

Psychosocial Variables and Overschooling at the Tertiary Education Level: Implications for Psycho-Academic Interventions

Okoro, Christopher Cornelius PhD

Udoh, Nsiong Anthony M.Ed.*

*Department of Educational Foundations, Guidance and Counselling,
Faculty of Education, University of Uyo,
P.M.B. 1017, Akwa Ibom State, Nigeria.*

**Corresponding author: nsiong99@yahoo.com*

Doi:10.5901/ajis/2012.v1n2p9

Abstract

This study examined the individual and collective contributions of selected psychosocial variables to overschooling at the tertiary education level. This ex-post-facto research randomly selected 500 graduate students from the University of Uyo for the study. The Self-assessment Graduate Overschooling Questionnaire (S-GOQ) was used in obtaining data. Chi square statistics and regression analysis were used in testing the two hypotheses in the study. The results indicate that there is significant relationship between overschooling and each of the selected psychosocial variables while the variables returned a no significant collective effect on overschooling. The implication of these findings for psychoacademic intervention was drawn.

Keywords: *Overschooling; Labour Economics; Unemployment; Occupational Mobility; School counselling.*

I. Introduction

Overschooling, the situation whereby individuals operate occupationally below their level of acquired education or completed schooling with concomitant wage penalty is spawned by a handful of psychological, social, and economic variables. These variables, as exposed by scores of researches, include favourable expectations on the marginal economic returns to educational investments, favourable position in the person queue in the labour market, social mobility, occupational mobility (both vertical and horizontal), personal idiosyncrasies, attitude towards education and certification, employability of graduates, and job-skills utilization concerns, inter alia.

Contemporary concerns for overschooling at the tertiary education level are founded on the apparent lack of justification for the value of education as the machinery for productivity. Education is generally assumed to positively correlate with productivity. As Becker's (1964) Human Capital Theory postulates, education

enhances productivity through its creation of human capital and development of skilled labour. This perceived correlation has over the years fuelled heavy investments in education by individuals, government and nongovernmental agencies.

This study therefore sought to expose the contributions of selected psychological and social variables to the incidence of overschooling at the tertiary education level using graduate students of the University of Uyo as a case in point.

1.1 Statement of the problem

The economic and health implications of overschooling among other issues makes it imperative to investigate the influence of selected psychosocial variables on overschooling at the tertiary education level with a view to furnishing an empirical outcome that that would serve as a basis for expert psycho-academic intervention at all levels of education. The problem of the paper therefore is whether psychosocial variables contribute to overschooling at the tertiary education level in Nigeria.

1.2 Research Questions

The following research questions were formulated to guide the study:

1. Do the listed psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) significantly relate to overschooling at the tertiary education level?
2. To what extent does the collective effect of the listed psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) predict overschooling at the tertiary education level?

1.3 Hypotheses

The research questions were converted to the following hypotheses:

1. The listed psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) do not significantly relate to overschooling at the tertiary education level.
2. The collective contributions of the listed psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) do not significantly predict overschooling at the tertiary education level in Akwa Ibom State.

2.0 Literature Review

In the past few decades, scores of empirical investigations have raised doubts challenging, as it were, a tentatively tenable explanation of the contribution of education to productivity (Tsang & Levin, 1985). While this contention is subject to empirical ratification, a more worrisome cum potent concern is the attempt by scholars to correlate overschooling with wage penalty, job dissatisfaction and attendant counter-productivity and mental health issues (cf. Allen & van der Valden, 2001; Cohn, 1992; Cohn & Ng, 2000; Dolton and Vignoles, 2000; Groeneveld & Hartog, 2004; Halaby, 1994; and Walker & Zhu, 2003).

About why individuals continue to invest in education, Walker and Zhu (2005) discovered wage premium (high earnings as a result of possessing a degree or higher qualification) as a prominent factor. Lenton (2011) submitted that education subsidy with resultant limited personal cost and prospects of job mobility are potent sustainers of overschooling. In the same vein, Fielding (1992) and Champion and Combes (2007) assessed the escalator effect of overschooling at the tertiary level of education to back up the position that horizontal job mobility prospects and labour market competition fosters overschooling. This is however argued based on research findings by Rice and Venables (2004) to depend on the geographical reach of the labour market for skilled labour.

