

Examining the Relationship between Parental Involvement and Workers' Income in Katsina State

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Abstract

This study examined the relationship between parental involvement and workers' income. Using a cross-section of civil servants, staff of secondary schools and youths in Katsina State, Nigeria, parental involvement indicators were regressed on income, using the ordinary least squares regression technique. The results indicate a statistically positive relationship between parental involvement and income, for all parental involvement indicators. Male workers were found to earn a significantly higher income than their female counterparts. Age and being married were positively related to income, but did not have a statistically significant effect on income. The level of education was positively related to income and statistically significant. Personal positive attributes which contribute to academic progress were found to be positively related to income while the negative attribute indicator was inversely related. Parental involvement policies are recommended as foundation for improving the future income of workers.

Keywords: Income; Katsina State; Nigeria; Parental involvement.

JEL Classification: D31, I20, J16, J23

Introduction

The home impacts the life-long behaviour of children. Parents are critical in this respect. Parental involvement is one way in which parents influence such life-long behaviour of children. By providing stimulating literacy and material environment (Snow et al., 1991), supporting and supervising children (Kurdek, Fine, & Sinclair, 1995), ensuring exposure only to appropriate television programmes and that homework is completed (Clark, 1993), emphasising effort over ability (Stevenson, 1983), and inculcating habits that promote independence or autonomy (Lamborn, Mounts, Steinberg, & Dornbusch, 1991), parents significantly determine the course that the future of children would take.

According to the *No Child Left behind Act* (2001), parental involvement is the process of parental participation in a regular two way and effective communication concerning children's academic success and other school activities. The North

West Regional Educational Laboratory (1999) defined parental involvement as the ongoing, active involvement of a student's family in his/her schooling process. Parental involvement, according to Hoover-Dempsey, Battiano, Walker, Reed, DeJong, and Jones (2001) is parents' active and willing contribution involving school- and home-based activities, ranging from supporting and entrenching the ethos of the school to helping children complete their homework. Implicit in these definitions is the view that parental involvement is displayed in such activities which are supportive of their children's success at school. These activities may be educational or not. Parents who thus take an active part in their children's educational development do so because of the firm conviction that their contribution can add value to the development of both the educational system and their children's life outcomes.

There is an extensive investigation on the relationship between education and earnings or incomes, with robust evidence that education has a significant positive impact on individual earnings (Card, 1999, 2001; Oreopoulos, 2006). Although parental involvement tends to decrease with increases in children's grade levels (Griffith, 1998), the imperative of early involvement shapes the course of the child's future outcomes. It is known that the education of the individual starts from the home, with parents providing the earliest forms of education to the child. In this context, parental involvement is critical as a foundation to the formal education and training that a child obtains in life. In this way, future earnings, from the point of view of the individual's education, are linked in some way or measure to the role of parents. This is even more important, given the wider social impact of education, ranging from lower participation in crime by the educated (Lochner and Moretti, 2004), improved health outcomes (Lleras-Muney, 2005), better participation in civic matters (Dee, 2004) and better satisfaction if life (Oreopoulos, 2007). The inter-generational impact is also stressed in the literature as the children of those receiving additional schooling also benefit (Black, Devereux and Salvanes, 2008).

From the foregoing, the significance of parental involvement cannot be overemphasized. As reported in Benson and Martin (2003), it extends beyond academic work to include higher rates of attendance, higher self-esteem, and higher probability of avoiding risk behaviours in adolescence and finally lower drop-out rates. Others are higher school achievement, lower delinquency, increased high school completion and higher rates of college and university admission.

Although Nigeria operates the National Policy on Education, which guarantees access to education by every child, it surprisingly contains only sketchy references to parental involvement, as it merely encourages private agencies, communities and parents to be involved in children's education (Kutelu & Olowe, 2013). It was observed that Nigeria's educational policies do not contain clear guidelines for the realization of parental involvement (Olibie, 2014).

