.1 (21.5 hours by males and 12.3 hours by females). In fact 10 percent of the respondents claimed that they studied for 35 hours or more per week.

Other evidence also decries the credibility of the self-report concerning amount of study time. To elaborate, observation in the study site indicated that many of the high school students engaged in different types of non-academic tasks outside their school hours. These tasks include fetching water from the nearby river or *bono* (water distribution center), collecting firewood, cooking food and brewing local drinks (in the case of females), selling commodities like onions, chick peas or chicken on a small scale in open markets, and assisting parents in tending cattle and weeding or harvesting crops. Then too evenings are typically times of family gatherings and chats in a dimly-lit *ilfign* (roughly "sitting room") and it takes a consuming interest and a Herculean effort to study under such conditions.

Another consideration that may help to explain the apparent disassociation between amount of study time and ninth grade achievement relates to the shortage of textbooks, the language competence of the students and their study strategies. Shortage of textbooks puts a severe limit on the efficacy of

independent study. Even when textbooks are retrieved from a partner through protracted negotiation, the English probably poses difficulties for many of the students. Deficiency in the medium of instruction, i.e. English, in turn encourages morbid surface processing of information such as indiscreet memorization, and blind underlining and copying.

From the obtained data, displacement also appeared to be irrelevant to ninth grade academic achievement. Concerning the matter, the initial hunch from the literature was that displacement would create adjustment problems and that would in turn hinder achievement. Given the finding, one likely explanation for the incongruous outcome is that some of those respondents who were inadvertently classified as "displaced" actually lived with relatives that provided some support in terms of food, shelter and emotional backing¹⁷, in which case the concerned students would face no special adjustment problems.

The Ninth Grade Academic Delibitation: Beyond Prediction

In this study absenteeism surfaced as a factor of relatively greater importance in determining ninth grade achievement. That prompts some practical considerations.

The literature suggests a few options for dealing with absenteeism. These include: setting attendance regulations (Kovas, 1986); bringing the school closer to home (USAID, 1991); school feeding (Easton and Fass, 1989), reducing teacher absence (Munoz and Arrive, 1987), and promoting student-teacher interaction (Bryk, 1989). However, as usual, such a listing is loaded with qualifications.

Regarding attendance regulations, for example, it appears that their effectiveness varies depending on the semester or season under consideration showing greater efficacy in the first than in the second semester (Kovas, 1986). The seasonal differential in the effectiveness of attendance regulations is probably associated with the relative off-school workload of the concerned students. Concerning regulations, in the present case, the Ministry of

Education requires that a senior high school student shows at least 90 percent attendance during the year in order to be allowed to sit for the final examination.¹⁸ However, practically that has apparently proved to be unworkable in many cases. Quite simply, a large number of students (11 percent in the present case, for instance) fail to meet the minimum attendance requirement. The all-too-apparent risk in enforcing the regulations indiscriminately in such a context is that, already exacerbated by hardships in their living conditions and by ill-defined academic prospects, many of those charged with absenteeism may leave school for good, even when there is reason to believe that they are academically salvageable.

Similarly other evidence (Abraha, *et al.*, 1991, for example) cautions against over-optimism regarding the effectiveness of home-school distance alone in reducing absenteeism. Additional factors such as motivational deficit to attend school may be at work as well. School feeding has also produced mixed results, sometimes making no impact on absenteeism at all (King and Bellew, 1989, cited in USAID, 1991).

Amid the apparent impasse in resolving the problem of absenteeism, two general perspectives would seem productive. First, a single option like school mapping should not be expected to eradicate the problem. In fact, a solution may require the use of different measures simultaneously (as in employing school mapping, attendance regulations, and reduction of teacher absence in concert). Second, solutions should be situation-specific. In this study, for example, the three most commonly advanced solutions for tackling absenteeism by the students were: provision of adequate stationery, improvement in medical services, and reduction of (students') workload outside the school (cited by 24.5, 14.7 and 9.8 percent of the respondents, respectively).

The implementation of the kinds of options advanced by the students requires, however, consideration of more specific and workable strategies such as looking for public or alumni donations of stationery for the most deprived students, providing preventive health education periodically in the school in cooperation with the local health centers, and accommodating the

needs of self-employed students as much as possible when students are assigned to the morning or afternoon shift. Obviously these kinds of efforts cannot be lasting solutions since the overall economic conditions of the locality remain a crucial element in resolving the problem.

