



**PERSONALITY AS A PREDICTOR OF JOB STRESS AMONG TEACHERS’
COLLEGE LECTURERS IN ZIMBABWE**

Patrick Senderayi

A thesis submitted in fulfillment of the requirements
for the
Degree of Doctor of Philosophy (Psychology)
in the School of Human Sciences, University of KwaZulu-Natal

Under the supervision of

Professor Nhlanhla, J. Mkhize (PhD)

March, 2021

Declaration

This PhD thesis is a presentation of original research work that has not been submitted for another degree, at any university.



Acknowledgements

I extend gratitude to my promoter, Professor Nhlanhla J. Mkhize for his scholarly patience, insight and guidance. I therefore acknowledge and express my gratitude as an African. Gubhela! Gcwabe! Wena kaZihlandlo! Wena kaKhabazela kaMavovo! Mumbo omhlophe okhany' amasi esiswini! Nhlama eyaphelel' etsheni ngokubadaphunela. Ngunezi Bambo abambulazi, Abadl'umuntu bemyenga ngendaba Sibi side esimajembelezana, Sibi side esimaphandla esaphandl' abeNguni bavungama Nina bengwaz' emabhudle Eth' isabhudla yabuye yaphinda yabhudla Malala amahle Nin' enalala nomunwe Navuka nakhwif' ilanga.

I wish to thank my 'collaborators' in the teachers' colleges, who I cannot name here, for their great help in organising participants, at times under very difficult and pressing circumstances.

I would like to truly say *ngiyabonga, ndinotenda* to the Ministry of Higher and Tertiary Education, Science and Technology Development (Zimbabwe) for granting permission for this study to be conducted in teachers' colleges. I also extend gratitude to principals and lecturers at the research sites.

Unkemetsi Sebata needs special mention for the invaluable contributions at various stages of this thesis. *Reaboka*.

I also acknowledge Emmanuel Chamunorwa Burombo, a fellow PhD candidate, for contributing his valuable study time to assist with the statistics.

I am indebted to Alan Bell for proofreading the final document. A very scholarly job was done. Thank you.

Dedication

I dedicate this thesis to unkosikazi wami, Sihle Patience Senderayi, nee Ndlovu, Gatsheni, Boyabenyathi, Ndlovu edl'khaya, Mthombeni, Gegana lobulembu, sofa s'lahlane s'thandwa sam'. Ngeke ngibonge ngom'lomo okweneleyo. I also dedicate this thesis to the memories of two family scholars who passed on before completing their doctoral studies; my brother, Jasper and uncle, Jerinos Samusha Senderayi.

TABLE OF CONTENTS

List of tables	ix
List of figures	x
Abstract	xi
CHAPTER 1. THE PROBLEM AND ITS SETTING	1
1.1 Introduction	1
1.2 Problem statement	12
1.3 Purpose of the study	12
1.4 Research questions	13
1.4.1 Main research question	13
1.4.2 Research sub-questions	13
1.4.2.1 Quantitative phase	13
1.4.2.2 Qualitative phase	13
1.5 Theoretical foundation	14
1.6 Nature of the study	15
1.7 Definitions and terms	15
1.8 Assumptions	17
1.9 Scope and delimitations	18
1.10 Significance of the study	20
1.11 Dissertation outline	20
1.12 Summary and transition	21
CHAPTER 2. REVIEW OF RELATED LITERATURE	23
2.1 Introduction	23
2.2 Literature search strategy	23
2.3 Relationship between massification and job stress	25
2.4 Teacher job stress in context	29
2.5 Stress studies	31
2.5.1 Causes of teacher stress	31
2.5.2 Stress among faculty in diverse cultural groups	32
2.5.3 Occupational stress among university teachers	34
2.5.4 Stress levels, symptoms and common stressors	35
2.5.5 Sources of stress and the perceptions of teachers	37
2.6 Conceptualizing burnout	38
2.6.1 Burnout and personality	40
2.6.2 Burnout: Job demands and job resources	41
2.7 Personality and coping	43
2.7.1 Problem-focused coping	43
2.7.2 Emotion-focused coping	45
2.7.3 Potentially Maladaptive emotion-focused coping	47
2.8 Conclusion	48