Much as there is low parental involvement in developed as well as in the developing countries (Pansiri & Bulawa, 2013), with Nigeria having a similar trend (Olibie, 2014; Olatoye & Agbatogun, 2009), its role in children's life-long economic opportunities has been largely ignored in the empirics.

The imperatives of education to labour market outcomes are emphasized in the literature (Oreopoulos & Salvanes, 2009). Despite the obvious advantages, previous studies did not consider the role of parental involvement in determining future outcomes of workers. Given that parental involvement assists student outcomes, it can be deduced that better student outcomes are likely to have impact on life experiences including employment, income, and health, among others. The study is thus motivated by the need to determine whether parental involvement contributes towards the future economic opportunities of workers. Moreover, past studies are mainly within the educational domains. This paper is novel as it investigated a largely education-driven domain from a socio-economic lens.

From the foregoing, this study investigates the relationship between parental involvement and workers' income. Following the introduction, section two is on materials and methods. The results are presented and discussed in section 3, while the paper is concluded in section 4.

Materials and Methods

Data Sources and instrumentation

This study made use of primary data, following a survey research design, as the purpose was to examine the parental involvement-income relationship. The population of the study was staff of Ministries, Departments, and Agencies of government in Katsina State, Nigeria, including staff of secondary schools and youths in Katsina State, Nigeria. Two hundred (200) respondents were randomly selected for investigation.

To collect the data, a structured questionnaire was used. It was designed to elicit response on parental involvement, socioeconomic background and current income and employment statuses of respondents. The questionnaire items were assessed to ensure face and content validities, by determining the extent to which each question or statement measured what it was supposed to measure. It was also reviewed with five of the researchers' colleagues to ensure clarity and relevance. It was furthermore subjected to pilot testing by administering it to a group of thirty-five (35) respondents from two ministries and three secondary schools, and the responses analysed, utilizing the Cronbach alpha reliability method.

Measurement of variables and Model

To examine the relationship that exists between parental involvement and income, a regression was estimated in which income is a function of parental involvement and other covariates. In this study, parental involvement is viewed as a variety of social capital, in which children's education is seen as an investment by parents. The study employed the two most widely used "domains" of parental involvement, i.e. parent-school and parent-child involvement (see Sheldon & Epstein, 2005).

Dependent variable: This was measured by current income, a continuous variable. In light of this, the linear regression estimation, embodied in the Ordinary Least Squares (OLS) and enamoured by its BLU (Best, Linear, Unbiased) properties, was considered suitable.

Independent variables: Because parental involvement is broadly categorized into home-based involvement and school-based involvement, four sets of variables were constructed from the questionnaire comprising: 1. Parent-child involvement; 2. Parent-school involvement; 3. Individual Covariates; and 4. Interaction terms:

The literature provides insights into some factors that influence income, including socioeconomic background (Lee & Burkam, 2002). The respondent's level of education, gender, marital status, and age, as individual-level covariates were included in this study

From the foregoing, to examine the relationship between parental involvement and children's income, a cross-sectional linear regression model is specified:

