

**WORK-FAMILY CONFLICT, JOB SATISFACTION AND LABOUR TURNOVER
INTENTIONS AMONG STATE UNIVERSITY LECTURERS**

BY

**Oredein, afolakemi olasumbo (Ph.D)
e-mail:opyoredein@yahoo.com**

**Institute of Education
Olabisi Onabanjo University
Ago-Iwoye, Ogun State.
Nigeria**

&

**Alao, foluso toyin (Mrs)
albott2004@yahoo.com**

**Babcock University
Ilisan, Ogun State
Nigeria**

Abstract

Examining the extent at which work-family conflict and job satisfaction could predict the labour turnover intentions among lecturers, Olabisi Onabanjo University, Nigeria, as a case study, is the purpose of this study. 229 (95%) respondents out of 240 returned their copies of the questionnaire for data analysis. The results reveal that there was a statistically significant ($p>0.05$) influence of work-family conflict, and job satisfaction on labour turnover intentions among lecturers, Olabisi Onabanjo University, Nigeria, as perceived.

Key Words: Work-family conflict, job satisfaction, and labour turnover

Introduction

Work-family conflict is an inter-role conflict in which the role pressures from work and family domains are mutually incompatible in some respect (Carmeli, 2003). That is, the participation in the work -family role is affected by participation in the family -work role. Work-family conflict is a common problem among employees; it is an undesirable situation and it negatively affects quite a number of other areas within and outside the family, these include: an increase in prolonged fatigue, high level of absenteeism at the work, and labour turnover intentions, among others (Nicole, 2003). The most common outcomes associated with work-family conflict are higher instances of job and family distress, poor health outcomes, and decreased job and life satisfaction (Warner, 2005). Sometimes, it leads to broken homes, and polygamy or an unexpected marriage. Nicole (2003) reveals that work-family conflict is caused by factors from both the work and home situations. The role of work time arrangement in the development of such a conflict is particularly striking; for example, working shifts, sudden transfer, frequent overtime, and change of working hours all increase the risk of conflict. Both the organization and the employee have the responsibilities of eliminating work-family conflict. Empirical evidence shows that individuals with high emotional intelligence are able to balance family interference with work and vice-versa (Brett & Stroh, 1995; Clarke, 2000; Carmeli, 2003; Nicole, 2003).

There is a growing body of research that reveals that work-family conflict is more prevalent than family-work conflict (Warner, 2005). This is not surprising given that these pressures continue;

the experience of employees' work life interfering with their family is almost inevitable. Warner further says that the most significant determinant of work-family conflict is found in the work domain. Therefore, it is critical for employers to become aware of practices that can be implemented in order to reduce employees' work-family conflicts.

Clarke (2000) cites Minuchin proposed family systems theory, which suggests that families are cultural systems that go through developmental stages. This tries to maintain a sense of continuity and equilibrium and enhance each member's growth. The theory and the related concept of family equilibrium suggest that pressures both outside and within the family can disturb the equilibrium of the family (Brett & Stroh, 1995). Clarke reflects on the double ABCX Theory and suggests that three factors interact to produce a family's well-being: the stressor, the family's resources or characteristics to cope with the stressor, and the family's ability to cope with the stressor. Wiggins and Sheham (1994) proceed to identify family support, family adaptability and family communication as predominant among characteristics that facilitate coping, with family communication identified as the characteristic that enables the evolution of the other two attributes of family functioning.

Job satisfaction is a psychological concept and, therefore, giving it a precise and single scientific definition might be nearly impossible, since the nature and concept are somehow abstract. However, job satisfaction could be defined as a pleasurable emotional state resulting from the appraisal of one's job, an effective reaction or an attitude towards one's job. In other words, job satisfaction implies the extent to which people like their job and dislike it. Weiss (2002) argues that job satisfaction is an attitude; it refers to how content an individual is with his or her job. Job satisfaction is a relatively recent term in the Nigerian context since in previous centuries; the job

available to a person was often predetermined by the parents' occupation. Job satisfaction is very crucial to the long-term growth of any organisation. Job satisfaction is closely related to efficacy, and, it has been identified that many teachers lose or fail to develop self-efficacy within educational settings (Dweck, 1999). Various researches have been carried out on factors that could influence teachers' job satisfaction (Evans, 1998; Mäenpää, 2005). Those factors include: school-specific factors like availability of material resources, teacher-students ratio, school environment, and school culture, prompt payment of salary, and feelings of successful teaching, among others. Interestingly, teachers have different factors that could influence their job satisfaction. For instance, prompt payment of salary might be an influencing factor to a teacher while school environment might be an influence factor to another. Job satisfaction has been demonstrated to be closely related to commitment, turnover, job performance, productivity and burnout (Khaleque, Hossain, & Hoque, 1992; Cooper & Kelly, 1993).

Labour turnover is the voluntary or involuntary termination of an individual's employment with a given organization. Labour turnover is the rotation of workers around the labour market, between firms, jobs and occupations, and between the states of employment and unemployment (Abassi & Hollman, 2000). Each time a position is voluntarily or involuntarily created, a new employee might be replaced, this replacement cycle is known as turnover (Woods, 1995). Labour turnover is a much studied phenomenon (Lam, Foong, & Moo, 1995; Shaw, John, Jerkins, & Nina, 1998; Booth & Hamer, 2007). Labour turnover or 'brain drain' as it is being referred to in tertiary institutions is one of the major challenges facing education in Nigeria today. Labour turnover intentions seem to be very prevalent in tertiary institutions both federal and state institutions of higher learning, and this might be due to some physical or social influences. The

physical influences include poor salary, school environment, and delay in payment of salary among others. Social influence on the other hand is the shared cognition by friends or organizational members that influence people's decision on job movement (Albeson, 1993). The social influence makes hopping from one job to another an acceptable behaviour (Naresh, Pawan & Chong 2003), thus, if an individual has not changed his/ her job for a long time, he/she feels an increasing pressure to do so because of social influence. In some countries in Asia, it has been observed that labour turnover intentions is giving sleepless nights to human resource managers, and employees have developed bad attitudes due to labour shortage (Naresh, Pawan & Chong 2003). But in Nigeria, the Guardian newspaper an editorial of noted that in the last 20 years, a sizeable number of Nigerian academics have migrated abroad in search of greener pastures.

Statement of the Problem

It is observed that there is a growing labour turnover intention among lecturers, especially in state institutions of higher learning and this in turn results to frequent in change of lecturers even within an academic session.

This study therefore examines the extent at which work-family conflict and job satisfaction could predict the labour turnover intentions among lecturers, Olabisi Onabanjo University as a case study. Also, the study investigates the relationship between work-family conflict, job satisfaction and labour turnover intentions among lecturers. Gender influence on work-family conflict, job satisfaction and labour turnover intentions among lecturers, Olabisi Onabanjo University were examined as well.

Research Questions

To this end, the study focuses on answering the following research questions:

- What are the perceived causes of work-family conflicts?
- To what extent would composite influence of work-family conflict and job satisfaction predict lecturers' labour turnover intentions?
- Is there any statistically significant relationship between work-family conflict, lecturers' job satisfaction and labour turnover intentions?
- Is there any statistically significant gender influence on work-family conflict, lecturers' job satisfaction and labour turnover intentions?

Method

Design

The research is to elicit information on work-family conflict and job satisfaction as predictors of labour turnover intentions among lecturers, Olabisi Onabanjo University. The study is purely a descriptive survey research where variables in this study had already occurred and are not subject to manipulations. Work-family conflict and lecturers' job satisfaction are the independent variables while labour turnover intention is the dependent variable.

Participant

The participants in this study were drawn from the lecturing staffs at Olabisi Onabanjo University, Nigeria that are from the staff grade level of Assistant Lecturer to the Professorial level. The university has 13 faculties out which 8 were randomly selected for the study. Selected lecturers were affiliated with the randomly selected 8 faculties. From each selected faculty, 30 lecturers were randomly selected; making 240 lecturers, 229 (95%) participants returned their copies of the questionnaire for the study.

Instrumentation

The development of the questionnaire was guided by a literature review. A structured Personal and Organizational Factors of Lecturers' Turnover Intentions Questionnaire (POFLIQ) was adopted for the study. The instrument used has four sections: A, B, C & D. Section A aims at seeking information of a background nature, including age, gender, department, work experience, and marital status, among others. Section B elicits responses on the lecturers' job satisfaction, using a 4-point scale ranging from *strongly agree* to *strongly disagree*. The focus of sections C and D are on work-family conflict and labour turnover intentions. Section C and D comprises 10 structured items each with a 4-point scale ranging from *strongly agree* to *strongly disagree*. The instrument was first administered to 10 lecturers ($\alpha = 0.85$) as pilot survey.

Procedure

Participants responded anonymously to the questionnaire given to them. All data collected were grouped based on the various research questions formulated for testing in this study. The data was subjected to statistical test and analysis. Descriptive statistics, Correlation, Regression analysis and t-test were used to calculate the research data.

Results

Research Question 1: What are the perceived causes of work-family conflicts?

Table 1: Descriptive Statistics on the Perceived Causes of Work-Family Conflicts

| Perceived Causes | N | Mean | SD | % |
|----------------------------|-----|------|------|-------|
| Stress from work | 238 | 3.22 | 0.51 | 9.88 |
| Lack of good parental care | 238 | 3.35 | 0.70 | 10.26 |
| Love of money | 238 | 3.19 | 0.77 | 9.77 |
| Nature of job | 238 | 3.37 | 0.72 | 10.32 |
| Poor remuneration | 238 | 2.93 | 0.92 | 8.97 |
| Job insecurity | 238 | 3.58 | 0.61 | 10.96 |

| | | | | |
|--|-----|------|------|-------|
| Lack of understanding between couple and extended family | 238 | 3.27 | 0.64 | 10.01 |
| Extra marital affairs | 238 | 3.41 | 0.59 | 10.44 |
| Family background | 238 | 2.93 | 0.90 | 8.97 |
| Cultural belief | 238 | 3.41 | 0.59 | 10.44 |

Table 1 above reveals that job insecurity is the perceived highest cause of work-family conflicts among lecturers with the percentage of 10.96. Cultural belief and extra marital affairs are the next perceived causes of work-family conflicts among lecturers with the same percentage of 10.44. Next to cultural belief and extra marital affairs is the nature of job (10.32%), like jobs that involve transfer, or shift. For instance, transfer as in the case of teachers, shift as in the case of nurses. Poor remuneration and family background are the least perceived causes of work-family conflicts among lecturers with the same percentage of 8.97. This shows that poor remuneration and family background are not really the cause of work-family conflict among lecturers.

Research Question 2: To what extent would composite influence of work-family conflict and job satisfaction predict lecturers' labour turnover intentions?

Table 2: Analysis of Variance

| Variables | Sums of Square | DF | Mean Squares | F-value | Prob>F |
|------------------------------|----------------|-----|--------------|---------|--------|
| Regression | 2201.583 | 2 | 1100.792 | 51.33 | .000* |
| Residual | 5039.413 | 235 | 21.444 | | |
| Total | 7240.996 | 237 | | | |
| R= 0.551 | | | | | |
| R ² = 0.304 | | | | | |
| SE= 4.611 | | | | | |
| R ² (adj.)= 0.298 | | | | | |
| DurbinWatson=1.543 | | | | | |

* Sig. at p<0.05

Table 2 above presents the regression analysis on the composite influence of work-family conflict and job satisfaction on lecturers' labour turnover intentions. Since $\alpha = 0.05$ exceed the observed significance level, $p = 0.000$, the data provide strong evidence that at least one of the coefficients (independent variables) is non zero. The overall independent variables (work-family conflicts, and job satisfaction) appears to be statistically useful for predicting the dependent variable (lecturers' turnover intentions) This implies that work-family conflict and job satisfaction have statistically significant composite influence on lecturers' labour turnover intentions. The $R^2=0.304$, that is, the explanatory variables (work-family conflict and lecturers' job satisfaction) capture about 30% variation in the endogenous variable (lecturers' labour turnover intentions). Also, it implies that work-family conflict and lecturers' job satisfaction exert a significant relationship with lecturers' labour turnover intentions (table 3).

Research Question 3: Is there any statistically significant relationship between work family conflict, lecturers' job satisfaction and labour turnover intentions?

Table 3: Descriptive Statistics and Correlation Matrix

| | Mean | SD | 1 | 2 | 3 | 4 |
|---------|-------|------|-------|-------|------|---|
| 1. LTOI | 58.87 | 5.50 | 1.00 | | | |
| 2. LJS | 41.55 | 3.48 | 0.66* | 1.00 | | |
| 3. WFC | 46.49 | 4.01 | 0.78* | 0.60* | 1.00 | |

* $P < 0.05$ WFC= Work-family Conflict; LJS= Lecturers' Job Satisfaction;
LTOI= Labour Turnover Intentions.

Results in table 3 above show that work-family conflict has the highest mean of 46.49, while lecturers' job satisfaction has the least mean of 41.55. Also, the table reveals there is positive relationship between the variables and it is discovered that the highest positive relationship is between work-family conflict and labour turnover intention ($r=0.78$). This implies that work-family conflict can easily influence the labour turnover intentions among lecturers. Also,

lecturers' job satisfaction has a positive relationship ($r=0.66$) with labour turnover intentions. This implies that increase in work-family conflicts and lecturers' job satisfaction could culminate in increase in labour turnover intentions among lecturers. Furthermore, work-family conflicts have a positive significant relationship with lecturers' job satisfaction, that is, work-family conflicts and lecturers' job satisfaction are significantly related to labour turnover intentions among lecturers.

Research Question 4: Is there any statistically significant gender influence on work-family conflict, lecturers' job satisfaction and labour turnover intentions?

