

FACTORS ASSOCIATED WITH SCHOOL DROPOUT IN PAKISTAN: AN ASSESSMENT USING SURVIVAL ANALYSIS

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INTRODUCTION

The bottom-line of this research is that despite granting autonomy to provinces in running school education and the State's obligation to "Right to Free and Compulsory Education", the track record has not been very impressive. The National Education Policy 2017, introduced after the 18th amendment, has not fully achieved one of its main targets of reducing the school dropouts. School participation is an important aspect of education outcome but what is more important is to examine the factors contextual to school retention especially towards higher level of education. There is a need to identify the risk factors that may contribute to low school survival rate in Pakistan such as teacher's absenteeism and lack of commitment, harsh treatment, lack of facilities, lack of parental involvement, child's personal abilities as well as child's involvement in paid and unpaid work. The persistency in school dropouts acts as a hurdle in achieving SDG4 objective of universal education for all. Therefore, there is a need to fine-tune the education policy by ascertaining legal and administrative actions towards student retention in schools. For this purpose, there is a need to determine the risk factors that must be contained through strict policy actions and awareness. Since getting a high enrolment is a necessary but not sufficient condition to improve the education outcomes. An improvement needs to be made in terms of completion and successful transition to higher level of education.

This report is comprised of three main research questions i.e., i) What are the individual, collective and social factors that are a cause of concern for early dropout from schools at household level? ii) Does education performance, readiness and schooling attributes matter in determining school dropouts? iii) What differences are observed across different divisions of Punjab and Sindh? The answers to these questions are found by calculating hazard ratios using MICS6 dataset on children between the age of 5 to 17 years. Furthermore, the narrative is developed by undertaking situational analysis using data from Public and Private School Census, Punjab Economic Profile and Sindh Education Statistics and Alif Ailaan Scores.

METHODOLOGY

The current study utilized Round 6 database of Multiple Indicators Cluster Survey (MICS) by UNICEF. The cohort used for analysis is children between the age of 5 to 17 years who have ever attended school.¹ The dependent variable is duration it takes for dropping out of the highest level of grade ever attended by a child. The levels of education are divided into pre-school, primary, secondary, and higher. The analysis is done for Punjab and Sindh.² The analysis is based on household data and data extracted from school census. The demand side factors are categorized into economic barriers, societal barriers, and personal disabilities. These are the impediments faced at the household level that may hinder continuing schooling. On the other hand, supply side

¹ The school going age, as defined under Article 25A, is 5 to 16 years.

² KPK and Balochistan is not included in the current study due to data limitations. At the time of analysis, the data for Balochistan was not available. The data on KPK for MICS6 does not include the cohort aged 5 to 17 years to be used for analysis.

factors include schooling attributes which reflect the quality of education as experienced by current students as well as the readiness of education system in terms of early education and beyond primary readiness, both in terms of availability and capacity. The control variables include gender differences, the incidence of poverty in different regions, and rural urban differences.

The estimation technique used in current study is survival analysis which estimates the probability of an event (school dropout) by considering many different times that event will occur. Thus, the prediction of response variable (school dropout), under survival analysis, will include the time to exposed risk along with other explanatory variables. This provides a better analysis of examining the risk factors and the extent to which these factors influence the event to occur i.e., school dropout. The survival analysis retains the information of both categories i.e., first who dropped out from school and second who completed a grade.

MAIN FINDINGS AND CONCLUSIONS

- The results indicate that the survival probability of student retention rises towards higher education level with each additional year of schooling. Students tend to drop out of school more at preschool (*Katchi*), primary and lower secondary level which results in educational wastage as the successful transition to secondary and higher level tends to get low.
- Children belonging to less privileged households are at greater risk of early dropout from school with a greater hazard ratio for poorest and second lowest quintiles as compared to the richest. For poorer households, children are considered a source of income at present rather than an asset for earning higher future income through education. The higher opportunity cost at present results in an earlier dropout from schools. In addition, it is found that children who are involved in paid/unpaid work are at higher risk of dropping out of school at an early stage of schooling in comparison to higher levels of schooling. However, those who successfully transition to higher grades are less likely to leave school despite being associated with child labour.
- Harsh treatment at home in terms of verbal and physical abuse is a contributing factor in increasing the parity risk of school dropout. Furthermore, parents' regular visit to school has a comparatively less hazard ratio in comparison to their non-participation.
- Children with functional difficulties and inability to acquire reading skills have greater chances of dropping out of school at an earlier stage. So, there is a need to focus on re-designing the curriculum at earlier levels of schooling by making it student-centric to build capabilities in terms of cognitive skills.
- It is found that absence of school governing body and parent's non-participation in school events and meetings significantly increases the chances of school dropouts. On the other hand, regular feedback on child's progress report tends to decline the hazard ratio. Regions that have lesser risk of school dropout (Rawalpindi, Gujranwala, and Lahore), also have greater prevalence of school governing body, regularity in students' performance as well as parental involvement with school management committee/ parent-teacher association. In the case of Sindh, contrasting results are observed i.e., the presence of the school governing body failed to reduce dropouts despite major efforts by School Education & Literacy Department of Sindh. It is observed that such intervention has caused more deprivation as compared to its absence which shows inability of such policy action to get the fruitful deliverability in case of Sindh.