Lenton (2011) found a general correlation of age with overschooling, implying that older persons are less mobile occupationally and thus more likely to be adjudged 'genuinely overschooled' in the long run as opposed to younger workers who, though apparently overschooled in the short run, are more likely to migrate to their occupational niche—thus changing their overschooling status.

Messinis (2008) found parental occupational status as a significant predictor of overschooling with such variations as father's occupational status impacting more strongly on male overschooling than overschooling among female children; and both parents' statuses combined predicting female overschooling. Furthermore, Messinis (2008) found no positive correlation between marital status, unemployment and overschooling in their study population. Other researchers have found positive linkages between job dissatisfaction resulting from job-skill mismatch and overschooling in tertiary education (cf. Green & McIntosh, 2006; Allen & van der Velden, 2001; Bauer, 2002; Frenette, 2004; Chevalier, 2003).

Finally, in the study by Chevalier (2003), gender and type of educational institution attended did not influence overschooling. However, the study revealed that those with better school credentials were less likely to be overschooled in the absolute sense as opposed to those with lower or poorer school credentials. Other researchers have found a positive correlation between schooling and social mobility. The education

system is often seen as a channel for upward social mobility; people with more education tend to have higher earnings and higher social statuses. Parents therefore help their children to move ahead by investing more in their children's education. This may be the only strategy for most parents to gain upward mobility for their children in the absence of better access to capital markets (Tsang & Levin, 1985).

In sum, the foregone perceived role of psychosocial variables in the incidence of overschooling informs this empirical inquest with a view to proffering psycho-academic strategies implementable in the school system to counteract possible negative outcomes of overschooling due to the influence of the selected psychosocial variables.

3.0 Research Method

3.1 Population, Sample and Sampling Technique

The research was conducted in the Postgraduate School of the University of Uyo, Nigeria. The population of the study comprised all graduate students in all the faculties in the University of Uyo at the time of the study. A total of 500 postgraduate students of the University of Uyo were selected for the study using the stratified random sampling technique.

3.2 Instrument

The instrument for Data collection was the Self-assessment Graduate Overschooling Questionnaire (S-GOQ) which comprised two sections. Section A obtained demographic data whilst Section B assessed indices of overschooling. The face and content validities of the items on the instrument were ensured by subjecting the items to rigorous assessment and reviews by 3 experts in Measurement and Evaluation based on existing literature on overschooling. Their expert recommendations were duly integrated into the final copy of the instrument.

3.3 Design and Statistics

This survey adopted the ex-post-facto design since the variables under investigation could not be kept under control. The Chi Square statistics was used to assess the significance of the relationship of the selected psychosocial variables with overschooling while regression analysis was used to assess the significance of the collective contributions of the selected psychosocial variables to the incidence of overschooling.

4.0 Presentation and Discussion of Results

Data analyses for the relationship of the psychosocial variables with overschooling are presented in Tables I-4 while the analysis for the contributions of the psychosocial variables to overschooling is presented in Table 5. The discussion of these findings will be done in the light of the two hypotheses formulated to guide the study.

Hypothesis One

The first hypothesis predicted that the psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) do not significantly relate to overschooling at the tertiary education level. Chi Square analyses of the individual psychosocial variables returned 36.07 (7.82), 83.27 (16.92), 42.05 (12.59), and 53.36 (12.59) as the calculated X^2 (Critical Value of X^2) for Parents level of education, Job satisfaction, Self concept and Peer Influence respectively. Since the computed values of X^2 are, in each case, greater than the Critical values of X^2 , the first hypothesis was rejected. This means that the listed psychosocial variables do significantly relate to overschooling.