Table 4: T-Test on Gender Influence

| Variable | Gender | N | Mean | SD | SE | t-value | p-value |
|-----------------------------|--------|-----|-------|------|------|---------|---------|
| Work-Family Conflict | Male | 149 | 46.52 | 4.04 | 0.33 | 0.104 | 0.713 |
| | Female | 89 | 46.46 | 3.97 | 0.42 | | |
| Lecturers' Job Satisfaction | Male | 149 | 41.45 | 3.57 | 0.29 | -0.612 | 0.615 |
| | Female | 89 | 41.73 | 3.33 | 0.35 | | |
| Labour Turnover Intentions | Male | 149 | 58.56 | 5.61 | 0.46 | -1.172 | 0.628 |
| | Female | 89 | 59.40 | 5.29 | 0.56 | | |

Not Sig. at $p>0.05$

Table 4 above reveals that there is no significant gender influence on work-family conflict, lecturers' job satisfaction and labour turnover intentions. Since $\alpha = 0.05$ does not exceed the observed significance level, $p = 0.713$, $p = 0.615$, and $p = 0.628$ respectively. This implies that both male and female lecturers have the intentions of changing their jobs. Also, both female and male lecturers have the same level of job satisfaction, and work-family conflicts affect both male and female lecturers the same way.

Discussion

The findings of this study show that stress from work, lack of good parental care, love of money, nature of job, poor remuneration, job insecurity, lack of understanding between couple and the extended family, extra marital affair, family background, and cultural belief are

perceived causes of work-family conflicts among lecturers. The stress from work could be the demands on the job. These may include: dealing with students' disciplines, large classes, teaching new courses, frequent changes of timetable or courses, increased workload, need to hit targets or deadlines, long working hours, and lack of regular breaks (Oredein, 2009).

Also, the results reveal that there is composite influence of work-family conflict and job satisfaction on secondary school lecturers' labour turnover intentions. Both work-family conflict and lecturers' job satisfaction have a positive relationship with labour turnover intentions. Although, this study is on permanent staff in Olabisi Onabanjo University, the result is not in consistent with Slattery & Rajan Selvarajan's (2005) work on temporary employees, that job satisfaction is negatively related to turnover intentions with temporary agency. But it is in tandem with Lindsey (2007), who identifies in his study, that job satisfaction is one of the factors that could contribute to turnover rates in organizations. Slattery and Rajan Selvarajan's (2005) suggest that job satisfaction is a more distant cause than commitment when it comes to turnover intentions. But this study as well shows that work-family conflict is more related to labour turnover intentions than lecturers' job satisfaction. Nevertheless, one strong message that could be relayed from this study is that lecturers' job satisfaction may be a more distant cause of labour turnover intentions than work-family conflicts. Moreover, work-family conflicts have a positive significant relationship with teachers' labour turnover intentions. This is in consistency with Lindsey (2007) which avers that the relationship between conflicts and turnover intentions is linear and significant. Conflicts generally have been recognized as pervasive issues within organization, with effects that contribute to the strongest turnover predictors (Frone, 2000; Medina, Munduate, Dorado, Martinez, & Guerra, 2005).

Furthermore, the results reveal that gender has no significant influence on work-family conflict, lecturers' job satisfaction and labour turnover intentions. That is, gender has nothing to do with turnover intentions of lecturers. Male and female teachers have the same level of job satisfaction, and both experience work-family conflicts. This is in consistency with Onovoh (2000), who identifies in his study that male and female teachers experience the same level of job satisfaction.

Recommendations

Institutions of higher learning serve the labour market, thus the need to reduce the rate of lecturers' turnover intentions in tertiary institutions. Based on the outcomes of this study, it is therefore recommended that government, and all stakeholders should examine the sources of labour turnover intentions among lecturers and recommend the best approach to fill the gap of the sources so that lecturers can be retained in the teaching profession. In other words, government, and all stakeholders should treat lecturers as an asset which needs a lot of attention. Lecturers are nation builders; hence they need to be motivated and compensated adequately. Besides, lecturers should be paid regularly as and when due, in addition, incentives should be given to lecturers. Academics should have regular breaks or annual leave. A good working environment should be provided. Government should consider the methods of allocating work and associated administrative arrangements. Moreover, the rate of labour turnover intentions can be brought down by focusing on lecturers' job satisfaction, and working on ways whereby work-family conflicts can be reduced.

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HIGHER EDUCATION RESEARCH IN UGANDA: PROBLEMS AND PROSPECTS

By

Dr. J. S. Owoeye
&
Dr. S. A. Oyebade

Kampala International University
Kampala, Uganda

Abstract:

Research is regarded as essential for development and the application of new knowledge for the benefit of society. Higher education in Uganda has expanded rapidly in the last 20 years. Universities have become the most important institutions in the achievement of national and international goals in enhancing the quality of life, wealth creation, production of high calibre human resources. Even though research has been recognized as key to development, research funding has not received adequate support. The resultant effect has been inadequate research infrastructure in this country. University funding is considered inadequate leading to alarmingly low and declining salaries of faculty staff, massive brain drain while external sources of grants have diminished. The study recommended for authorities' careful consideration and implementation of all policies that will facilitate effective and efficient functioning of tertiary education. These include adequate funding, upgrading of all (library, laboratory, workshops)

facilities, continuous staff development efforts, comprehensive data generation, storage and usage among others.

Introduction

A brief History of Higher Education in Uganda

Historically, in pre-independence Uganda, educational opportunities were limited and only a few lucky ones were able to take the advantage of them. According to Kasozi (2003), public universities in Uganda dated back to the pre-colonial era when Makerere University was established in 1922 as a technical college to train public servants for civil service, teaching and parastatals. In 1937, the College metamorphosed into an institution of higher education and subsequently became a constituent College of the University of London in 1949. Makerere College served the students from other British colonial territories of Kenya, Tanganyika and Zanzibar.

Sichmerman (2005) and Ssekamwa (1988) cited in Kyaligonza (2009) noted that Makerere College was part of the University of East Africa until its dissolution in 1970 into Makerere University, University of Dar-es-Salam and the University of Nairobi. Other public and private universities which emerged in later years included Mbarara University of Science and Technology (1989), Namasagali University (1991), Uganda Martyrs University Nkozi (1993), Nkumba University (1996), Bugema University (1997), Uganda Christian University Mukono (1997), Ndejje University (1998), Kampala University (1999), Kyambogo University, Kampala (2000), Kampala International University (2001), Gulu University, Gulu (2003), Busitema University of Technology (2006) and St. Lawrence University (2006). Below is a comprehensive list of public and private higher institutions in Uganda (see Table 1).

Table 1: List of Universities in Uganda (2009) and Estimated Current Higher Education Enrolment (2007)

| Type of Institution | Name of University | Location | Year established | Enrollment |
|-----------------------------|---|--------------------------------|------------------|------------|
| <i>Public Universities</i> | <u>Busitema University</u> (BUSU) | Tororo | 2007 | 160 |
| | <u>Gulu University</u> (GU), | Gulu | 2002 | 3,347 |
| | <u>Kyambogo University</u> (KYU) | Kampala | 2002 | 10,000 |
| | <u>Makerere University</u> (MUK) | Kampala | 1922 | 33,000 |
| | Makerere Business School | Kampala, a campus of MAK | | |
| | <u>Mbarara University of Science & Technology</u> (MUST) | Mbarara | 1989 | 3,000 |
| <i>Private Universities</i> | <u>African Bible University</u> | <u>Wakiso</u> | 2005 | 25 |
| | <u>Aga Khan University</u> | <u>Kampala</u> | 2001 | |
| | <u>All Saints University</u> | <u>Lira</u> | 2008 | |
| | <u>Ankole Western</u> | <u>Kabwohe</u> | 2008 | |

| | | | |
|--|--------------------------------|-------------|--------------|
| <u>Institute of Science and Technology</u> | | | |
| <u>Bishop Stuart University</u> | <u>Mbarara</u> | 2006 | |
| <u>Bugema University (BU)</u> | <u>Luweero</u> | 1997 | |
| <u>Busoga University (BSOU)</u> | <u>Iganga</u> | 1999 | 2,500 |
| <u>Fairland University</u> | <u>Jinja</u> | 2005 | 482 |
| <u>International Health Sciences University (IHSU)</u> | <u>Kampala</u> | 2008 | |
| <u>Islamic University in Uganda (IUIU)</u> | <u>Mbale</u> | 1988 | 5000 |
| <u>Kabale University Kabale</u> | | 2005 | 1,000 |
| <u>Kampala International University (KIU)</u> | <u>Kampala</u> | 2001 | |
| <u>Kampala University (KU)</u> | <u>Kampala</u> | 2005 | |
| <u>Kumi University (KU')</u> | <u>Kumi</u> | 1999 | |
| <u>Lugazi</u> | <u>Mukono</u> | 2007 | 400 |

| | | | | |
|---------------------------------------|--|---------------------------------|-------------|--------------|
| | <u>University (LZU)</u> | | | |
| | <u>Manafwa University (MU)</u> | <u>Manafwa</u> | 2008 | |
| | <u>Mutesa 1 Royal University (MIRU),</u> | <u>Masaka</u> | 2007 | |
| | <u>Mountains of the Moon University (MMU)</u> | <u>Kabarole</u> | 2005 | |
| | <u>Ndejje University (NDU)</u> | <u>Luweero</u> | 1992 | 2,164 |
| | <u>Nkumba University (NU)</u> | <u>Entebbe</u> | 1999 | 4,600 |
| | <u>St. Lawrence University (Uganda) (SLAU)</u> | <u>Kampala</u> | 2006 | |
| | <u>Uganda Christian University (UCU)</u> | <u>Mukono</u> | 1997 | 6,000 |
| | <u>Uganda Martyrs University (UMU)</u> | <u>Mpigi</u> | 1993 | 3,397 |
| | <u>Uganda Pentecostal University (UPU)</u> | <u>Kabarole</u> | 2005 | 315 |
| <i>Degree-Awarding Non-University</i> | <u>Uganda Management Institute (UMI)</u> | <u>Kampala</u> | 1969 | |

| | | | | |
|--|--|--------------------------------|-------------|--|
| | <u>Kigumba Institute of Petroleum Studies (KIPS)</u> | <u>Masindi</u> | 2010 | |
|--|--|--------------------------------|-------------|--|

Sources: <http://www.enteruganda.com/brochures/uniguidehome.html>,
http://www.unesco.org/iau/onlinedatabases/list_data/u-nw.html#Uganda

The Goals of Higher Education in Uganda

Traditionally, higher education in Uganda engages in three principal functions of teaching, research and public service. According to Kampala International University Strategic Plan (2008/2009 – 3012/2013), *teaching* develops the intellectual capacities of individuals to enable them understand and appreciate their environment. Intellectual development promotes critical thinking and sharpens the reasoning capabilities of people.

The top echelons of business and public organizations must be trained to think critically and must be professionally qualified to enhance the productive capabilities of their organizations. Research portends the scholarly, scientific, philosophical and critical approaches of intellectuals to the solution of practical problems of man as well as their creative contributions to the Arts and Sciences. It is also to be noted *research* work preserves, acquires, disseminates, interprets and applies knowledge and creates frontiers. *Public service activities* of higher institutions include; health care, consultancy services, extra mural teaching, artistic performances, conference, courses, seminars and symposia.

The Government White Paper (1992) prescribed five basic functions of higher education in Uganda thus:

- i. teaching to produce high level man power;
- ii. research, particularly applied;
- iii. publication of books, journals and research papers;
- iv. public service through a variety of extension activities; and
- v. serving as store-houses of knowledge and centres of excellence in all human endeavours.

In line with the above, tertiary education institutions in Uganda seek to pursue the goals, which according to Government White Paper (1992), include:

- (i). training high level technical, managerial and professional personnel for all sectors of national life
- (ii). generating advanced knowledge and innovations through research and to be able to translate or adapt them to local and Ugandan situations;
- (iii). intensify the provision of public service through expanded extra-mural or extension work and consultancy services;
- (iv). developing the intellectual capacities of students to understand their local and national environment objectively and appreciate to develop the same;
- (v). promoting the development of an indigenous scientific and technological capacity needed for tackling the problems of development;
- (vi). equipping the students with knowledge, skills and attitudes to enable them to join the world of work as useful members of their communities and the nation at large, especially through being:
 - a. committed to, and ready for, community and national service voluntarily or when mobilized to do so;
 - b. nationally conscious, to work anywhere with fellow nationals; and
 - c. productive individuals with positive attitudes towards personal, community and national development as well as believing in the dignity of labour and displaying a willingness to be involved in productive practical work.
- (vii). to develop and inculcate the spirit of patriotism, national unity and international solidarity (pp. 88-89).

The Centrality of Research in Universities

The Report of the Visitation Committee to Ugandan Public Universities (2007) emphasized that one of the primary functions of universities is to create and produce knowledge through research and to disseminate knowledge through publications (in peer - reviewed books and articles in scholarly journals). The second major function of reputable universities is to teach undergraduate and postgraduate programmes through research. Thirdly, public universities are expected to spearhead, set and regularly review the national agenda.

The pursuit research in the university can be basic, strategic, applied or experimental. The report further asserted that “a university that does not carry out researches is indistinguishable from a high school and is condemned to intellectual and academic obscurity”.

With the on-going digital revolution and the emergence of knowledge economies, research in universities and elsewhere has assumed more importance than ever before. The report concluded that given the centrality of research in the age of globalization and digital revolution, the nation’s universities cannot afford to become mere teaching colleges consuming knowledge produced in other higher educational institutions around the world. It recommended that Ugandan universities must join in competitive research to serve their purpose, justify their existence and build their national and international reputations.