CHAPTER 3. THEORETICAL FRAMEWORK	50
3.1 Introduction	50
3.2 Why a theoretical framework?	50
3.3 Five-factor model of personality (FFM)	53
3.3.1 Trait approach: Some evidence for cultural psychology	53
3.3.2 Brief outline of the Five-Factor Model	56
3.4 Cultural Transactional Theory of Stress and Coping	62
3.4.1 Cultural Psychology: Application in Stress and Coping Theory	62
3.4.2 Individualistic versus Collectivistic Cultures	63
3.4.3 Theoretical Underpinnings of the Cultural Transactional Theory of Stress and Coping	64
3.4.4 Cultural Transactional Theory of Stress and Coping and the current study	69
3.5 The Job Demands Resources Model	69
3.6 Conclusion	72
 CHAPTER 4. RESEARCH METHODOLOGY	 74
4.1 Introduction	74
4.2 Mixed methodology	74
4.2.1 Pragmatism and mixed methods research	74
4.2.2 Mixed methods research approach	76
4.2.3 Mixed methods sequential explanatory research design	78
4.2.3.1 Quantitative phase research variables	80
4.2.3.2 In-depth interview	81
4.3 Population	83
4.4 Sampling procedures	83
4.4.1 Sampling: Quantitative (Survey) phase	83
4.4.2 Sampling: Qualitative (In-depth interview) phase	85
4.4.3 Procedures for recruitment, participation, and data collection	87
4.4.3.1 Quantitative phase	87
4.4.3.2 Qualitative phase	90
4.5 Instrumentation and operationalization of constructs	91
4.5.1 Occupational Stress Survey	91
4.5.2 Oldenburg Burnout Inventory	92
4.5.3 Coping Orientations to Problems Experienced (Dispositional Version)	93
4.5.4 Goldberg's Lexical Factor Markers – The Big Five Personality Test	94
4.5.5 Semi-structured interview	95
4.6 Issues of reliability and validity	97
4.6.1 Occupational Stress Survey	99
4.6.2 Oldenburg Burnout Inventory	100
4.6.3 Goldberg's lexical factor markers – The Big Five Personality Test	101
4.6.4 Coping Orientations to Problems Experienced – Dispositional Version	101
4.6.5 Semi-structured interview	102
4.7 Quantitative data analysis procedures	102
4.7.1 Multiple linear regression analysis (MLR)	103
4.7.1.1 Preliminary analysis	103

4.7.1.2 The Multiple Linear Regression Model (MLR)	104
4.7.2 Correlation Analysis (CA)	107
4.7.3 Research site preliminary analysis	109
4.8 Qualitative data analysis procedures	110
4.8.1 Interview data transcription and coding	110
4.8.2 Issues of trustworthiness	113
4.9 Ethical considerations	115
4.9.1 Ethical clearance and negotiating entry	115
4.9.2 Informed consent	116
4.9.3 Confidentiality and anonymity	118
4.9.4 Social value and beneficence	118
4.10 Summary and transition	119
CHAPTER 5. QUANTITATIVE PHASE RESULTS AND FINDINGS	121
5.1 Introduction	121
5.2 Demographics	121
5.3 Relationship between personality and stress	123
5.3.1 Research Question 1a	123
5.3.2 Research question 1b	127
5.4. Relationship between personality and burnout	129
5.4.1 Research question 2a	129
5.4.2 Research question 2b	132
5.5 Relationship between personality and coping	134
5.5.1 Research question 3a	134
5.5.2 Research question 3b	137
5.4 Conclusions	143
CHAPTER 6. QUALITATIVE PHASE RESULTS AND FINDINGS	146
6.1 Introduction	146
6.2 Demographics	146
6.3 Teachers' college lecturers' lived job stress experiences	149
6.3.1 Lecturer job demands	149
6.3.1.1 Marking overload	149
6.3.1.2 Job control	152
6.3.2 Job resources	155
6.3.2.1 Organizational level	155
6.3.2.2 Interpersonal and social relations level	157
6.3.2.3 Organization of work and tasks level	160
6.4 Teachers' college lecturers' lived burnout experiences	163
6.4.1 Lecturer work disengagement	163
6.4.2 Lecturer work exhaustion	168
6.5 Teachers' college lecturers' lived coping experiences	171
6.5.1 Problem-focused coping	171
6.5.2 Emotion-focused coping	174
6.5.3 Potentially maladaptive emotion-focused coping	178