Practically, another variable tabled for sustained deliberation or re-view by the study is the Grade 8 National Examination. Because of its scope, the present investigation is not adequate to determine whether or not the ninth grade academic aberration regarding female students is noticeably due to a limitation in the screening power of the grade 8 examination. Still, in a very forceful way, the study prescribes the need to undertake investigations, that would shed more light on the different types of validity pertaining to the examination. Such investigations assume special importance at the moment because, by policy, grade 8 has been re-designated as the end of primary schooling thereby bestowing more prominence to its function as an academic watershed. The task at hand cannot be under-estimated because, again by policy direction, the pre-eighth grade syllabi are expected to show orientation differentials that aims at tuning up instruction to the particular conditions and aspirations of individual regions, including their choice of the medium of instruction.

Overall, the present study has made an indent, but only an indent, into the factors that impinge on the academic crisis in grade 9. Looking at the degree to which absenteeism and the grade 8 results explained grade 9 achievement (45 percent of the variance in the case of males, for example), there is clearly a need to replicate the study using larger samples in different schools to verify the present findings and to track down other similarly potent variables, including the qualification of teachers commonly assigned to teach in that grade.

SUMMARY AND CONCLUSION

One major cause for the academic debilitation in grade 9 in pre-dominantly agricultural and low-income localities seems to be student absenteeism. Performance on the Grade 8 National Examination also appears to play a

similar role, although the available evidence is equivocal about its importance. The study further suggested that illness, the need to work for self-support and distance of school from home are relatively more important determinants of absenteeism among ninth graders in the school investigated and, pending replication, possibly in other similar schools.

Although the literature suggests a variety of options for dealing with the problem of absenteeism, quite meaningfully, a need exists to assess their relevance in view of situation-specific solutions which, according to the present respondents, included the provision of stationery and medical services. That definitely goes beyond the all-too-familiar facade of rules and regulations pertaining to attendance.

Considerations regarding the usefulness of the grade 8 examination for determining admission to the senior high school further unveiled a tradition that is noticeably wanting in validity studies. The message here is too obvious to miss.

Generally the major task in handling the grade 9 academic crisis in situations of the kind explored in this study is not so much the creation of student academic motivation but its maintenance and nurturing - a task that has been thinly debated and thinly resolved locally.

Notes

1. Partly computed by the researcher using data in MOE, 1996 and 1997.
2. See Note # 1.
3. Computed by the researcher taking data from MOE, 1995, 1996 and 1997.
4. See Note # 3.
5. See Darge, 1994 for a description of such cases.
6. In 1992/93, for example, out of 239 students who sat for the grade 9 examinations in the school, only 151 (or, 63%) were promoted to grade 10. (Edosa Kefelcha, Interview, December 1995.)
7. Tiny grains which form a staple food in many regions of the country. Compared to other forms of agriculture, growing *teff*-*cragrostis teff* is a labor-intensive occupation that often involves even young members of the family.

8. Fifty males and 50 females were first considered adequate for the study. On second thought, it was felt that a few of the sampled students may not be able to participate in the study. So three respondents were added to the sample in each group to help compensate for any absentees.
9. The available information was inadequate to classify four of the male respondents as either "displaced" or "not displaced."
10. Out of the 96 respondents, 32 (or 33%) obtained a grade 9 average of less than 50 percent.
11. The information about school conditions that is used in the discussion is extracted from the interview with the Director of the School (See Edosa 1995).
12. For example, for a ninth grade student studying 15 subjects, the cost of stationery for one semester was about 25 *Birr*. Sandal shoes made of plastic were available for about 11 *Birr* but reasonably decent sneakers or leather shoes cost close to 100 *Birr* or more. Clothes were expensive too, but used ones were available for about 15 *Birr* a piece. So conservatively, parents who sent three children to school, for instance, needed to spend about 500 *Birr* per year (or about 250 *Birr* per semester) only for the children's stationery and clothing. That probably accounted for more than half of the annual income of most parents in the locality.
13. According to the Director of the School, in 1995/96 each student in grades 9-12 was expected to pay 17 *Birr* registration fee (for the year). Students who were re-admitted after withdrawal were asked to pay 23 *Birr*. In addition, students were occasionally required to contribute money for other purposes such as physical repair of the school and sports.
14. A previous study in the same site indicated that homesickness was much more prevalent among displaced female students than among displaced male students. See Darge, 1994.
15. The present findings about the prevalence of illness among female students and about the misconceptions regarding menstruation are strikingly similar to other findings in primary schools. See MOE and IDS, 1996.
16. The sub-tests included Amharic, Social Studies, Mathematics, Science and English.
17. Later inquiries with the Director of the School and other staff members supported this conjecture.
18. Communication by the Director of the School. (See Edosa, 1995).