Universities and Development through Research

The Universities represent the highest level of manpower training and research for both developed and developing nations. For Africa in general and Uganda in particular, universities are agencies of technological innovation in economic growth and development. The proceedings on the *Role of African Universities in the Attainment of the Millennium in Development Goals* (Kenyatta University, 2006) confirmed that “universities and other institutions of higher learning are key players in domesticating knowledge and diffusing it into the economy which it can only do through close linkages with the private sector”.

To play this role effectively, universities would need to go beyond being conventional sources of graduate manpower to becoming engines of community development which is working directly with their host communities to address critical development problems and pursue social renewal just in line with the goals outlined before. Such problems in Uganda include unemployment and under employment, poverty, hunger, food insecurity, brain-drain, poor skill development, high cost of educational materials, limited access to educational opportunities especially at the higher level, among others.

Kasozi (2003) noted that university education brings substantial social returns to investment that exceed private returns by a wider margin than was previously believed. It improves individual

lives and enriches the wider society, indicating a substantial overlap between private and public interests in higher education. He submitted further that higher education creates a pool of educated people needed by the private sector for the creation, preservation and transmission of knowledge and free discussion of ideas whether social or scientific.

Problems of Higher Education and Research in Uganda

Shortage of funds

The Visitation Committee to Public Universities Report (2007) asserted that the higher education system in Uganda is confronted by severe financial crisis (see Tables 2-6)

Table 2: Makerere University, Private and Government Recurrent Funding, 1991/92 to 2000/2001

| Year | Recurrent Funding from Internal Funds | Approved, Government, Recurrent Funding | Internal funding as a % of Government Funding |
|-----------|---------------------------------------|---|---|
| 1991/1992 | 44,144,884 | 6,285,819,000 | 0.7 |
| 1992/1993 | | 8,183,429,000 | |
| 1993/1994 | | 8,641,950,000 | |
| 1994/1995 | 1,626,073,457 | 12,766,675,000 | 12.7 |
| 1995/1996 | 2,731,000,000 | 20,328,433,000 | 13.4 |
| 1996/1997 | 362,988,000 | 20,579,406,000 | 1.8 |
| 1997/1998 | 1,500,000,000 | 21,041,938,000 | 7.1 |
| 1998/1999 | 2,680,000,000 | 23,300,000,000 | 11.5 |
| 1999/2000 | 10,600,000,000 | 22,900,000,000 | 46.3 |
| 2000/2001 | 13,863,196,233 | 23,228,973,000 | 59.7 |

Source: (Mamdani, 2007)

Table 2 explains the trends in the release of funds for Makerere University (the oldest) for a 10-year period of 1991/92 to 2000/2001: A gradual increase is noted but this could mean less to research funding as a result of increasing cost of materials and inflation.

Table 3: Makerere University Proposed Research Budget versus Government Grants 1988/89-1998/99

| Year | Proposed Amount Shs | Approved Amount Shs | Percent % Appr./Pro | Actual Release Shs | Percent % Actual/Pro |
|------|---------------------|---------------------|---------------------|--------------------|----------------------|
|------|---------------------|---------------------|---------------------|--------------------|----------------------|

| | | | | | |
|---------|--------|--------|------|-----------|------|
| 1988/89 | 117.9M | 7.5M | 6.4 | | |
| 1989/90 | 135.6M | 23M | 17.0 | | |
| 1990/91 | 81M | 10M | 12.3 | | |
| 1991/92 | 774.4M | 100M | 12.9 | | |
| 1992/93 | 645M | 100.5M | 15.6 | | |
| 1993/94 | 394M | 100.5M | 25.5 | 105M | 26.6 |
| 1994/95 | 662.8M | 300M | 45.3 | 300M | 45.3 |
| 1995/96 | 806.7M | 270M | 33.5 | 232.6M | 28.8 |
| 1996/97 | 1.110B | 270M | 24.3 | 169M | 15.2 |
| 1997/98 | 1.098B | 162M | 14.8 | 117M | 10.7 |
| 1998/99 | 1.138 | 134M | 11.8 | Not Known | |

Source: University Bursar's Office

Table 3 also reveals a sharp difference in the amount of research funds proposed and the amount approved. For instance, for 1993/94 the percentage of funds proposed to the approved were below 50 per cent and in actuality the rate continued to decline from 45.3% in 1994/95 to 1998/99

Table 4: Research Grant Approved by Makerere Board of Research and Publications 1990-1998

| Project | Date Approved | Total Amount Ug.Sh |
|---------|----------------|--------------------|
| 1. | 12/4/90 | 1,642,916 |
| 2. | 26/4/91 | 6,575,760 |
| 3. | 14/8/91 | 6,773,000 |
| 4. | 1/4/92 | 10,524,350 |
| 5. | 12/4/95 | 20,000,000 |
| 6. | 4/7/95 | 4,000,000 |
| 7. | 28/9/95 | 10,437,760 |
| 8. | 18/9/95 | 19,248,150 |
| 9. | 15/5/96 | 10,000,000 |
| 10. | 15/11/97 | 10,500,000 |
| 11. | 10/6/97 | 1,000,000 |
| 12. | 29/7/97 | 6,890,000 |
| 13. | 9/9/97 | 7,146,500 |
| 14. | 29/7/98 | 8,274,500 |
| 15. | March 2003 | 68,140,188 |
| 16. | May 2003 | 95,308,026 |
| 17. | September 2003 | 153,827,458 |

Source: Secretariat, Board of Research and Publications, School of Graduate Studies.

Table 4 presents a varied array of grants approved by Makerere Board of Research and Publications for an 8-year period of 1990-1998. In 2003 alone, a total of 417,275,627 was released for research by Makerere.

Table 5: Contribution of Accessible Internet PERI Project Databases to the Visibility and Availability of East African Full-text Scholarly Publication for the Period 1990-2005

| Database | Makerere | Dar-es-Salaam | Nairobi | Total | Percent (%) |
|-----------------|-----------------|----------------------|----------------|---------------|--------------------|
| Blackwell | 136 | 238 | 605 | 9790 | 24.2 |
| Ebsco | 309 | 4 | 92 | 405 | 10 |
| Emerald | 304 | 4 | 9 | 317 | 7.8 |
| Gale | 8 | 0 | 4 | 12 | 0.3 |
| Highwire Press | 263 | 538 | 1,391 | 2,192 | 54.3 |
| Pub-Med | 35 | 27 | 73 | 135 | 3.4 |
| Total | 1,055 | 811 | 2,174 | 12,851 | 100 |

Source: Databases Access, November 2005

Table 5 displays the comparative research and publication outputs in three universities in East Africa. It shows of that the total 12,851 publications produce by these universities between 1990 and 2005, Nairobi led with 2,174, followed by Makerere with 1,055 and Dar-es-Salam with just 811.

Table 6: World Bank Financing for Education in Sub-Saharan Africa, FY1990-FY2008 (US\$ millions)

| Menu | IBRD and IDA New Commitments (millions of current US\$) | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------|
| Sub-Sector | FY90 | FY91 | FY92 | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 |
| Adult lit /non-formal education | - | 2.44 | 9.22 | - | - | - | 10.21 | - | - | 30.45 | 6.07 | - | 13.52 | 0.69 | 4.63 | - | 0.72 | 18.50 | - |
| Gen education sector | 57.96 | 9.36 | 0.86 | 2.55 | 18.02 | 18.05 | 36.78 | 56.50 | 27.38 | 10.95 | 92.90 | 89.22 | 128.28 | 128.91 | 79.89 | 174.77 | 173.46 | 131.40 | 190 |
| Pre-primary education | - | - | - | 8.03 | - | - | - | 8.34 | - | 0.42 | - | 9.20 | - | - | - | - | - | - | 7 |
| Primary education | 90.74 | 153.25 | 82.71 | 184.35 | 99.42 | 104.46 | 95.45 | 15.39 | 226.11 | 126.47 | 57.29 | 59.94 | 214.18 | 237.94 | 91.80 | 106.11 | 90.56 | 257.90 | 45 |
| Secondary education | 38.65 | 18.54 | 40.21 | 32.19 | 25.74 | 12.28 | - | 18.98 | 98.17 | 10.85 | 13.65 | 14.40 | - | 53.92 | 124.20 | 11.19 | 18.26 | 106.60 | 4 |
| Tertiary education | 119.72 | 30.67 | 163.75 | 131.04 | 69.94 | 30.20 | 41.76 | 11.59 | 46.00 | 24.68 | 13.95 | 17.02 | 69.48 | - | 45.93 | 61.16 | 29.07 | 140.10 | 105 |
| Vocational training | 3.13 | 6.66 | 27.36 | 6.25 | 55.37 | 10.04 | 10.45 | 4.41 | 2.37 | 4.94 | 5.92 | 19.75 | 47.15 | 2.12 | 16.46 | 15.80 | 27.20 | 51.50 | 22 |
| Total Africa Region | 310.20 | 220.92 | 324.11 | 364.41 | 268.49 | 175.03 | 194.65 | 115.21 | 400.03 | 208.76 | 189.78 | 209.53 | 472.61 | 423.58 | 362.91 | 369.03 | 339.26 | 706.00 | 373 |

Source: World Bank Report, 2008, p.4.

Public funding of higher education has continued to decline since the 1990s while students' enrolments have been increasing (See Table 7 below). The Structural Adjustment Programme and other policies of international lenders side-lined the funding of tertiary education, coupled with the erroneous belief that public returns on higher education were low compared to other levels of education and that it was a waste of public resources to fund tertiary education.

Table 7: Projected enrolment and demand for tertiary institutions in Uganda (1969-2015)

| Year | Projected population at 2.67% annual growth | Total enrolment estimated at 18% annual growth | Enrolment per 100,000 of population | Expected UPE contribution to total tertiary enrolment |
|------|---|--|-------------------------------------|---|
| 1969 | 9,535,051 | 5,341 | 56 | |
| 1980 | 12,636,179 | 10,352 | 80 | |
| 1991 | 16,671,705 | 17,575 | 105 | |
| 1992 | 17,180,493 | 20,134 | 117 | |
| 1993 | 17,625,991 | 24,065 | 131 | |
| 1994 | 18,083,041 | 26,422 | 146 | |
| 1995 | 19,262,600 | 30,268 | 157 | |
| 1996 | 19,847,700 | 34,674 | 175 | |
| 1997 | 20,438,400 | 39,721 | 194 | |
| 1998 | 21,029,000 | 45,504 | 216 | |
| 1999 | 21,619,700 | 52,128 | 241 | |
| 2000 | 21,210,400 | 59,716 | 268 | |
| 2001 | 21,788,100 | 68,408 | 300 | |
| 2002 | 23,351,000 | 78,367 | 336 | |
| 2003 | 23,914,000 | 89,775 | 375 | |
| 2004 | 24,895,000 | 102,843 | 413 | |
| 2005 | 25,039,000 | 117,813 | 471 | |
| 2006 | 25,656,100 | 134,609 | 526 | |

| | | | | |
|------|------------|---------|------|---------|
| 2007 | 26,334,000 | 154,609 | 587 | |
| 2008 | 27,010,800 | 177,111 | 656 | 89,497 |
| 2009 | 27,688,100 | 202,898 | 733 | 155,056 |
| 2010 | 28,365,500 | 232,433 | 819 | 167,805 |
| 2011 | 29,122,600 | 266,266 | 888 | 192,227 |
| 2012 | 29,971,100 | 305,020 | 1018 | 230,209 |
| 2013 | 30,819,600 | 349,421 | 1134 | 252,264 |
| 2014 | 31,668,100 | 400,285 | 1264 | 288,986 |
| 2015 | 32,516,700 | 458,554 | 1409 | 331,053 |

Source: Kasozi (2003) p.3

Table 7 shows the projection of enrolment and demand for tertiary education in Uganda up to 2015

In 2000, studies carried out by the World Bank on higher education in selected African countries (including Uganda) showed the importance of higher education to development yet, the nation's allocation of funds to education in 2005/06 to 2014/15 have not indicated a change of heart in substantially funding education by devoting less than 15% of Ministry's budget to higher education. The consequence of underfunding is the delivery of declining quality of higher education and a drastic reduction of researches in public universities.

Inadequacy and deterioration of infrastructures: This is majorly due to underfunding and the problem of inflation. There are shortages in the supply of laboratory, library and classroom facilities and high student-teacher ratios vis-a-vis the demand for these infrastructures. In Uganda, economic problems and political instability resulted in lack of maintenance of equipment, failure to replace obsolete irrelevant books and equipment, and research journals thus contributing to poor level of research in the higher institutions.

Brain drain due to low remuneration and social economic crises

Brain-drain is departure of seasoned academics and scientists that would have added value to tertiary education development and research activities to other climes of the

world where they are highly valued. Uganda, like many African countries, has experienced external mobility and migration of best scholars from the universities to greener pastures and better-paying government and private agencies and firms that may or may not be able to tap their talents effectively. Identifying the causes of *brain drain* in Africa, Effa (1998) listed inhibiting factors such as poor working conditions, inadequate remuneration and equipment, absence of employment benefits and job security, political instability, limited opportunities for postgraduate studies (particularly in scientific and technological fields) and the increasing mismatch between training programmes and labour market demand.

In fact, Kyaligonza (2009) cited Sutherland's (2003) report that the decline of research in public higher education institutions in Uganda started in 1971 when General Idi Amin plunged Uganda into a dictatorship, economic ruin and degradation. The *Asians* who controlled the economy were expelled in 1972 and the British, the Americans and other core cadre researchers in Makerere Universities and other tertiary institutions were forced to leave the country. This led to the decline of research activities which existed prior to 1971. The situation has not changed much till date.