$$Y_i = \beta_0 + \beta_i X' + \varepsilon_i \quad (1)$$

Variable	Coefficient	Std. Error	t-Statistic
<i>Parent-child involvement:</i>			
Inspection of child's school work	0.5813***	0.3041	1.911542
Strictness on child	0.7613**	0.3591	2.120022
Monitoring	0.5814**	0.2421	2.401487
Ensuring school work is done	0.6825**	0.2604	2.620968
<i>Parent-school involvement:</i>			
Parent/Teachers Association meetings	0.1516*	0.0503	3.013917
Parent/Teachers Interactive Forum	0.1174*	0.0215	5.460465
Events involving parents Participation (such as excursion, debates, Sports activities)	0.8147**	0.3304	2.465799
Parents' visits to the school	0.8228*	0.2817	2.920838
<i>Individual Covariates:</i>			
Gender (Base = male)	0.7104***	0.3572	1.9888
Age	0.0422	0.0281	1.501779
Marital status (Base: married)	0.1391	0.1342	1.036513
Level of education	1.602**	0.7051	2.272018
Regular visit to the library to read	0.8751*	0.3042	2.876726
Studying with other students at spare time	0.1865**	0.081	2.302469
Consulting subject teachers for help with academic work	0.1823*	0.0354	5.149718
Reading only if it was necessary	-0.1053*	0.0215	4.897674
<i>Interaction terms:</i>			
Age*Male	0.0729	0.1173	0.621483
Age*Level of education	0.4255**	0.2074	2.051591
Level of education*Married Female	0.9711***	0.4922	1.972978
Age*Married	0.2914	0.1831	1.59148
Constant term	0.4215	0.3723	1.13215

Diagnostics:	
R-squared	.522
Adjusted R-squared	.513
F-statistics	6.518
Prob (F-stat)	0.000
Mean VIF	1.001
DW:	1.962
BPCW	0.6934 (0.4086)
RESET	0.45971 (0.6143)

Where B_0 and B_i are parameters to be estimated and ε_t is a Gaussian white noise. Y is the dependent variable (income), and X is a vector of explanatory variables as previously defined.

Results and Discussion

The results of the income equation are presented in table 1.

Table 1. Results of OLS Regression

Dependent Variable: Income

Note: *, ** and *** denote statistically significant at 1%, 5% and 10% levels respectively. VIF: Variance Inflation Factor; DW: Durbin-Watson statistics for autocorrelation; BPCW: Breusch-Pagan/Cook-Weisberg test for heteroskedasticity; RESET: Ramsey residual specification error test.

Source: Authors' computation from estimation data

Results in table 1 indicate that there is a positive and statistically significant relationship between parental involvement and income, for all parental involvement indicators. Parent/teachers association meetings, parent/teachers interactive forum and parents' visits to the school have positive impact on income and significant at 1%, strictness on child, monitoring, ensuring that school work was done, events involving parents participation positively impact income at 5%, while inspection of child's school work impacts income positively and significantly at 10%. Evidently, both parent-child and parent-school involvements are significant predictors of income.

The coefficient of gender has a positive relationship with income, although this is not a particularly helpful interpretation. Compared to the female, the male earns a

significantly higher income, which suggests a significant income inequality between the sexes. This is consistent with previous findings where women were found to earn 19% less than men on average among full-time workers (Blau & Kahn, 2016). This may be due to women working in lower paying jobs, occupations and industries than men, representing 51% of the wage gap in 2010 (Blau & Kahn, 2016). It is also possible that due to the differences in abilities, preferences and barriers, women may choose lower paying jobs. It may well be due to women's domestic responsibilities which could lead them to choose less paying jobs even with similar human capacity (Becker, 1985). These barriers faced by women can be in several forms, including discrimination and sexual harassment (Parker, 2018) and less chances of being promoted (Thomas, 2019). The diversity in earnings between male and female workers may also be due to occupational segregation as emphasized in the literature, as men tend to be more widely distributed among occupations than women (Karmel & Maclachlan, 1988).

Although age and being married are positively related to income, they are not statistically significant, an indication that both age and marital status do not significantly account for income earned. As shown by the coefficient of marital status, being married or unmarried does not significantly determine income, a result that demonstrates the important role that education plays, whether or not the individual is married. However, because age is important when addressing issues of experience, it was interacted with gender (with male as a base) and level of education. This study did not specifically test whether experience is critical for earnings. Age *per se* is not the same thing as experience, as the former is directly linked to the amount of time spent at work over time. As presented in table 1, only Age*Level of education coefficient is statistically significant. This implies that age is important as a determinant of income if it is combined with the level of education. Consequently, education plays a key role in explaining income, other factors remaining the same. To determine whether education is important in determining the income of married women, the study interacted education with married female (Level of education*Married Female). The result indicates that being married and being educated is still significant in determining average income.