- Rawalpindi, Gujranwala, and Lahore are less poverty afflicted divisions as compared to rest of the Punjab and the parity risk of school dropout is also lowered in these regions. The parity risk of school dropout resulting from paid labour in urban areas is highest in the case of Bahawalpur followed by Multan. Whereas rural unpaid family labour in D. G. Khan is a significant contributor for dropping out of school. On the other hand, paid labour in rural areas of Rawalpindi and Sahiwal have the highest hazard ratio associated with discontinuation of school education at earlier grades. Larkana, Mirpurkhas and Hyderabad divisions experience an early school dropout and have higher poverty incidence. On the other hand, the less impoverished regions such as the division of Karachi and Sukkur show better performance in terms of lower risk of school dropouts. The involvement of children as unpaid family labour in rural areas of Larkana and Hyderabad divisions is a significant contributor towards early dropout from school whereas this relationship is substantially stronger in urban areas of Karachi. In the case of Shaheed Benazirabad, the risk of school dropout is much higher in urban than rural areas. Child labour in the form of paid activities is significant only in rural areas of Larkana and Mirpurkhas with much higher impact in the latter. The analysis shows that paid labour in urban has no significant role in Sindh but a contributor factor in Punjab.
- The quality of physical infrastructure is an important factor for school retention and successful transition to higher grades. The learning score is highest in the case of D. G. Khan, but this division has inability to address higher incidence of student dropouts due to lack of capabilities for beyond-primary readiness. This is observed in terms of poor school infrastructure and lesser number of middle and high schools to cater the successful transition from primary to higher level of schooling. Furthermore, the inadequate number of above-primary schools is a greater impediment than the poor infrastructure for school retention. For Multan division, school infrastructure as an indicator of readiness is better performing followed by the availability of beyond primary schooling. Mirpurkhas has a higher risk of school dropout where the school availability is less as well as the proportion of dysfunctional schools and schools with only one functional classroom is also high. Hyderabad division has a higher public-school ratio along with comparatively better school infrastructure but still this region corresponds to the highest school dropout risk. The possible reasons could be poor performance in educational outcomes, gender parity and beyond primary readiness. Hyderabad has the highest learning score in terms of education outcome, but such performance proves to be inadequate for school retention towards higher grade which is mainly due to inadequacy in beyond primary school availability and poor infrastructure of existing schools. Similarly, Mirpurkhas is under performing in all the categories which also has a higher hazard ratio of school dropout.

POLICY RECOMMENDATIONS

Based on our analysis, some key issues to be addressed are given below:

- i) Strong legal system must be enacted to deter child labour.
- ii) Poverty is also one of the reasons for school dropouts. Hence, an in-cash payment scheme for education attainment specifically in impoverished regions could play an important role in improving school retention. Scholarship rewards could incentivize students for successful transition towards higher level of schooling. 'Education voucher

scheme³ through public-private partnership needs to be expanded for affordable access to education.

iii) Parental involvement and the school governance system must be strengthened. In addition, parental involvement must also include conducive household environment for child development. The PTAs can play an important role for awareness in this regard.

iv) The schools must focus on improving the educational outcomes in terms of learning outcomes, development of cognitive abilities and regular feedback mechanism. The general principle of access to 'education' must be prioritized towards 'quality education'. Such course of action must start from primary and pre-school (Katchi) level for successful transition to higher levels since the school dropout risk is highest at these two levels of education. This can ultimately also bring fruitful results in early childhood programmes.

v) Beyond-primary school readiness needs to be improved, both in terms of school availability and school infrastructure, by considering the differences and resource deficiencies across regions.

vi) Above all, each province needs to structure and fine-tune the education policies with reference to regional and local context, catering to its specific needs by involving the local bodies instead of a single policy action at provincial level. Since the National Education Policy 2017 continues to guide the federating units due to absence of comprehensive policy drafts of their own and such policy becomes somewhat shallow in regional context.

³ The voucher scheme is currently introduced in 36 districts of Punjab with high concentration in Lahore and Rawalpindi. These two regions also depict lower hazard ratios for school dropouts.