Kyaligonza (2009) further reports the submissions of Musisi, *et al* (2003), Kasozi (2003) and Mamdani (2007) on how military rule and general mismanagement of the economy from 1971- 1979 and the post Amin Civil Wars instability of the 1980s represent the sad phase in the country's educational development. During this time, higher education system lost its integrity, credibility and professionalism. The resultant effect was that staff and students were isolated from international scholarships. Purchase of up-to-date books and subscription for scholarly journals was drastically reduced because of lack of foreign exchange and university lecturers' loss of morale and self esteem.

Shortage of technical/professional staff

Related to the above is the shortage in the production and employment of technical and professional support staff to enhance research activities in Ugandan tertiary institutions. It is generally noted that the hitch in research activities and productivity is caused by poor

remuneration of staff and endemic poverty of public workers. For example, Kyaligonza (2009) found that academics who could not endure and persevere were driven by the hustle to survive to becoming taxi drivers, *boda-boda* riders, etc, thus further deepening the level of intellectual erosion and mediocrity.

Poor remuneration, high cost of living and high tax regime

A sad development from poor remuneration, high cost of living and high tax regime on education and other workers in Uganda has led to paying little attention to research and further studies. For example, the urge to earn more wages has encouraged the practice of academics keeping two, three or more full-time employments with negative consequences on the research development efforts and productivity.

Currently, there is a very low enrolment of Ugandans in postgraduate programmes in tertiary institutions compared to other nations in East Africa. This could be because of absence of government sponsorship schemes like scholarships and bursaries to encourage aspiring candidates who could have graduated to become budding academics and promising researchers focusing on the problems challenging the growth and development of the Ugandan nation.

Management issues

According to Taferra and Altbach (2003), management and administrative systems are significant to the productivity and effectiveness of any enterprise and academic institutions are no exceptions. However, Ugandan universities suffer from poor, inefficient and highly bureaucratic management systems. Poorly trained and poorly qualified personnel, inefficient and ineffective management, outdated infrastructures and poorly-remunerated staff are found throughout the system. The issues of mismanagement and embezzlement of funds, both internally and externally generated are often reported. Cases of fraud reportedly abound in Kyambogo and Makerere Universities which have made authorities to institute investigations and re-deploy or dismiss very senior staff in management positions. It must be noted that the manner of university governance and the manner of appointing university leadership often contribute to the problem.

Emphasis on teaching at the expense of research

Kyaligonza (2009) found that public universities in Uganda are failing to fully fulfil the functions of higher education as they lag behind in research, while emphasizing teaching at the expense of research. Even, government is not very serious in investing in university research as it lays little premium on the need to properly remunerate and motivate research supervisors, acquire research equipment and facilities like computers, internet facilities, libraries and workshop facilities as well as deliberately fund research.

Shortage of teaching and non-teaching staff

Kyaligonza (2009) citing Mugerwa (2003) and Mamdani (2007), notes the disproportionate number of teaching and non-teaching staff. Academic staff members usually carry heavy teaching work load and teach large classes, thus finding it hard to conduct meaningful research or effectively supervise student research projects.

It could be concluded that large class sizes keep lecturers busy even between semesters with large numbers of scripts running into another semester and sometimes into another session due to short breaks and multiple admissions.

Promotion of academic staff not tied to research productivity

Promotion of staff in Ugandan universities is relatively slow and possesses very little challenge, because promotion is not tied to quantity and quality of publications. So, the motivation to study and conduct meaningful research is not there. As if these are not enough, public universities in Uganda suffer inadequate educational facilities like laboratories, equipment, well stocked libraries, computers and internet facilities, lecture and seminar rooms, research carrels and office space for lecturers. Lack of personal offices for university lecturers cannot boast of personal offices and working tables, makes it difficult for them to efficiently and effectively attend to student problems, supervise students, keep their teaching resources and research materials in offices, conduct their own researches to be disseminated in local and international conference meetings.

PROSPECTS OF RESEARCH BY UGANDAN HIGHER EDUCATION

Higher education research in Uganda has its own challenges as reviewed above, but all is not lost. There are prospects. Adequate government budgetary allocation to public universities and also by proprietors to the private universities for research holds much prospect for increased level and quality of research undertakings by Ugandan universities. Another prospect lies in compelling private business organizations like banks, reputable manufacturing industries which are prospective beneficiaries (employers and users) of the products of higher education research to contribute towards the funding of research in higher institutions.

In Uganda, power supply is an asset to economic, social and academic activities. Hence, research facilities can survive quite well. Thus local and international researchers can be attracted to initiate researches in basic development problems confronting Uganda and its people.

Uganda Statistics House (Office of Statistics) has the mandate to collect basic data for research and decision-making purposes. If the will power is there, there are enough opportunities to develop a strong data bank on various social, economic and educational problems. Uganda has a few old and many new public and private higher institutions and colleges which may widen their capacity for research by establishing linkages and collaborations with ever-willing foreign institutions. This will ensure regular exchange of ideas on research and other academic endeavours. Through this channel, researchers from various institutions can be made to work together in teams to conduct researches. There are waiting collaborators and research grant providers all over the world which Ugandan universities need to explore.

Conclusion

One of the major problems confronting research in higher institutions is inadequate funding of research projects and or programmes. It could be concluded that research output in Ugandan higher institutions and the issue of research funding were among major complaints by the university lecturers. The issue of research underfunding has been responsible for most of the strikes of public universities in Uganda and that research in

public universities depends on substantial internal and external financial resources. Internal sources of funding research have proved to be highly limited and inadequate, and that sponsors have failed to sustainably support research undertakings yet, the achievement of each university largely depends largely on appropriate level of funding. This could explain why Makerere University and other public universities in Uganda have continued to be rated low as compared with other universities in Africa. On this note, it is pertinent to review and reconsider the importance of research in higher education and the positive role that higher education can play in nation building and development.

Recommendations

Presently, inadequacy of funding inadequacy constitutes a major challenge to research in public and private universities in Uganda. To sustain excellence in research, concerted efforts must be made towards redressing the problem of under-funding of research in the institutions.

Related to the challenge of underfunding is the need to upgrade facilities and laboratories in order for the universities to improve adequately on the quality of teaching and research.

Government should negotiate the support of development partners, international donor agencies, research institutes, and special grants for the university system to purchase adequate infrastructures to carry out vital researches in higher education.

Continuous staff development is a key to achieving excellence in research work. It is therefore necessary for the Ugandan government and universities to review their staff development programmes and policies on promotion of deserving intellectuals so as to effectively reduce the adverse consequences of poor motivation as is presently obtained.

The Ministry of Education and Sports should improve on basic data collection activities, analysis and storage for research and development purposes.

Universities in Uganda should explore collaboration and linkages with reputable institutions abroad. Also, the declining sources of internal and external funds underscore the need for the universities to renew their search for external grants.

Universities in Uganda should also expand the area of income generation through alumni, endowments, consultancies, and partnership to reinforce the conventional sources of funding research

The library is a very important facility promoting high quality training. Authorities should ensure that libraries are set up and equipped to encourage research.

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JOB -RELATED STRESS, PERSONALITY, SOCIAL SUPPORT AND BURNOUT AMONG COLLEGE OF EDUCATION LECTURERS

BY

DR. SAMUEL O. SALAMI

e-mailaddress:drsosalami2002@yahoo.co.uk

**Department Of Guidance and Counselling
Kampala International University, Kampala- Uganda**

Abstract

Purpose - The main purpose of this study was to investigate the relationship of job stress, personality and social support to burnout among college of education lecturers. The second purpose was to examine the extent to which personality and social support can buffer the negative effects of stress on burnout. Design/ methodology / approach – Survey methodology was used for this study. Job-related stress, personality and social support were used as the predictors of emotional exhaustion, depersonalization and personal accomplishment. Findings- Results showed that job stress, personality dimensions and social support jointly and separately predicted dimensions of burnout. Personality and social support interacted with job stress to predict personal accomplishment. Practical Implications-Results support the view that, environmental (job stress and social support) and personal factors (personality traits) have influence on burnout. Originality /Value-The papers findings imply that interventions designed to improve lecturers' classroom management skills, social network and assessment of their personality traits may have positive impact in combating burnout.

Keywords: Job stress, personality, social networks, burnout.

Introduction

Burnout is defined as a chronic affective response pattern to stressful work conditions that feature high levels of interpersonal contact, Maslach, Jackson and Leiter (1996) conceptualized burnout as consisting of emotional exhaustion, depersonalization and reduced personal accomplishment. Emotional exhaustion refers to the feeling of being emotionally over-extended, tired and fatigued. Depersonalization refers to the tendency to

develop negative, cynical, callous or detached attitudes towards the people with whom one works. The Third component is the loss of or reduced feeling of personal accomplishment derived from jobs and employees often evaluate themselves negatively. Burnout as an individual negative experience occurring as a result of chronic work stress has become prominent in teaching professional literature since the mid-1970s'. There is a general view that teacher burnout may have a negative impact on the teachers themselves leading , for instance, to emotional and physical ill-health , and on the students as burned out teachers may be relatively impaired in the quality of teaching and commitment, may give less information and less praise and interact less with students. Another effect of job stress and burnout is that they serve as impediments to the lecturers' research functions in higher education. The main purpose of the study was to investigate the relationship of job-related stress, personality and social support to burnout among a previously unstudied element of the population, college of education lecturers of the population, college of education. A secondary objective was to examine the extent to which personality and social support can buffer the negative effects of stress on burnout in the lecturers.

Studying stress and burnout among the college of education lecturers has implications for improving understanding of job-stress and burnout as well as for enhancing their working life. Understanding environmental and personal influences on burnout may hold benefits for institution and lecturers. Appreciating the environmental and personal factors that influence burnout can help human resource specialists and career counsellors forecast burnout as well as factors related to early manifestation of burnout. From such

information, appropriate intervention strategies that will combat burnout and enhance employee and organizational wellness can be developed. Although considerable research has studied stress and burnout further research is warranted to identify new factors that might mediate job stress-burnout link.

Examining previously unstudied populations within postsecondary education especially colleges of education, could help researchers identify such new factors .Because of differences among tertiary educational institutions (e.g. universities, polytechnics, and colleges of education) regarding work performed, entry requirements, type of students taught, salaries, class size, publishing, tenure and training opportunities, it is important to study samples from a single type of tertiary institution. Therefore, insights gained from examining stress and burnout among college of education lecturers have a potential to impact staff development and retention strategies relative to the specific type of tertiary institution.

Theoretical framework

This study was based on person- environment (PE) Fit theory and the transactional model of stress and burnout. These are the most widely accepted frameworks for conducting research on job-stress and burnout (Brewer& McMahan, 2004; Edwards, Caplan & Harrison,1998;Edwards& Cooper,1990; Kokkinos,2007;Spielberger& Vagg,'1999). PE Fit theory and transactional model of burnout assert that the interaction between an individual and his or her environment determines whether or not a situation is stressful for that person. It assumes that human behaviour is a function of the person and the environment, and that a person's vocational satisfaction, stability and achievement

depend on the congruence or fit between the person's personality and the environment in which the person works (Herr,Cramer,& Niles, 2004;Kokkinos,2007; Salami,2006).

In the context of the workplace, the individual's attributes are interests, transferrable skills, career motives and values, personality preferences, career orientations, self-concept and sense of self-efficacy. The work environment include individual's expectations and perceptions regarding workload, control over one's work, tangible and intrinsic rewards of work, the relationship and sense of community among co-workers ,perceptions of fairness in the workplace and the role of personal and organizational values (Herr et al, 2004). If the fit between an individual and environments is incompatible, stress results. Similarly, lack of fit between the demands placed on individuals and their abilities to meet those demands can result in stress. Though there are evidences that burnout occurs as a result of complex interaction between individual characteristics and issues in the work environment, research has not systematically considered the role of person variables in this direction especially studying the manifestation of burnout among college of education lecturers.

Job stress and dimensions of burnout

The work of a typical university, polytechnic or college of education lecturer could be divided into four groups namely, teaching, conducting research, civil obligation and administration (Makinde & Alao, 1987). The intensity and frequency of influence of involvement in any of the broad groups of job activities depend on the ranks of the lecturer. In addition, a lecturer is expected to be seen as a counsellor to both students and parents, sometimes as a nurse, a social worker, even to some extent, a parent for the students under his or her tutelage. With increasing number of roles that students, parents

and employers demand from lecturers, it is no wonder that lecture stress and burnout are on steady increase. This has invariably affected the research functions of the lectures in tertiary institutions.

In view of the important roles played by lecturers in the manpower development of most countries, research has been conducted on how stressful the lecturers find their job to be and the impacts of such job-related stress on their attitudes, emotions, job performance and the way they relate to staff and students (Thompson & Dey, 1998). Colangelo (2004) defined teacher stress as an unpleasant feeling that teachers experience as a result of their work. Stress has effects on a person's physical, emotional and psychological well-being. Past research on job stress among postsecondary lecturers has identified numerous sources and variables affecting stress levels as well as burnout (Brewer & McMahan, 2004). For example, researchers have consistently reported time pressure (Barnes, Agago & Combs, 1998), high self expectations (Smith, Anderson & Lovrich, 1995), research and publication demands (Blix, Cruise, Mitchell & Blix, 1994) as significant sources of job stress.

Two thirds of United States' College faculty members reported that keeping up with information technology (IT) was stressful for them (Sax, Astin, Korn, & Gilmartin, 1999). Gmelch, Wilke and Lovrich (1986) examined dimensions of stress among professors from some postsecondary institutions and identified five dimensions of perceived stress, namely, reward and recognition, time constraints, departmental influence, professional identity and student interaction. Salami (2006) also identified heavy workload, working under pressure, large classes, students' disruption of lectures

and delayed and inadequate salaries as sources of stress among college of education lecturers in Nigeria.