This findings are in consonance with those of Walker and Zhu (2003), Cohn and Ng (2000), and Dolton and Vignoles (2000) who found in their separate studies a positive correlation between job satisfaction and overschooling. Also, Messinis' (2008) finding that parent's level of education does predict overschooling is in agreement with the result of this study. Similar results were also obtained by Green and McIntosh (2006), Bauer (2002), Frenette (2004) and Chevalier (2003). Furthermore, an earlier study by Tsang and Levin (1985) found a correlation between social self concept and overschooling. This study supports that result as evinced by the significance of the contribution of self concept to overschooling. In the dearth of empirical findings on the influence of peer influence on overschooling, this study thought it wise to probe the possible influence of that psychosocial variable on overschooling. The result shows that in reality, peer influence exerts a potent force on the incidence of overschooling wherefore expert psycho-academic intervention is imperative.

Hypothesis Two

The second hypothesis claimed that the individual contributions of the listed psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) do not significantly predict overschooling at the tertiary education level in Akwa Ibom State. To assess the extent of significance of the collective contributions of the listed psychosocial variables to overschooling, regression analysis was employed.

The result returned 1.04 as the F-ratio of the collective contributions of the psychosocial variables to overschooling. Since this was not statistically significant at $p < 0.05$, this second hypothesis was upheld, indicating that collectively, the listed psychosocial variables do not significantly predict overschooling. Although this is not statistically significant, it highlights the need for psycho-academics to assess and cater for these variables singly when planning and implementing psycho-academic intervention programmes.

Though this research returns a no significant interpretation on the collective effect of the listed psychosocial variables on overschooling, potent results were obtained by Messinis (2008), who found that parent's education statuses do influence overschooling. Also, Chevalier (2003), Green and McIntosh (2006), van der Velden (2001) and Frenette (2004) found a potent correlation between job satisfaction and overschooling. Further, a study by Tsang and Levin (1985) showed a correlation between social mobility and overschooling. These separate findings lend credence to the result spirit of this research, highlighting the fact that though these psychosocial variables do not possess a collective influence on overschooling, they (as a cluster) should not be ignored altogether.

5.0 Conclusions

The purpose of this study was to ascertain the individual relationships and collective contribution of psychosocial variables (parent's level of education, self concept, peer influence, and job satisfaction) on the incidence of overschooling. Based on empirical findings, these variables (individually) correlate with overschooling. Since contemporary concerns over overschooling bears also mental and social health issues (positive self concept, job satisfaction, and internal frame of reference) it has become imperative to probe and counteract the influence of negative psychosocial variables on schooling through the design and implementation of expert psycho-academic programmes at all levels of education as expounded in the next section.

6.0 Implications for Psycho-academic Intervention

In designing and implementing psycho-academic interventions against the incidence of overschooling, the following should be given due consideration:

- Adequate numbers of psychologists, social workers and guidance counsellors should be on ground to render satisfactory psycho-academic intervention services to students. Such services will necessarily include career orientation, career guidance and counselling, psychological testing and evaluation, personality inventories, and other pertinent psycho-academic assessments

needed to ensure proper direction of students through academics with a view to attaining self actualisation in areas of career preparation and adjustment.

- Intakes into degree programmes should be informed and constantly reminded of the need to pay careful attention to their future job requirements, the prevailing situation in the job market, job risks, and employment alternatives in their chosen area of discipline with a view to forestalling long years of sojourn in the labour market, a situation which as exposed in this study spawns overschooling among other economic, social, and mental health predicaments.
- Fresh emphasis during orientation programmes, usually mounted to enhance the progress and adjustment of students, should be placed on the acquisition of skills relevant for employment and the development of positive attitude towards prospective jobs.
- Acquisition of affective and psychomotor skills relevant to prospective jobs should be emphasised alongside with the acquisition of cognitive skills.
- Appropriate and continual guidance services should be rendered to students throughout the duration of their programmes as this would curtail future incidence of overschooling.