As expected, the coefficient of education (level of education) is positively related to income and statistically significant at 5% level. This is consistent with theoretical expectation. The positive relationship of workers education and age/experience on earnings for both male and female corroborates the previous findings reported in Byron and Takahashi (1989), and Behrman and Deolalikar (1995). In addition, the

monetary benefits from being educated is emphasised in the literature (Schuller, 2007).

Academic related factors such as regular visit to the library to read, studying with other students at spare time, consulting subject teachers for help with academic work, and reading only if it was necessary are statistically significant and positively related (except “reading only if it was necessary” which has a negative impact) on income. Thus personal attributes which contribute to the academic progress of the individual help predict income. Importantly, not taking school matters seriously as indicated by the “reading only if it was necessary” undermines income.

It should be noted that the relationship between parental involvement and children's income as found in the study in no way implies causation. There is the possibility that the statistically significant impact found may well be working through third factors. First, active parental involvement may show a positive impact on income via the standards that parents set for their children, which assist the latter in setting self-goals and the imperative of hard work towards achieving them, as highlighted in Amatea et al. (2006). Because parental involvement involves parent-child communication, children are aware at an early age about the importance of setting future goals and the steps required to attain them (Zellman & Waterman, 1998). Second, the level of educational aspiration which parents communicate with their children is linked to occupational aspirations and planned preparations for the future by children, in line with the literature (Castambis, 2001). Parent-child interaction such as reading together or helping with homework has been noted to be instrumental to children when they become adults in terms of facilitating the exploration of their own interests (Smetana, 2011).

Many of the respondents strongly agreed that parental guidance played a vital role in their vocational choice, leading to their current employment and income. The role of parents/family in children's career development has been emphasized (Taylor, Harris & Taylor, 2004; Rogers, Creed & Praskova, 2018; Yulianti, Denessen & Droop, 2018). Several studies have pointed out learning cultures that prepare students effectively for further learning and career orientedness (Krieder et al., 2007; Rowan-Kenyon et al., 2008; Bangser, 2008; Bottoms et al., 2009).

The goodness-of-fit indicates that about 51% changes in income is explained by changes in the explanatory variables used in the model. All the variables are jointly significant in determining the income of respondents as indicated by the statistically

significant F-statistic. The mean variance inflation factor indicates that there is no high multicollinearity among the regressors. The estimated model satisfies the Durbin-Watson (DW) autocorrelation test (its value is approximately 2). The null hypothesis of heteroskedasticity is rejected, as the BPCW value is not statistically significant. The model is well specified as indicated by the RESET statistic, an indication of the stability of the estimated coefficients

Conclusions

This study investigated the relationship between parental involvement and workers' income. Using a cross-section of civil servants, staff of secondary schools and youths in Katsina State, Nigeria, the ordinary least squares regression was utilized. All the parental involvement indicators used were found to have a statistically positive relationship with income. Compared to female workers, male workers were found to earn a significantly higher income. In addition, age and being married were found to correlate positively with income, although not statistically significant. Furthermore, education was a significant predictor of income. The workers' positive personal attributes which contributed to their academic progress were found to be positively related while the negative attribute indicator was negatively related to income.

The empirical results confirm the imperative of parental involvement towards the future economic advancement of children. Consequently parental involvement in both home and school activities are recommended to improve the future income of workers. The positive contribution of parental involvement to income supports the promotion of parental involvement policies in schools, while emphasising the role of the family for the future economic advancement of children.

There are several parental involvement challenges including fatigue, lack of awareness of their rights, school policies and procedures and limited logistics (Geenen, Powers & Lopez-Vasquez, 2001; Peña, 2000), which necessitate a plan of action with emphasis on improving collaboration between schools and parents, taking note of the ever changing economic, political and social landscapes.

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