Several researches has examined job stress among university lecturers, however, little attention has been paid to college of education lecturers. The scarcity of research on college of education lecturers may have been due to the view that in contrast with universities, college of education lecturers work are much easier to perform because of the relatively less academic and less demanding nature of the curriculum and that mature students' are much easier to handle. On the other hand, it can be argued that, compared with university students, college of education students are relatively more difficult to teach and handle because they are more elderly, with family responsibilities, and less interested in academic matters.

The colleges of education lecturers are not well paid as those in the Universities. Yet the college of education Lectures are expected to give academic leadership, conduct research and publish the outcomes in learned journals. It follows; therefore, that college of education lecturers may confront problems and challenges that are at least as difficult to deal with as those for University lectures which may have adverse consequences for their well- being and job performance.

Empirical evidence have shown that, teachers experiencing more stress were burned out (Ganster& Schaubroeck,1991, Kokkinos, 20007; Moare,2007. The manifestation of burnout is a function of stressors engendered at both the environmental organization and personal levels. Kokkinos (2007) investigated the association between burnout and job stressors among primary school teachers and found that managing student misbehavior, teachers' appraisal by students' workload, and the time constraints were predictors of

dimensions of burnout. Byrne & Hall, (1989) found out that the role conflict, work overload, classroom climate, decision making and peer all organizational factors that contributed to teachers stress and eventual burnout. Therefore, it was expected that job stress will predict burnout. Formally stated the first hypotheses are:

H1: Job-related stress, personality and social support will jointly predict dimensions of burnout.

H2: Job-related stress will significantly predict dimensions of burnout.

Personality and dimensions of burnout

There is growing evidence that differences in personality dimension are related to job stress (Kim-Wan, 1991). Type A personality affects the perception of Job-related stress and the subsequent experience of psychological and physical strain including burnout. Type A individuals are characteristics as hard driving, personality, persistent involved in work, oriented toward leadership and achievement and having a sense of time urgency. Type B individuals are characterized as having the opposite characteristics (Kim-Wan, 1991).it was found that personality type exerted both a man and buffering effects on burnout. Type a teachers were less burned out and less adversely affected by harmful effects of stress (Kim-Wan, 1991).

The use of five- factor model of personality developed by Costa and McCrae (1992) to study the process of burnout has been applied to various populations. The five-factor model of personality (Costa & McCrae, 1992) posits that adult personality can be comprehensively described in terms of neuroticism (susceptibility to psychological distress, inability to cope up with stress),extraversion (the disposition towards positive emotions, sociability and high activity), openness (the proclivity toward variety,

intellectual curiosity), agreeableness (the inclination towards interpersonal trust and consideration for others), and conscientiousness (the tendency towards persistence, industriousness and organization).

Research on personality correlates of teacher burnout has indicated that neuroticism was associated with burnout (Maslach, Jackson & Leiter, 1996).Scaufeli and Enzmann (1998) cited in Kokkinos(2007) reported that neuroticism was one of the strongest personality correlates of burnout especially emotional exhaustion. Some researchers using the Eysenck model of personality (Eysenck & Eysenck, 1985) have found associations between burnout and high scores in neuroticism , introversion and psychoticism respectively (Kokkinos 2007).

In a study of the relative contribution of personality (Big Five model) in the prediction of burnout dimension among teachers working in special education in Greece, Kokkinos and Davazoglou(2005) cited in Kokkinos (2007) found that teachers' personality traits were significant predictors of three burnout dimensions. In particular high levels of neuroticism and low of agreeableness were predictive of emotional exhaustion, for depersonalization, neuroticism was the most important predictor whereas personal accomplishment was predicted by low levels of neuroticism and high levels of extraversion and conscientiousness. In a recent study, Kokkinos (2007) found that neuroticism was a common predictor of all dimensions of burnout although in personal accomplishment had a different direction. Results obtained by different researchers from investigations of the relationship between personality factors and burnout were not consistent because different personality instruments were used to measure personality traits. For example, some authors used the five- factor personality model by Costa and

McCrae (1992) while others used Eysenck's model of personality measures, thus making interpretation of the results difficult .

Therefore, it was expected that the lecturers personality will predict dimensions of burnout with the use of the five-factor personality measure by Costa and McCrae (1992).Based on the foregoing it was expected that :

H3: Personality characteristics will significantly predict dimensions of burnout.

H4: Personality characteristics will interact with job stress to predict dimensions of burnout.

Social Support and Dimensions of Burnout

According to House and Wells(1978), people may be said to have social support is described a relationship with one or more persons which is characterised by relatively frequent interactions, strong and positive feelings, and especially perceived ability and willingness to lend emotional and /or instrumental assistance in times of needs. Social support is an important resource that enables an individual to cope with stress and prevent burnout (Bonfiglio, 2005 Kim-wan, 1991); Russell, Altmaier& Velzen, 1987). According to the buffering hypothesis, individuals who have high social support are able to rely on others in dealing with stressful situations. As a result, they are less adversely affected by stress and burnout.

It has been found that social support can buffer the negative effects of stress (e.g. Bonfiglio, 2005; Cheuk, Wong & Rose, 1994; Cutrona, 1990; Russell et al ,1987; Solomon ,Waysman & Mikulincer,1990; Wong & Cheuk, 2005), although such positive effects of social support have not been identified in some other studies (e.g. Kahn & Byosiere, 1992, Parkes,1990). However, results from some of the studies were not

conclusive. For example, Kahn and Byosiere (1992) and Parkes (1990) did not find positive effects of social support in buffering the relationship between job stress and burnout whereas Cutrona (1990) and Wong and Cheuk (2005) found positive effects on such relationship. Therefore it was expected that social support will interact with job stress to predict burnout.

Based on the reviewed literature it was expected that:

H5: Social support will predict dimensions of burnout.

H6: Social support will interact with job stress to predict dimensions of burnout

Demographic characteristics'

In studying burnout among postsecondary lecturers, researchers have identified some demographic characteristics. For example, Byne and Hall (1989) found that demographic variables had a stronger impact on postsecondary educators than they had on educators at other levels. (i.e. primary , intermediate and secondary). Jackson (1993) and Kim-Wan (1991) found significant differences in levels of burnout among teachers relative to demographic factors such as gender, age, marital status, tenure status, academic rank and workload. However, Dillon and Tanner (1995) did not report significant differences in levels of burnout relative to demographic characteristics of teachers.

Method

Research Design

This study adopted a survey research design that utilised questionnaires to obtain data from the respondents.

Participants

The participants were 340 lecturers (Male-240 (70.58%), Female -100 (29.41%) randomly selected from the three colleges of education in Kwara state, Nigeria. The mean age of the sample was 36.70years (S.D.= 4.50), range=21-59 years). Highest level of education of the lecturers include B.A. Ed./B.SC. Ed., B.Ed., B.A./BSC., PGDE., M.Ed, and Ph.D. The teaching experience of the lecturers ranged from 2 to 28 years. Academic ranks were Assistant Lecturer 30(8.82%), Lecturer 111 64(18.82), Lecture 11 75(22.05%) lecturer 1 70(20.58%) Senior lecturer 63(18.52%) Principal Lecturer 20 (5.88%) Chief Lecturer or Senior Principal Lecturer 18(5.29%); Marital status-married=129(37. 94%), single = 200(58.82%) Divorce= 3(0.88%), Widow/Widower= 8(2.35%).

Measures

Personality: The NEO-FFI (Form S, Costa & McCrae, 1992) was used to assess the five personality dimensions. It consists of five 12- item scales developed through factor analyses as a short form of the NEO- PI-R to assess Neuroticism (N), Extraversion (E), Openness(O), Agreeableness (A), and Conscientiousness (C).

The item response adopted a 5-point likert Scale ranging from strongly disagree (1) to strongly agree (5). For the reliability of NEO- FFI , Costa and McCrae (1992) reported Cronbach's alpha Coefficients of 0.86, 0.77,0.73, 0.68, and 0.81 respectively for the N,E,O,A, AND C scales. Costa and McCrae (1991) have reported the construct validity of NEO-FFI. For the present study, the Cronbach's alpha coefficients ranged from 0.70 to 0.87 for the N, E, O, A and C scales.

Job stress. Job stress was measured by means of occupational stress scale (OSS, Salami, 2003).

OSS is a 50-item questionnaire that measures occupational stress factors viz: workload, interpersonal problems, time pressure, working conditions , leadership problems, inadequate facilities and personal problems. Items are responded to on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Range of score is 50-250. The coefficient of international consistency (Cronbach's alpha) of the scale was $r = 0.85$. The OSS has impressive norms and correlated highly ($r=0.75$) with the stress scale by Cooper, Cooper and Eaker (1988).

Teachers Burnout: Maslach Burnout Inventory .Human services.Survey (MBI- HSS ; Maslach, Jackson & Schwab, 1996) was used to assess the three aspects of teachers' burnout. The scale consists of 22 items that fall on the three subscales: emotions exhaustion (9 items), depersonalization (5items), and lack of a sense of personal accomplishment (8 items). Some amendments were made to the items for suitability for lecturers at the postsecondary level. Respondents indicate the frequency that they experience feeling related to each of the subscale items on a 7-point scale ranging from Never (0) to every day (6). The internal consistency ranges from .76 to .90 (Iwaniki & Schwab, 1981). For the current study, Cronbach's alphas were .86, for emotional exhaustion, .70 for depersonalization and .72 for personal accomplishment.

Social Support: The type of Social support received by the teachers was assessed by the social provisions scale (SPS) developed by Cutrona and Russell (1987). It measures the six relational provisions as obtained from the teachers' current social relationships. The respondents are to indicate their degree of agreement or disagreement if they feel the

statements are true of their current relationships with friends, family members, colleagues, college organization, community members. The six provisions are (1) attachment, the feeling of being close to others from which one derives a sense of security and safety; (2) social integration, a sense of belonging to a group of people who share similar interests, concerns of recreational activities;(3) reassurance of worth, the recognition of one's competence , skills, and values by others; (4) reliable alliance, the assurance that one can count on others for assistance under any circumstances;(5) guidance, advice or information as obtained through relationships with trustworthy and authoritative individuals who can provide advice;(6) opportunity for nurturance, a sense that others' well- being relies upon one's work. The alpha cronbachs's coefficient for this study for the six sub-scales were .75, .60, .75, .72, .68 respectively

Demographics: Data on demographic characteristics of respondents were collected via a demographic questionnaire developed by the researcher. Characteristics addressed by the questionnaire were (a) age, (b) gender, (C) academic qualifications, (d) teaching experience, (e) academic ranks, and marital status. There characteristics were chosen based upon a review of related literature.

Procedure

The survey forms containing all the four scales (Personality Inventory (NEO-FFI), Occupational Stress Scale, Social Support Scale, Maslach Burnout Inventory Human Services Survey(MBI-HSS),and the Demographic Questions were administered to the randomly selected lecturers institutions that participated in the study. Six research assistants who were three undergraduates and three postgraduate students, who had had been provided with instructions regarding the administration protocol, administered the

survey forms. The lecturers completed the survey forms anonymously and the purpose of the study, which was research, was explained to them. The participants were assured that their responses were confidential.

Data Analysis

Data collected were analysed using hierarchical multiple regression analysis.

Personality traits, job stress, social support and interactions between job stress and personality traits and social support served as independent variables while three components of teacher burnout served as the dependent variables.

Results

Correction analyses

Table 1 presents the descriptive statistics for the variables under study as well as the bivariate correlations between job stress, teachers' personality, social support and burnout dimensions.

Table 1: Means, standard deviations and correlation matrix of Job stress, personality, social support, demographic factors and burnout dimensions.

| variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|------------|------------|--------------|-------------|----|
| EEX | - | | | | | | | | | | | | | | |
| Dep | .19* | - | | | | | | | | | | | | | |
| Pac | .08 | .12 | - | | | | | | | | | | | | |
| Social support | -.20* | .19* | .13 | - | | | | | | | | | | | |
| Neuroticism | .35* | -.24* | -.23* | .03 | - | | | | | | | | | | |
| Extraversion | -.24* | -.20* | .30* | .14 | .07 | - | | | | | | | | | |
| openness | .14 | -.19* | -.20* | .15 | .10 | .20* | - | | | | | | | | |
| Agreeableness | .12 | .09 | .15 | .02 | .04 | .19* | .11 | - | | | | | | | |
| conscientiousness | .15 | -.30* | .32* | .03 | .08 | .07 | .13 | .18 | - | | | | | | |
| stress | .19* | .25* | .20* | -.23* | -.19* | .18 | .14 | .08 | .12 | - | | | | | |
| Age | .09 | .07 | .07 | .05 | .06 | .10 | .07 | .03 | .04 | .12 | - | | | | |
| Gender | .05 | .06 | .08 | .10 | .43 | .03 | .02 | .09 | .07 | .04 | .01 | - | | | |
| Experience | .10 | .09 | .12 | .08 | .07 | .01 | .04 | .05 | .03 | .02 | .06 | .03 | - | | |
| Rank | .12 | .09 | .06 | .03 | .05 | .06 | .03 | .08 | .02 | .03 | .05 | .07 | .04 | - | |
| Marital status | .05 | .08 | .10 | .07 | .02 | .04 | .02 | .09 | .01 | .04 | .10 | .09 | .05 | .12 | - |
| Mean | 18.40 | 6.35 | 36.85 | 22.65 | 30.34 | 31.46 | 32.60 | 36.61 | 43.4 | 36.70 | - | - | 15.00 | 3.60 | - |
| S.D | 9.56 | 5.70 | 7.26 | 1.60 | 2.40 | 3.42 | 5.85 | 4.23 | 3.56 | 4.50 | - | - | 5.80 | 2.40 | - |
| | | | | | | | | | | | | | | | |

Note: N=340, S.D. = Standard Deviation, a=nominal data, so no mean score (male=0, female=), b= nominal data, so mean score (married=1, single, divorced, widow/widower=0), EEX= Emotional exhaustion, Dep= Depersonalization, Pac= personal accomplishment, * p< 0.05 (2-tailed test.