Finally, the planning and implementation of expert psycho academic intervention programmes will help reorient students and other investors in education to see education as a means to an end not just an end in itself. With such de-emphasis on the intrinsic value of education, students will be assisted to have a comprehensive understanding of and appreciation for the extrinsic value of education—a machinery for economic productivity, a machinery for social adjustment and national integration, a machinery for personal development and adjustment. If education stakeholders give serious consideration to the foregone implications of the association of the psychosocial variables examined in this research to psycho academic interventions, then not only will student be assisted to study with focus and direction, but the incidence of overschooling will also be curtailed in the short run and totally forestalled in the long run.

Tables of Chi Square and regression analysis of the individual correlation and collective contribution of listed psychosocial variables to overschooling

Table I: Parents Education and Overschooling

O	E	$(O-E)^2/E$	Calc X	df	Crit X
15	12.9	0.22			
6	7.2	0.14			
74	58.2	4.51			
5	21.7	13.16	36.07	3	7.82*
11	12.9	0.22			
8	7.2	0.14			
42	58.2	4.51			
39	21.7	13.16			

*Significant at $p < 0.05$

Table 2: Job Satisfaction and Overschooling

O	E	$(O-E)^2/E$	Calc X	df	Crit X
69	52.4	5.26			
17	28.5	4.32			
8	10.9	0.75			
6	8.3	0.85			
24	52.4	15.18			
48	28.5	13.62			
22	10.9	11.87			
5	8.3	0.98			
43	52.4	1.69	83.27	9	16.92*
29	28.5	0.03			
10	10.9	0.02			
17	8.3	9.71			
73	52.4	8.42			
19	28.5	3.17			
3	10.9	5.97			
5	8.3	1.44			

*Significant at $p < 0.05$

Table 3: Self Concept and Overschooling

O	E	$(O-E)^2/E$	Calc X	df	Crit X
37	31.7	1.04			
35	42.9	1.44			
11	15.4	1.50			
17	10.1	4.78			
36	31.7	0.49			
54	42.9	3.00			
4	15.4	7.86	42.05	6	12.59*
6	10.1	1.81			
22	31.7	2.95			
39	42.9	0.28			
31	15.4	16.21			
7	10.1	0.71			

*Significant at $p < 0.05$

Table 4: Peer Influence and Overschooling

O	E	$(O-E)^2/E$	Calc X	df	Crit X
14	13.5	0.00			
2	15.7	11.64			
56	38.0	8.15			
29	32.7	0.52			
11	13.5	0.40			
31	15.7	15.60			
35	38.0	0.18			
22	32.7	3.52	53.36	6	12.59*
16	13.5	0.38			
14	15.7	0.29			
23	38.0	5.92			
48	32.7	6.75			

*Significant at $p < 0.05$

Table 5: Regression analysis of the collective contribution of the listed psychosocial variables to overschooling

<i>Regression Statistics</i>	
Multiple R	0.091390081
R Square	0.008352147
Adjusted R Square	0.000338831
Standard Error	2.477704059
Observations	500

<i>Source of Variation</i>	<i>df</i>	<i>Sum of Square</i>	<i>Mean Square</i>	<i>F-ratio</i>
Regression	4	25.59	6.40	1.04*
Residual	495	3038.81	6.14	
Total	499	3064.41		

<i>Variables</i>	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>
Constant	18.538	1.108	16.736
PE	0.004	0.014	0.294
JS	0.015	0.010	1.483
SC	-0.008	0.020	-0.392
PI	-0.020	0.015	-1.337

*p<0.05; Critical F (4, 495) = 2.39; Critical t = 1.96

References

- Allen, J. & R. van der Velden (2001). Educational Mismatches versus Skill Mismatches: Effects on Wages, Job satisfaction, and on-the-job search. *Oxford Economic Papers* 53 (3), 434-452.
- Amaewhule, W. A. (2007). *Education, the world of work and the challenge of change: In search of intervention strategies*. Inaugural lecture series No. 23; River State University of Science and Technology, Nkpolu Port Harcourt.
- Becker, Gary S. (1964). *Human Capital*. New York: NBER.
- Champion A. & Coombes M.G., (2007). Using the 2001 census to study human capital movements affecting Britain's larger cities: insights and issues. *Journal of the Royal Statistical Society* 170(2) 447-467.
- Chevalier, A. & Lindley, J. (2007). *Overeducation and the Skills of UK Graduates*. London: Centre for the Economics of Education.