REFERENCES

- Abraha, S., A. Beyene, T. Dubale, B. Fuller, and S. Holloway. 1991. What factors shape girls' school performance? Evidence from Ethiopia. *International Journal of Educational Development* 11(2): 107-18.
- Akins, D. L. 1980. ACT Scores: Possible factors behind the decline. *Journal of Counselling Services*, 3(3), pp.6-13.
- Boyer, S. P., & Sedlacek, W. E. 1988. Non-cognitive predictors of academic success for international students: A longitudinal study. *Journal of College Student Development*, Vol. 29. pp.218-223.
- Bryk, A. S., & Yeow Ming, T. 1989. *The effects of high school organization on dropping out: An exploratory investigation*. Report by the Center for Policy Research in Education. The State University of New Jersey, New Brunswick.
- Carroll, J. 1963. *A model of school learning*. Teachers College Record, 64. Columbia University, New York.
- Darge Wole. 1994. Major problems and coping strategies of *Sinkegna* high school students: A preliminary study. In H. G. Marcus (Ed.), *New Trends in Ethiopian Studies: Papers of the XIIth International Conference of Ethiopian Studies*, I:113-136. New Jersey, The Red Sea Press.
- _____. 1997. *Childhood experiences in parental care and later competency: The case of Sinkegna high school students*. Research report submitted to the Institute of Educational Research, Addis Ababa University.
- Deschamps, A. B. 1992. *An integrative review of research on characteristics of dropouts*. Unpublished Doctoral Dissertation, George Washington University.
- Easton, P. , & Fass, S. 1989. Monetary consumption benefits and demand for primary schooling in Haiti. *Comparative Education Review*, 33(2).

- Edosa Kefelcha. Director, *Arbegnotch* Secondary School, Arsi, Interview, December 27, 1995.
- Goldstein, A. 1960. Does homework help? A review of research. *Elementary School Journal* 1: 212-224.
- Hagborg, W. J., *et al.*, 1991. A follow-up study of high school students with a history of grade retention. *Psychology in the Schools*, 23(4), pp.310-317.
- Kovas, M.A. 1986. *A comparison of secondary school student performance in attendance and achievement with relationship to the use or non-use of a restrictive and punitive Administrative control policy for attendance.* Research Report. Indiana University.
- Levanto, J. F. 1973. *The identification and analysis of factors related to secondary school absenteeism.* Unpublished Doctoral Dissertation, University of Connecticut.
- Makonnen Yimer, *et al.* 1991. The comparability of the predictive power of the ESLCE with other Measures: Preliminary observations, *Proceedings of the Workshop on Major Issues Related to the ESLCE and Possible Solutions.* Institute of Educational Research, Addis Ababa University.
- MOE (Ministry of Education). 1995. *Education statistics - Annual abstract.* Addis Ababa: Educational Materials Publication and Distribution Agency.
- _____. 1996. *Education statistics - Annual abstract.* Addis Ababa: Educational Materials Publication and Distribution Agency.
- _____. 1997. *Education statistics - Annual abstract.* Addis Ababa: Commercial Printing Enterprise.
- MOE & IDS (Institute of Development Studies, Sussex). 1996. *Gender and primary schooling in Ethiopia.* Addis Ababa.
- McGinn, N. F., & Borden, A. M. 1995. *Framing questions, constructing answers: Linking research with education policy for developing countries.* Cambridge, M.A.: Harvard University Press.

- Munoz Izquierdo, C. & de Arrive, S. L. 1987. *Strategies for improving access to and retention in primary education in Latin America*. Cambridge, M. A.: Harvard Institute for International Development.
- NEB (National Examination Board). 1983. *Item analysis of questions in the 6th and 8th grade national examinations* (unpublished Report in Amharic), Addis Ababa.
- Nkinyangi, J. A. 1980. *Socio-economic determinants of repetition and early school withdrawal at the primary school level and their implications for educational planning in Kenya*. Unpublished Doctoral Dissertation, Stanford University.
- Paschal, R., Weinstein, T., & Walberg, H. J. 1984. The effects of homework on learning: A quantitative synthesis. *Journal of Educational Research*: 78: 97-104.
- Pedhazur, E. J. 1982. *Multiple regression in behavioral research*. New Jersey: Lawrence Erlbaum.
- Peng, S. S., et al. (April, 1980). *School experiences and performance of Asian American high school students*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- USAID, 1991. *Educating girls: Strategies to increase access, persistence, and achievement*. (ABEL Research Project), Washington, D.C.
- White, R. T., & Gagne, R. M. 1974. Past and future research on learning hierarchies. *Educational Psychologist*, 11: 19-28.