The bivariate correlations on Table showed that job stress significantly correlated with all the three dimensions of burnout – emotional exhaustion , depersonalization, and personal accomplishment(correlations ranged from $r=.19$ to $.20$, $p< .05$).Social support had significant negative correlations with emotional exhaustion ($r=-.20$, $p<.05$) and depersonalization ($r=-.19$, $p<.05$) except with personal accomplishment.

Of the personality variables, neuroticism was positively correlated with emotional exhaustion ($r=.35$, $p< .05$) and depersonalization($r=.24$, $p<.05$) and negatively correlated with personal accomplishment($r=-.23$, $p< .05$). Extraversion was negatively correlated with emotional exhaustion($r=-.20$, $p<.05$) whereas it was positively correlated with personal accomplishment($r=.30$, $p<.05$).Openness was negatively significantly correlated with depersonalization ($r=-.19$, $p<.05$) and personal accomplishment ($r=-.20$, $p<.05$) but not with emotional exhaustion. Agreeableness had no significant correlation with all the dimensions of burnout. Conscientiousness had negative significant correlation with depersonalization($r=-.30$, $p<.05$) and positive correlation with personal accomplishment($r=.32$, $p<.05$). None of the demographic characteristics (age, gender, experience, rank and marital status) had significant correlations with any of the dimensions of burnout.

Regression analyses

A series of regression analyses were performed to find out the joint and relative/ separate contributions of various factors in predicting burnout dimensions among college education lecturers. Three separate hierarchical multiple regressions were conducted regressing each burnout dimension on lecturers' demographics, personality

characteristics, job stress and social support. Results are shown on Tables 2 to 4 in a manner consistent with the hypotheses.

On the joint contribution of all the independent variables (stress , personality and social support) to the prediction of dimension, of burnout, as hypothesized, results of hierarchical multiple regression analyses on Tables 2 to 4 showed that all the independent variables jointly predicted emotional exhaustion($R^2=.44, F(1,328)=10.32, p<0.05$) (see Table 2);depersonalization ($R^2=.27, F(1,328)=8.97, p<0.05$) (see Table 3) and personal accomplishment ($R^2=.23, F(1,328)= 5.73, p<0.05$) (see Table 4).

Table 2: summary of hierarchical regression analyses for variables predicting emotional exhaustion

| variable | R | R ² | R ² | F | Fchange | DF | Beta | t | p |
|-----------------------------|-----|----------------|----------------|-------|---------|-------|------|--------|-----|
| Step1 Demographics | .16 | .02 | - | 1.30 | 1.20 | 5,335 | | | |
| Age | | | | | | | .09 | 1.20 | .95 |
| Gender | | | | | | | .07 | .08 | .82 |
| Rank | | | | | | | .05 | .07 | .73 |
| Experience | | | | | | | .08 | .05 | .78 |
| Marital status | | | | | | | .09 | .03 | .90 |
| Step 2 Stress | .48 | .23 | .21 | 11.56 | 9.67* | 1,334 | .24 | 14.20* | .03 |
| Step 3 personality | .56 | .31 | .08 | 9.42 | 5.60* | 5,329 | | | |
| Neuroticism | | | | | | | .20 | 7.78* | .05 |
| Extraversion | | | | | | | .25 | 8.65* | .05 |
| Openness | | | | | | | .18 | 4.20* | .05 |
| Agreeableness | | | | | | | .08 | 1.45 | .76 |
| conscientiousness | | | | | | | .23 | 6.73* | .05 |
| Step 4 social support | .67 | .44 | .13 | 10.32 | 8.54* | 1,328 | .22 | 8.90* | .05 |
| Step 5 Interaction terms | .69 | .47 | .03 | 1.60 | 1.20 | 6,322 | | | |
| Stress X Neu | | | | | | | .06 | .09 | .73 |
| Stress x Exit | | | | | | | .09 | 1.30 | .52 |
| Stress x Op | | | | | | | .02 | .07 | .67 |
| Stress x Agr | | | | | | | .01 | .05 | .73 |
| Stress xCon. | | | | | | | .03 | .07 | .65 |
| Stress xSS | | | | | | | .04 | .09 | .55 |

NOTE: N= 340, Neu=Neuroticism, OP= openness, Exit= Extraversion, Agr= Agreeableness, Con = conscientiousness, SS= social support, * P<0.05.

Job Stress

It was hypothesized that job stress will predict all the three dimensions of burnout. As expected, job stress significantly predicted emotional exhaustion (Beta=.24, t=14.20, p<0.03) (see Table 2). Job stress was also a significant predictor of depersonalization (Beta=.21, t=7.60, p<.05) (see Table 3) and personal accomplishment (Beta=.19, t=4.43,p<.05) (see Table 4).

Table 3: Summary of Hierarchical Regression analyses for variables predicting depersonalization

| Variable | R | R ² | R ² change | F | F change | DF | Beta | t | p |
|---------------------------------|-----|----------------|-----------------------|------|----------|-------|------|-------|-----|
| Step 1: Demographics | .12 | .01 | - | 1.10 | .09 | 5,335 | | | |
| Age | | | | | | | .05 | .08 | .70 |
| Gender | | | | | | | .03 | .05 | .53 |
| Rank | | | | | | | .06 | .07 | .80 |
| Experience | | | | | | | .09 | 1.30 | .45 |
| Marital status | | | | | | | .04 | .06 | .50 |
| Step 2 Stress | .35 | .12 | .11 | 8.50 | 6.75* | 1,334 | .21 | 7.60* | .05 |
| Step 3 Personality | .42 | .17 | .05 | 7.85 | 5.34* | 5,329 | | | |
| Neuroticism | | | | | | | .23 | 8.57* | .05 |
| Extraversion | | | | | | | .09 | 1.54 | .54 |
| Openness | | | | | | | .18 | 7.66* | .05 |
| Agreeableness | | | | | | | .08 | 1.20 | .67 |
| Conscientiousness | | | | | | | .25 | 9.63* | .05 |
| Step 4 Social Support | .52 | .27 | .10 | 8.97 | 7.43* | 1,328 | .27 | 9.45* | .05 |
| Step 5 Interaction terms | .56 | .31 | .04 | 1.89 | 1.41 | 6,322 | | | |
| Stress x Neu | | | | | | | .08 | 1.34 | .84 |
| Stress x Ext | | | | | | | .04 | .93 | .87 |
| Stress x Op | | | | | | | .07 | .87 | .88 |
| Stress x Agr | | | | | | | .02 | .67 | .76 |
| Stress x Con | | | | | | | .05 | .58 | .93 |

| | | | | | | | | | |
|---|--|--|--|--|--|--|-----|-----|-----|
| Stress x SS | | | | | | | .06 | .36 | .65 |
| Note: N=340, Neu=Neuroticism, OP=Openness, Ext=Extraversion, Agr=Agreeableness, Con=Conscientiousness SS=Social Support, Social Support, * P<0.05. | | | | | | | | | |

Personality

It was hypothesized that personality characteristics would also predict emotional exhaustion, depersonalization and personal accomplishment dimensions of burnout. Emotional exhaustion was predicted by neuroticism, extraversion, openness and conscientiousness (See Table2).Regarding depersonalization, neuroticism, openness and conscientiousness were the strong predictors of this dimension of burnout. Extraversion and agreeableness did not make any significant contribution to the prediction of depersonalization (see Table 3). Personal accomplishment was predicted by neuroticism, extraversion, and conscientiousness but not by openness and agreeableness (see Table 4).

Table 4: Summary of Hierarchical Regression analysis for variables predicting personal accomplishment

| Variable | R | R ² | R ² change | F | F change | DF | Beta | t | p |
|---------------------------------|-----|----------------|-----------------------|------|----------|-------|------|-------|-----|
| Step 1: Demographics | .10 | .01 | - | 1.30 | 1.13 | 5,335 | | | |
| Age | | | | | | | .03 | .06 | .75 |
| Gender | | | | | | | .07 | 1.10 | .56 |
| Rank | | | | | | | .09 | 1.23 | .43 |
| Experience | | | | | | | .05 | .09 | .86 |
| Marital status | | | | | | | .04 | .05 | .73 |
| Step 2, Stress | .32 | .10 | .09 | 4.32 | 3.56* | 1,334 | .19 | 4.43* | .05 |
| Step 3 Personality | .42 | .17 | .07 | 4.53 | 3.84* | 5,329 | | | |
| Neuroticism | | | | | | | .20 | 7.64* | .05 |
| Extraversion | | | | | | | .18 | 6.23 | .05 |
| Openness | | | | | | | .09 | 1.50 | .42 |
| Agreeableness | | | | | | | .07 | 1.23 | .33 |
| Conscientiousness | | | | | | | .22 | 8.72* | .05 |
| Step 4 Social Support | .48 | .23 | .06 | 5.73 | 4.38* | 1,328 | .19 | 4.20* | .05 |
| Step 5 Interaction terms | .64 | .40 | .17 | 7.89 | 5.23* | 6,322 | | | |

| | | | | | | | | | |
|---|--|--|--|--|--|--|-----|-------|-----|
| Stress x Neu | | | | | | | .06 | .09 | .85 |
| Stress x Ext | | | | | | | .23 | 9.06* | .05 |
| Stress x Op | | | | | | | .09 | 1.10 | .42 |
| Stress x Agr | | | | | | | .07 | 1.00 | .4 |
| Stress x Con | | | | | | | .25 | 11.09 | .04 |
| Stress x SS | | | | | | | .02 | .05 | .68 |
| Note: N=340, Neu=Neuroticism, OP=Openness, Ext=Extraversion, Agr=Agreeableness, Con=Conscientiousness SS=Social Support, Social Support, * P<0.05. | | | | | | | | | |

Social Support

It was hypothesized that social support will predict all dimensions of burnout. As anticipated, social support was a strong predictor of emotional exhaustion (Beta=.22, $t=8.9, p<0.05$) (see Table 2), depersonalization (Beta=.27, $t=9.45, p<0.05$) (see Table 3) and personal accomplishment (Beta=.19, $t=4.20, p<0.05$) (see Table 4).

Interaction of stress with personality and social support

Results of the analyses indicated that, there were no significant interaction effects of stress with personality dimension and social support is predicting emotional exhaustion and depersonalization dimensions of burnout (see Table 2 and 3). However, stress interacted with extraversion (R^2 change=.17, Beta=.23, $t=9.06, p<.05$) and conscientiousness (R^2 change=.17, Beta=.25, $t=11.09, p<.05$) to predict personal accomplishment. Stress did not interact with neuroticism; openness and agreeableness to predict personal accomplishment (see Table 4). Finally, all the demographic characteristics did not predict any dimension of burnout (see Table 2, 3 and 4).

Discussion

The purpose of the present study was to examine the relationship between job stress, personality characteristics, social support and dimensions of burnout in a sample of college of education lecturers. Results from this study showed that stress, personality and

social support were correlated with burnout dimensions, thus providing support for the PE-fit theory and transactional model of burnout in which in order to understand its process. There is need to consider both the environmental and person variables. These findings are in agreement with those of Schaefer et al.(1993), and Kokkinos(2007). Emotional exhaustion and depersonalization were more related to environmental stressors and social support while personal accomplishment was related to personality variable.

As expected, job stress played a central role in predicting dimensions of burnout among the lecturers. This findings is consistent with those of previous researchers who reported similar results (Ganster & Schanbroek, 1991; Hughes, 1987; Kim-Wan,1991;Kokkinos, 2007; Moore, 2001). An explanation for this finding is that there are certain issues in the lecturers' job that cause them more concern, stress and eventually burnout. Examples of issues in the lecturers' job that may serve as sources of stress include workload, time pressure, working conditions, inadequate facilities and students' misbehavior. Stress arises when a lecturer appraises the environment as one that taxes or exceeds his/ her resources and therefore is perceived as threatening. Lecturers who have high expectations and want to achieve may be prone to stress and burnout (Kokkinos, 2007).

The results also showed that, as hypothesized, personality characteristics were associated with burnout dimensions. The results were in line with the findings of previous researchers who reported that emotional exhaustion and depersonalization were predicted by neuroticism and conscientiousness (Kokkinos, 2007). Similarly Kokkinos (2007) found that personal accomplishment was predicted by high scores in conscientiousness and extraversion and low scores in neuroticism. Kim-Wan(1991) reported that Type A personality predict burnout especially personal accomplishment .These results could be

attributed to the fact that lecturers' will high scores in conscientiousness and extraversion or Type A personality more often work harder, put greater efforts and commitment to their jobs and accomplish more in their work even at the cost of their health.

As hypothesized in this study, the results revealed that social support had significant correlations with dimensions of burnout. These results corroborated the findings of previous researchers' who reported that teachers who possessed higher levels of social support were less burned out. (Bonfiglio, 2005; Kim -Wan, 1991; Russell, Atlmaeir & Velzen, 1987). Possible explanation for these findings could be that when lecturers face specific job- related difficulty or stress, social support from their supervisors, friends, families, co-workers and others would help minimize emotional distress and boost their self-esteem both of which, in turn, enhance their abilities in coping effectively with job-related problems they are confronted with.