6.6 Conclusion	181
CHAPTER 7. CONCLUSIONS AND IMPLICATIONS	183
7.1 Introduction	183
7.2 Summary of conclusions about research questions	184
7.2.1 Lecturer job stress	184
7.2.2 Lecturer burnout	191
7.2.2.1 Lecturer disengagement	191
7.2.2.2 Lecturer exhaustion	192
7.2.3 Personality and coping	196
7.3 Unique contribution of the study	199
7.4 Theoretical and practical implications of the current study	202
7.5 Limitations and criticisms	204
8. REFERENCES	208
.	228
9. APPENDICES	233
Appendix 1. Policy Circular 3 of 2018	233
Appendix 2. Training of Secondary Science Teachers	234
Appendix 3. Permission Letter from Ministry of Higher and Tertiary Education,	235
Appendix 4. Occupational Stress Survey 2008 (Original version)	236
Appendix 5. Occupational Stress Survey 2008 (Adapted version)	244
Appendix 6. Approval to use Occupational Stress Survey	247
Appendix 8. Approval to use OLB	249
Appendix 9. COPE Dispositional Version	250
Appendix 10. The Big Five Personality Test	252
Appendix 11. Interview for Lecturers	254
Appendix 12. Ethics Approval Certificate	256
Appendix 13. Informed Consent- Participant	257
Appendix 14. Informed Consent to Record Interviews	258
Appendix 15. Quantitative Data Outputs	259

LIST OF TABLES

Table

1.	Enrolment in teachers' colleges by sex	27
2.	Maximum variation sampling based on ratio of quantitative phase participants	86
3.	Questionnaire distribution and return	89
4.	Quantitative phase participant profile	122
5.	Multiple linear regression model for job stress	124
6.	Job stress dimensions correlation analysis	127
7.	Multiple linear regression model for burnout	131
8.	Burnout dimensions correlation analysis	133
9.	Multiple linear regression model for coping	136
10.	Coping dimensions correlation analysis	138
11a.	Lecturer interview sample profile	147
11b.	Lecturer interview sample profile	148

LIST OF FIGURES

Figure		
1.	Literature search process	24
2.	Theoretical lenses	52
3.	Cultural transactional theory of stress and coping	65
4.	Basic outline of the job demands-resources model	70
5.	Mixed method sequential explanatory design procedures	79
6.	Normal P-P plot and histogram of the fitted multiple linear regression standardized residuals	259
7.	Scatter plot of standardized residuals versus standardized predicted values of the fitted multiple linear regression model	260
8.	Cook's distance plot for the fitted multiple linear regression model	261
9.	Partial regression plot of extraversion, agreeableness and openness to experience	262
10.	Partial regression plot of conscientiousness and neuroticism	263
11.	Normal P-P plot and histogram of the fitted multiple linear regression standardized residuals	264
12.	Scatter plot of standardized residuals versus standardized predicted values of the fitted multiple linear regression	264
13.	Cook's distance plot for the fitted multiple linear regression model	265
14.	Partial regression plots of extraversion, conscientiousness, neuroticism and agreeableness	266
15.	Partial regression plots of openness to experience	267
16.	Normal P-P plot and histogram of the fitted multiple linear regression standardized residuals	267
17.	Scatter plot of standardized residuals versus standardized predicted values of the fitted multiple linear regression model	268
18.	Cook's distance plot for the constructed multiple linear regression model	268
19.	Partial regression plot for conscientiousness, openness to experience and neuroticism	269
20.	Partial regression plot of extraversion and agreeableness	270
21.	Ponterotto and Ruckdeschel matrix for estimating adequacy of internal consistency coefficients with research measures	270

PERSONALITY AS A PREDICTOR OF JOB STRESS AMONG TEACHERS' COLLEGE
LECTURERS IN ZIMBABWE

Patrick Senderayi

ABSTRACT

This quantitative-dominant mixed methods sequential explanatory study sought to investigate how personality predicts job stress in a sample of Zimbabwean teachers' college lecturers from an agrarian collectivistic culture. Key concepts were illustrated using the five-factor model of personality, the Cultural Transactional Theory of Stress and Coping, and the Job-Demands-Resources model. 211 lecturers were surveyed using four self-report measures; Occupational Stress Survey, Oldenburg Burnout Inventory; Coping Orientations to Problems Experienced, and the Big Five Personality Test. Thirty (30) participants were purposefully selected using maximal variation sampling for the in-depth interview. Multiple linear regressions identified dominant personality traits that predicted job stress, burnout and coping. Correlation analyses determined the shared associations between personality traits and dominant job stress, burnout, and coping dimensions. Extraversion was a weak predictor of demands and control. Extraversion, neuroticism, and conscientiousness showed a low correlation with exhaustion. Coping was related to conscientiousness, neuroticism, and openness to experience. Lecturers reported an immense workload, which was made more stressful by under-staffing and large classes. They disengaged from their jobs because these were mechanical and routine. Lecturers reported exhaustion caused by the pressure of deadlines, which caused imbalance in work-life. They also used a range of coping strategies to mitigate the negative impact of job stress and burnout. This study adds to the existing literature on the stress of lecturers, and provides some evidence to support the universality of traits. Implications of stress, burnout and coping are highlighted.