- Chevalier, A. (2003). Measuring over-education. *Economica*, 70(279), 509–531.
- Cohn, E. (1992). The Impact of Surplus Schooling on Earnings: Comment. *Journal of Human Resources*, 27, 679–679.
- Cohn, E. & Ng, Y. (2000). Incidence and wage effects of overschooling and underschooling in Hong Kong. *Economics of Education Review*, 19(2), 159–168.
- Dearden, L., McIntosh, S., Myck, M. & Vignoles A. (2002). The returns to academic and vocational qualifications in Britain. *Bulletin of Economic Research*. 54(3), 249-274.
- Dolton, P.J. & Vignoles, A. (2000). The Incidence and Effects of Over-education in the Graduate Labour Market. *Economics of Education Review* 19 (2), 179-198.
- Ekpoh, U. I. & Edet, O. A. (2011). Entrepreneurship Education and Career Intentions of Tertiary Education Students in Akwa Ibom and Cross River States, Nigeria. *International Education Studies*. 4(1), 172-178.
- Fielding A. J (1992). Migration and Social Mobility: South East England as an Escalator Region. *Regional Studies*, 26 (1), 1-15.
- Green, F., McIntosh, S. & Vignoles, A. (2002). The utilization of education and skills. Evidence from Britain. *The Manchester School*. 70, 792-811.
- Groeneveld, S. & Hartog, J. (2004). Overeducation, wages and promotions within the firm. *Labour Economics*, 11(6), 701–714.
- Groot, W. & Maassen van den Brink, H. (2000). Over-education in the Labor Market: A Meta-analysis. *Economics of Education Review*, 19, pp. 149-58.
- Groot, W. & Maassen van den Brink, H. (2000). Overeducation in the labor market: A Meta-analysis. *Economics of Education Review*, 19(2), 149–158.
- Halaby, C. (1994). Overeducation and skill mismatch. *Sociology of Education*, pages 47–59.
- Hartog, J. & Oosterbeek, H. (1988). Education, allocation and earnings in the Netherlands: Overschooling? *Economics of Education Review*. 7(2), 185–94.
- Lenton, P. (2011). Overeducation Across British Regions. Sheffield Economic Research Paper Series: 2011001. Retrieved on 23/09/2011 from <http://www.shef.ca.uk/economics.htm>.
- Machin, S. (1999). Wage Inequality in the 1970s, 1980s and 1990s. In P. Gregg & J. Wadsworth (eds), *The State of Working Britain* (pp. 185-205). Manchester: Manchester University Press.
- Madumere-Obike, C. U. (2000). Reposition Education for Employment: Implications for educational management. *Multidisciplinary Journal of Research Development (MIKJORED)*. 7(3) 43-52.
- McGuinness, S. (2007). How Biased are the Estimated Wage Impacts of Overeducation? A Propensity Score Matching Approach. *Applied Economics Letters*. 15, 145–149.
- Rice P. & Venables A. J. (2004) Spatial determinants of productivity: Analysis for the regions of Great Britain, CEP discussion paper 642.
- Tsang, M. C. & Levin, H. M. (1985). The Economics of Overeducation. *Economics of Education Review*. 4(2), 93-104.
- Verhaest D., & Omey E. (2009). The Determinants of Overeducation: Different Measures, Different Outcomes? University of Ghent, Belgium, Working Paper 09/592.
- Walker I. & Zhu, Y. (2005). The College Wage Premium, Over-education and the Expansion of Higher Education in the UK, IZA DP 1627.
- Walker, I. & Zhu, Y. (2003). Education, Earnings and Productivity – Recent UK Evidence. *Labour Market Trends*. 1, 145-152.