The results in relation to the buffering effects of personality and social support in the hypotheses indicated that personality and social support were effective in reducing adverse effects of job stress on reduced personal accomplishment but not on emotional exhaustion and depersonalization dimensions of burnout. These results, are in line with the work of Kim-Wan(1991) who reported that Type A personality and social support buffered the relation between job stress and reduced accomplishment of their teacher sample. Possible explanation for these findings could be that, in the case of personality, lecturers who had high scores on extraversion and conscientiousness worked harder and put in more efforts and commitment. In the case of social support, lecturers who had more social support from their supervisors , friends, co-workers members and family members reported less burnout and therefore had more personal achievement.

Implications of the findings

Results reported in this study have implications for career counselling practice and assessment. The findings suggest that dimensions of burnout have different predictors when personality and environmental factors (job stress and social support) are considered simultaneously. The preponderance of environmental factors in the prediction of burnout dimension of emotional exhaustion is heart-warming because it is easier to control or change job-related conditions causing stress than personal characteristics. Therefore, employers should provide more conducive working environments devoid of stress for the lecturers. This will remove part of the impediments to the lecturers' research functions in higher education.

Appropriate intervention strategies that will emphasise improvement of teachers' skill in classroom management should be developed by career counselors and adopted for the professional development of the teachers. These could be adopted during teacher training or after training when they are teaching. This can be a sure way of combating burnout. Since stress could also emanate from work overload and students' disruption of classroom lectures, lecturers should be taught principles of handling group behaviour and time management. This will assist the lecturers in having a more balanced distribution of time for their work.

Also lecturers need to know their personality characteristics so that they will be aware of their own personal dispositions that may reduce or aggravate stress. In this regard, personality assessment should be conducted by career counselors for all lecturers and appropriate coping responses they use in dealing with work-related stress noted. Career counsellors should work with college managements to conduct stress audits that assess

the levels of stress in different parts of the organization, the particular stressor of concern and ways to enhance employee and organizational wellness within the college. In this aspect, career counsellors need to teach the lecturers appropriate coping strategies in order to reduce the use of maladaptive coping strategies. Self efficacy training, cognitive behavioural and rational emotive behavioural therapies and problem –solving techniques are intervention strategies that could be used to reduce burnout among lecturers. Also the lecturers should improve their social networks so that they will have access to appropriate social support when they have job-related problems.

This study is a cross-sectional research and it used self-report measures. These are obvious limitations. Future researchers could embark on longitudinal studies in order to establish causal relationship. In addition to self –report measures, interview techniques and focus group discussions could be used to complement the data collection instruments. Despite these limitations, the present study has contributed to the body of literature on stress and burnout in lecturers.

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Table: Means, standard deviations and correlation matrix of Job stress, personality, social support, demographic factors and burnout dimensions.

| variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-----|-----|-------|------|----|
| EEX | - | | | | | | | | | | | | | | |
| Dep | .19* | - | | | | | | | | | | | | | |
| Pac | .08 | .12 | - | | | | | | | | | | | | |
| Social support | -.20* | .19* | .13 | - | | | | | | | | | | | |
| Neuroticism | .35* | -.24* | -.23* | .03 | - | | | | | | | | | | |
| Extraversion | -.24* | -.20* | .30* | .14 | .07 | - | | | | | | | | | |
| openness | .14 | -.19* | -.20* | .15 | .10 | .20* | - | | | | | | | | |
| Agreeableness | .12 | .09 | .15 | .02 | .04 | .19* | .11 | - | | | | | | | |
| conscientiousness | .15 | -.30* | .32* | .03 | .08 | .07 | .13 | .18 | - | | | | | | |
| stress | .19* | .25* | .20* | -.23* | -.19* | .18 | .14 | .08 | .12 | - | | | | | |
| Age | .09 | .07 | .07 | .05 | .06 | .10 | .07 | .03 | .04 | .12 | - | | | | |
| Gender | .05 | .06 | .08 | .10 | .43 | .03 | .02 | .09 | .07 | .04 | .01 | - | | | |
| Experience | .10 | .09 | .12 | .08 | .07 | .01 | .04 | .05 | .03 | .02 | .06 | .03 | - | | |
| Rank | .12 | .09 | .06 | .03 | .05 | .06 | .03 | .08 | .02 | .03 | .05 | .07 | .04 | - | |
| Marital status | .05 | .08 | .10 | .07 | .02 | .04 | .02 | .09 | .01 | .04 | .10 | .09 | .05 | .12 | - |
| Mean | 18.40 | 6.35 | 36.85 | 22.65 | 30.34 | 31.46 | 32.60 | 36.61 | 43.4 | 36.70 | - | - | 15.00 | 3.60 | - |
| S.D | 9.56 | 5.70 | 7.26 | 1.60 | 2.40 | 3.42 | 5.85 | 4.23 | 3.56 | 4.50 | - | - | 5.80 | 2.40 | - |
| | | | | | | | | | | | | | | | |

Note: N=340, S.D. = Standard Deviation, a=nominal data, so no mean score (male=0, female=), b= nominal data, so mean score (married=1, single, divorced, widow/widower=0), EEX= Emotional exhaustion, Dep= Depersonalization, Pac= personal accomplishment, * p< 0.05 (2-tailed test.

Table 2: summary of hierarchical regression analyses for variables predicting emotional exhaustion

| variable | R | R ² | R ² | F | Fchange | DF | Beta | t | p |
|--------------------------|-----|----------------|----------------|-------|---------|-------|------|--------|-----|
| Step1 Demographics | .16 | .02 | - | 1.30 | 1.20 | 5,335 | | | |
| Age | | | | | | | .09 | 1.20 | .95 |
| Gender | | | | | | | .07 | .08 | .82 |
| Rank | | | | | | | .05 | .07 | .73 |
| Experience | | | | | | | .08 | .05 | .78 |
| Marital status | | | | | | | .09 | .03 | .90 |
| Step 2 Stress | .48 | .23 | .21 | 11.56 | 9.67* | 1,334 | .24 | 14.20* | .03 |
| Step 3 personality | .56 | .31 | .08 | 9.42 | 5.60* | 5,329 | | | |
| Neuroticism | | | | | | | .20 | 7.78* | .05 |
| Extraversion | | | | | | | .25 | 8.65* | .05 |
| Openness | | | | | | | .18 | 4.20* | .05 |
| Agreeableness | | | | | | | .08 | 1.45 | .76 |
| conscientiousness | | | | | | | .23 | 6.73* | .05 |
| Step 4 social support | .67 | .44 | .13 | 10.32 | 8.54* | 1,328 | .22 | 8.90* | .05 |
| Step 5 Interaction terms | .69 | .47 | .03 | 1.60 | 1.20 | 6,322 | | | |
| Stress X Neu | | | | | | | .06 | .09 | .73 |
| Stress x Exit | | | | | | | .09 | 1.30 | .52 |
| Stress x Op | | | | | | | .02 | .07 | .67 |
| Stress x Agr | | | | | | | .01 | .05 | .73 |
| Stress xCon. | | | | | | | .03 | .07 | .65 |
| Stress xSS | | | | | | | .04 | .09 | .55 |

NOTE: N= 340, Neu=Neuroticism, OP= openness, Exit= Extraversion, Agr= Agreeableness, Con = conscientiousness, SS= social support, * P<0.05.

Table 3: Summary of Hierarchical Regression analyses for variables predicting depersonalization

| Variable | R | R ² | R ² | F | F change | DF | Beta | t | p |
|-----------------------------|-----|----------------|----------------|------|----------|-------|------|-------|-----|
| Step 1: Demographics | .12 | .01 | - | 1.10 | .09 | 5,335 | | | |
| Age | | | | | | | .05 | .08 | .70 |
| Gender | | | | | | | .03 | .05 | .53 |
| Rank | | | | | | | .06 | .07 | .80 |
| Experience | | | | | | | .09 | 1.30 | .45 |
| Marital status | | | | | | | .04 | .06 | .50 |
| Step 2 Stress | .35 | .12 | .11 | 8.50 | 6.75* | 1,334 | .21 | 7.60* | .05 |

| | | | | | | | | | |
|---|-----|-----|-----|------|-------|-------|-----|-------|-----|
| Step 3 Personality | .42 | .17 | .05 | 7.85 | 5.34* | 5,329 | | | |
| Neuroticism | | | | | | | .23 | 8.57* | .05 |
| Extraversion | | | | | | | .09 | 1.54 | .54 |
| Openness | | | | | | | .18 | 7.66* | .05 |
| Agreeableness | | | | | | | .08 | 1.20 | .67 |
| Conscientiousness | | | | | | | .25 | 9.63* | .05 |
| Step 4 Social Support | .52 | .27 | .10 | 8.97 | 7.43* | 1,328 | .27 | 9.45* | .05 |
| Step 5 Interaction terms | .56 | .31 | .04 | 1.89 | 1.41 | 6,322 | | | |
| Stress x Neu | | | | | | | .08 | 1.34 | .84 |
| Stress x Ext | | | | | | | .04 | .93 | .87 |
| Stress x Op | | | | | | | .07 | .87 | .88 |
| Stress x Agr | | | | | | | .02 | .67 | .76 |
| Stress x Con | | | | | | | .05 | .58 | .93 |
| Stress x SS | | | | | | | .06 | .36 | .65 |
| Note: N=340, Neu=Neuroticism, OP=Openness, Ext=Extraversion, Agr=Agreeableness, Con=Conscientiousness SS=Social Support, Social Support, * P<0.05. | | | | | | | | | |

Table 4: Summary of Hierarchical Regression analysis for variables predicting personal accomplishment

| Variable | R | R ² | R ² change | F | F change | DF | Beta | t | p |
|---------------------------------|-----|----------------|-----------------------|------|----------|-------|------|-------|-----|
| Step 1: Demographics | .10 | .01 | - | 1.30 | 1.13 | 5,335 | | | |
| Age | | | | | | | .03 | .06 | .75 |
| Gender | | | | | | | .07 | 1.10 | .56 |
| Rank | | | | | | | .09 | 1.23 | .43 |
| Experience | | | | | | | .05 | .09 | .86 |
| Marital status | | | | | | | .04 | .05 | .73 |
| Step 2, Stress | .32 | .10 | .09 | 4.32 | 3.56* | 1,334 | .19 | 4.43* | .05 |
| Step 3 Personality | .42 | .17 | .07 | 4.53 | 3.84* | 5,329 | | | |
| Neuroticism | | | | | | | .20 | 7.64* | .05 |
| Extraversion | | | | | | | .18 | 6.23 | .05 |
| Openness | | | | | | | .09 | 1.50 | .42 |
| Agreeableness | | | | | | | .07 | 1.23 | .33 |
| Conscientiousness | | | | | | | .22 | 8.72* | .05 |
| Step 4 Social Support | .48 | .23 | .06 | 5.73 | 4.38* | 1,328 | .19 | 4.20* | .05 |
| Step 5 Interaction terms | .64 | .40 | .17 | 7.89 | 5.23* | 6,322 | | | |
| Stress x Neu | | | | | | | .06 | .09 | .85 |
| Stress x Ext | | | | | | | .23 | 9.06* | .05 |

| | | | | | | | | | |
|---|--|--|--|--|--|--|-----|-------|-----|
| Stress x Op | | | | | | | .09 | 1.10 | .42 |
| Stress x Agr | | | | | | | .07 | 1.00 | .4 |
| Stress x Con | | | | | | | .25 | 11.09 | .04 |
| Stress x SS | | | | | | | .02 | .05 | .68 |
| Note: N=340, Neu=Neuroticism, OP=Openess, Ext=Extraversion, Agr=Agreeableness, Con=Conscientiousness SS=Social Support, Social Support, * P<0.05. | | | | | | | | | |

A PILOT STUDY OF THE CHALLENGES AND PROSPECTS OF
CONTINUOUS ASSESSMENT IMPLEMENTATION IN NIGERIA

Henry O. Owolabi, Ph. D

Department of Arts and Social Sciences Education,

University of Ilorin, Nigeria

Henryowolabi2000@yahoo.com

+2348033733311

Adams O.U. ONUKA, Ph. D

Institute of Education

University of Ibadan, Nigeria

adamonuka@yahoo.com

+2348033564064

Abstract

This study obtained basic information from teachers and students on the challenges and prospects of implementing continuous assessment in the Nigerian school system. Secondary Schools in Ilorin, the capital city of Kwara State, located in the central region of Nigeria were sampled for use in the study. It employed survey research design executed through the collection of ex post facto data. Two hundred and forty respondents comprising one hundred and twenty teachers and one hundred and twenty students were respectively sampled and used as subjects in the study. Two questionnaires, one for teachers and one for students, were developed and used to collect data which were analysed using mainly percentages. Findings show that the greatest challenges of implementing CA in Nigerian secondary schools include poor level of preparedness for tests on the part of students, poor test administration procedures, poor handling of scores and feedback to students, poor coverage of instructional contents by test contents, large classes, inadequate time for tests and lack of knowledge and skills of the appropriate evaluation techniques. Respondents suggested that time should be given to implementing CA, teachers should be adequately trained in the techniques of evaluation, relevant modern technology for its conduct and recording should be provided for teachers. It was discovered that Nigerians know that CA possesses some prospects if properly implemented. These include reducing examination malpractices, engendering quality study habit in the student, improving educational and learning outcomes attainment

among others. It was thus recommended that teachers should be given relevant training on modern evaluation techniques and schools provided the enabling environment for CA to work.

Introduction

Assessment plays a significant role in the educational development of a person and, of course, a nation. It is a means of quality control, of determining the level of accountability displayed by stakeholders in the industry and also of determining the effectiveness of teaching and learning as well as in finding out student achievement. It is a vital tool for educational evaluation, thus its importance as a quality assurance tool cannot be overemphasized. Assessment is said to be continuous when it is regular, cumulative and comprehensive. The concept of assessment in the Nigerian context became officially operative since 1985 consequent upon the production of a manual for its implementation as a result of the implementation of the Nigerian National Policy on Education which was introduced in 1977 (FRN, 1977; 1981; 1998; and 2004). Continuous Assessment (CA) was thus introduced alongside the 6-3-3-4 system of education in Nigeria.

Continuous Assessment uses a variety of techniques for assessing the student because it considers all the three domains of learning, namely cognitive, affective and psychomotor. According to Onuka and Junaid (2007), CA uses tests, questionnaires, observation techniques and other tools to really determine whether or not comprehensive learning has taken place. The result thereof is normally used to help students improve their learning.

With the launching of the nine-year basic education in 1999, the School Based Assessment (SBA) was also introduced at the lower, middle and upper basic levels of Nigerian education. The practice of CA continues at the secondary school level. The objectives of the Nigerian government in instituting CA include making students' scores

in it a substantial percentage of the final certificate examinations. Up till now, only the examining bodies are able to tell what they do with the CA scores collected from secondary schools. Neither the schools themselves, the rest of the educational subsystem nor society are sure of what happens to those scores.

None of the examining bodies in Nigeria bothers itself about the CA performance of learners in our schools. They seem to be interested in obtaining the scores and merging them with the final one shot test administered by them which they suspect have been doctored. Issues of benchmarking learners through the use of standardized tests for which experts in the universities and the examining bodies are strategically equipped had been sidelined while publishing houses do not direct investment in this venture apparently for fear of loosing out. Benchmarking and quality control, which would have removed the burden of developing every test for use by the school teacher, is an area of our educational development that is yet to be attended to.

Experts have course to suspect the validity and reliability of the scores submitted by schools to the examination bodies as results of CA tests. Psychometric properties of the tests that produced these scores could not be ascertained. The training and ability of some of the teachers who generated them are in doubt as many of them lack professional training. In view of these, it is necessary to investigate the challenges and prospects of CA in order to be able to identify the factors responsible for the poor implementation of this component of the 6-3-3-4 system. It has become necessary to embark on studies taking a perspective on the implementation at the school level with a focus on secondary teachers and students as the most important link in the implementation chain.

Implementation of CA in Nigeria has been fraught with such problems as poor assessment skills of teachers, poor attention of stakeholders to the use of CA as a quality control and assurance tool and care free attitude of both teachers and students. Sufficient funds are not allocated for its implementation and CA scores storage equipment such as computers are not made available for teachers to use (Onuka and Oludipe, 2004; 2006; Onuka, 2007a). As a result, little has been achieved. Nigerian schools have thus been denied the potentialities that CA for improving student learning and reducing examination malpractice in schools where it is often practiced (Roy-Macauley, 1998; Adeoye and Okpala, 2005; Frempong, 2005; Oberloher, 2005; Anikweze, 2005). This study, therefore, was designed to find out what challenges teachers and students in the Nigerian educational system face in the implementation of CA and how they could be mitigated as well as the prospects of using CA to further enhance teaching and learning in Nigeria.

Research Questions

The following questions were, therefore, addressed in this study:

1. What are the major challenges confronting teachers in the implementation of CA?
2. What are the major challenges confronting secondary school students in responding to CA procedures?
3. What should be done to improve CA implementation at the school level?
4. What are the prospects of CA implementation in Nigeria?

Procedure

The study adopted the survey research using the ex post facto design. Teachers and students were purposively sampled from three secondary schools in Ilorin Metropolis. A

total of two hundred and forty respondents comprising one hundred and twenty teachers of different school subjects and one hundred and twenty students from these three schools were sampled.

Two questionnaires were developed and validated for use in the study by the researchers. The first questionnaire focused on the challenges teachers face in the implementation of CA while the second was on challenges students face in coping with CA implementation at the secondary school level. Both instruments also required information on the prospects of CA and what could be done to overcome these challenges in the Nigerian school system from teachers and students respectively. The internal consistency of each of the instruments was determined through the use of Cronbach's Alpha. Coefficients of 0.79 and 0.54 were respectively obtained. These indices somehow indicate the construct validity of the questionnaires. The instruments were administered on the 240 respondents within two weeks. All the administered questionnaire copies were retrieved from the respondent.

The resulting data from this research exercise were analysed by use of percentages.

Results and Discussion

Teachers and students were asked to indicate the challenges they face in implementing and participating in CA. Simple percentages of the frequency of challenges indicated by respondents are presented in the tables below in answer to the research questions. The first research question was on the greatest challenges faced by teachers in implementing CA. Responses by teachers are summarized in Table 1

Table 1: Summary of most critical challenges of teachers in implementing CA

| Description of the challenge | Percentage of the respondents |
|-------------------------------------|--------------------------------------|
| Poor Preparation of students for CA | 29.6 |
| Poor test administration procedures | 23.9 |

| | |
|---------------------------------|-------|
| Marking and recording | 17.2 |
| Large student population | 7.7 |
| Setting questions/item writing | 4.9 |
| Demand on teachers' time | 4.9 |
| Use of methods other than tests | 4.9 |
| Teachers' level of motivation | 4.9 |
| Disruption of work pace | 1.0 |
| Number of assessments | 1.0 |
| Total | 100.0 |

The most critical challenges faced by teachers in implementing CA were poor preparation on the part of students for continuous assessment, poor test administration procedures and coping with marking of students' scripts and record keeping with 29.5%, 23.8% and 17.1% respectively. Other challenges faced by teachers were large classes which translate to large number of scripts to mark and records to be kept, poor test development skills, demand on teachers' time, problems with measurement of non cognitive variables and poor motivational level of teachers. The least critical problems identified by teachers include the fact that CA exerts a disruptive influence on the pace of work as well as the frequency of assessments.

The above findings confirm the fact that implementing in Nigeria is fraught with challenges (Onuka and Obialo, 2004; Onuka and Oludipe, 2004; Onuka, 2007; Yoloje, 2003; Anizekwe, 2005; Wiggins, 1998; Wosanju, 2005; Owolabi and Olasehinde-Williams, 2007). This is in tandem with the fact that the Nigerian governments whether federal or state do not often make enough funds available for implementing laudable educational programmes (Onuka, 2004; 2007b).

The second research question was on the major challenges confronting secondary school students in responding to CA procedures

Table 2 : Summary of most critical challenges of students

| Description of the challenge | Percentage of the respondents |
|---|-------------------------------|
| Insufficient time to write the tests | 35.7 |
| Poor coverage of instructional content by CA tests | 32.2 |
| Poor invigilation/test administration | 17.1 |
| Scoring and feedback to students | 5.7 |
| Fear of failure | 3.8 |
| Insufficient time to prepare for tests | 3.8 |
| Inadequate information to students on test time table | 1.7 |
| Total | 100.0 |

Students have their greatest challenge in the time given to them for writing CA papers and this being closely followed by poor coverage of instructional content by the CA tests reveal that the teachers seem to be in a rush to conduct their tests as required by authorities rather than to use tests to achieve instructional objectives. The problem of poor invigilation and test administration procedures in regular school tests may be at the root of examination malpractices. If this is considered alongside overpopulation in classrooms pointed out by teachers as part of their challenges, then it is apparent that invigilation may not be as effective in such environments. While students eagerly await their test scores, teachers have voluminous scripts to battle with.

These conclusions are in conformity with the views of Wosanju (2005,); Wiggins (1998) and the finding of Onuka and Obialo (2004) that CA implementation can be very time consuming and its administration can be cumbersome and so may be poorly executed.

The third research question is on what should be done to improve CA implementation at the school level? Data was obtained from both students and teachers on what could be done to solve the problems they had identified. The frequency of each of their suggestions and the percentages are summarized in tables 3 and 4 below:

Table 3: Summary of steps suggested by teachers for ensuring successful implementation of CA

| Suggested steps | Percentage of respondents |
|--|----------------------------------|
| Improving invigilation and CA administration | 30.98 |
| Develop/Promote healthy study habit among students | 16.90 |
| Decongest/Reduce students population per class | 15.49 |
| Improve record keeping | 9.86 |
| Re-training of teachers | 7.04 |
| Improve commitment/motivation of teachers | 7.04 |
| Raise the proportion of CA test component | 4.23 |
| Include assessment of non cognitive variables | 4.23 |
| Ensure CA tests represent instructional coverage | 2.82 |
| Give enough time to students | 1.41 |
| Total | 100.00 |

The three major areas considered by teachers to be critical to the successful implementation of CA effective test administration (30.9%), promotion of healthy study habits among students (16.9%). This gives the impression that teachers have little or no control over the administration of CA in schools, just as Onuka and Junaid (2007) found that some schools in Kogi State, Nigeria were not effectively implementing CA.

Decongestion of classrooms with 15.5% of the respondents is another major step suggested by teachers for improving the implementation of CA. The nature of questions to use, timing of the tests and the time table given for administration, when left at the mercy of the system rather than under the control of teachers, could lead to a lot of problems. Yet as Onuka and Junaid suggested, CA implementation should be done co-operatively. The issue of decongesting classrooms is closely tied to test administration. Improving record keeping, re-training of teachers and ensuring commitment of teachers also go together and among them lies the possibility of creating the conditions that could make for successful implementation of CA in schools.

Data from students on the prospects of CA are presented in table 4 below:

Table 4: Summary of steps suggested by students for ensuring successful implementation of CA

| Suggested steps | Percentage of the respondents |
|--|--------------------------------------|
| Giving enough time to write each test | 25.78 |
| CA test to represent instructional coverage | 18.24 |
| Thorough invigilation/test administration | 17.61 |
| Opportunity/Time for students to fully prepare | 13.84 |
| Releasing the CA time table in good time | 11.95 |
| Feedback/students' access to CA test scores | 6.92 |
| Improving the quality of questions/items | 3.77 |
| Conducive classroom environment | 1.89 |
| Total | 100.00 |

To solve the problems students encounter in the CA implementation, 25.8% of the sampled students suggested that sufficient time should be allocated for the writing of each test while the coverage of instruction and CA tests do not seem to agree. This says much about the validity of the CA tests conducted in schools since teachers present tests that only conform to official instructions rather than those that represent their instruction. The students are therefore at a disadvantage. If their preparations had often met with disappointments, the tendency to prepare will in subsequent tests is jeopardized. The lack of thoroughness of invigilation could promote cheating and thus shows that the teachers may have to take the CA tests seriously as a vital component of school learning and as such of high significance in remediating student poor performance (Wiggins, 1998; Onuka and Oludipe, 2004; Wosanju, 2005). The opportunity for preparation begins with the instruction provided by teachers and is complemented by students' efforts and the time at the disposal of students to prepare for CA tests. This is related to the release of time table to students in good time to allow for their preparation. Students' interest in knowing their performances is reflected in their desire for feedback and access to their scores.

Suggestions by teachers on how to integrate CA test scores with performance in the final examinations are presented in table 5 below:

Table 5: Suggestions by teachers on how to integrate CA and final test scores

| Suggested steps | Percentage of the respondents |
|---|-------------------------------|
| Proper compilation of CA test scores by teachers/schools | 50.00 |
| Make examination bodies to add CA test scores to final scores | 32.69 |
| Proper coordination of CA by Ministry of Education or other bodies set up for the purpose | 17.31 |
| Total | 100.00 |

The above table shows suggestions on how teachers believe CA tests taken by the students should be properly compiled and kept for the purpose of integrating these results into the summative assessment by external/public examining bodies in the country. This process could remove the doubts examining bodies have over the scores submitted by schools as true records of their students' CA tests. There is the feeling that the final grades of candidates released by the examining bodies do not reflect the CA scores sent in by schools otherwise the percentage of teachers suggesting that the bodies should be made to integrate CA test scores into final grades. Finally, it was suggested that the body coordinating CA, usually a unit of the ministry of education, should ensure proper coordination so as to make CA scores authentic which can be then integrated in the summative assessment conducted by public examining bodies.

Respondents stated that the successful implementation of CA in Nigeria has the prospects helping to curb examination malpractices, improvement of teaching and learning, promotion of hard work among teachers and students and building up students' character. These results clearly show that properly executed CA possesses the prospects of promoting learning if appropriately carried and its results adequately utilized (Onuka and Oludipe, 2004). The results also corroborates the finding of Onuka and Obialo (2004) that examination malpractices have been cankerworm which must be dealt with and that of Onuka and Junaid (2007) which discovered that consistent administration of CA can reduce examination malpractices as the students become used to examination system and also because the CA system improves the study habit of the student. Therefore, it is pertinent that all machinery for effectively implementing CA in Nigerian schools should

be put in place; since it has been proven that the CA system can improve student performance.

Conclusion

The foregoing presentations and discussion have shown very clearly and unambiguously that there are critical challenges facing the implementation of CA in Nigerian schools, yet these challenges which are not insurmountable do not prevent CA with some prospects from improving the education system. These challenges include: lack of quality enabling environment, non-provision of the relevant equipment, most teachers do not possess the requisite training, heavy teaching workload and large classes among others. The study shows that if these problems are frontally CA implementation has the potentials of improving teaching and learning and thus the entire education system. It can assist in building self-confidence in the student as well as reducing the rate of examination malpractices. It could also assist student to cultivate good study habit.

Recommendations

In view of the findings of this study, it is recommended that:

- The corrective feedback loop should be used to help learners perform optimally rather than wait for them to reach the final year before cumulative scores are processed for ultimate merger with the final tests scores.

- All stakeholders must support the full-blown implementation of CA in the school system by providing the enabling environment for its effective, meaningful and comprehensive implementation.
- Beyond giving of time tables and following them to enable them prepare adequately, there is the aspect of ensuring coverage of instructional content by the teachers.
- The outcome of CA tests should be given as feedback to students, their parents and other stakeholders for education system improvement.
- Appropriate training on evaluation methods should be given to all teachers in the school system in order to engender the full-blown and successful implementation.

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