Key words: Burnout, Coping, Disengagement, Exhaustion, Personality Traits, Stress.

CHAPTER 1

THE PROBLEM AND ITS SETTING

“If there is to be a specialty called personality, its unique and therefore defining characteristic is traits” (Buss, 1989).

1.1 Introduction

The relationship between personality and variables such as stress, burnout, and coping has occupied personality psychologists for decades. Furthermore, the preponderance of extant literature suggests that personality traits relate to these three variables (Bakker, Van Der Zee, Lewig & Dollard, 2006; Cleare, 2013; Foley, 2013; Johnson, 2013; Fink, 2015; Penney, David & Witt, 2011). In recent times, the focus of personality psychology has been on five broad traits – namely, openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Douglas, Bore, & Munro, 2016). The importance of research on the relationship between stress, burnout and coping in personality psychology has been stressed in the literature. However, it is noteworthy that the bulk of this research has been contextualized to western cultures, which are largely individualistic. While much is known about the relationship between personality and the foregoing constructs, very little research has examined this relationship in collectivistic cultures, more so, with a sample of teachers’ college lecturers.

Extant literature reveals that scholars in organizational and occupational psychology are demonstrating an increased interest in how personality influences

individuals in work settings (Panaccio & Vandenberghe, 2012). For example, Zimmerman (2008) examined the relationship between personality and turnover, while Wickramaaratchi and Perera (2016) studied how personality affected work-family balance. Some scholars have argued for the universality of traits. For example, Piedmont, Bain, McCrae and Costa (2002) demonstrated, with some success, that The Big Five traits shared some universal elements with the Zimbabwean Shona culture.

World-wide, the work environment in which professionals such as lecturers function has transformed rapidly. In Zimbabwe, higher education has been affected by massification in tertiary institutions, such as teachers' colleges. In the light of insufficient teaching resources, coupled with depleted motivation levels of poorly remunerated lecturers, massification causes an added burden to lecturers who have to grapple with large student numbers.

In the current study, the relationship between the research variables is investigated using measures which have been developed within a Western individualistic worldview. The study explains this relationship using a sample of lecturers in a Zimbabwean setting that is largely collectivistic, and has an Afrocentric worldview. The study is thus conducted against a backdrop of ongoing debate, which has led some scholars to argue that personality traits are more applicable to western cultures (Cross & Markus, 1999; Shweder & Sullivan, 1993). However, some scholars (e.g. Piedmont, Bain, McCrae & Costa, 2002) aptly warn that the acceptance of such a narrow standpoint would imply that personality trait models, and related measures, developed in western cultures are inapplicable in collectivistic cultures. In the current debate, Mkhize (2003) proffers a balanced view by pointing out that the emergent challenge is therefore to advance a

psychologically relevant and dynamic interpretation of the African and other worldviews, because in the modern world, people are exposed to multiple worldviews and social realities.

Various measures have been proposed by western researchers. Currently, the five-factor model (FFM) which has given rise to the NEO-Personality Inventory is viewed as the gold standard in western psychology. In this model, traits are commonly referred to as The Big Five factors (Srivastava, 2013). Laher (2008, p.76) points out that “The NEO-Personality Inventory (NEO-PI-R) is amongst the most widely used and researched operationalization of the FFM. Evidence from studies using the NEO-PI-R suggests that the FFM is cross-culturally applicable.” However, the wide use of a measure by a plethora of scholars does not necessarily make it culturally universal, absolute and flawless. The existence of alternative explanations of personality should seize psychologists and scholars. The standpoint taken by some scholars (e.g. Mkhize, 2003), questioning the universality of presuppositions derived from Western psychology is plausible. African psychologists and scholars argue for “Ubuntu” as one other rational alternative explanation of personality. Ubuntu defines personality from an African collectivistic perspective. Laher (2008, p.78) states that,

‘Ubuntu’ is not an absolute collectivist dimension that subsumes the individual and subjects everyone to a communal identity. Rather ‘ubuntu’ incorporates dialogue and promotes the functioning of the individual in the community, giving precedence to the community. Hence the African preference for cooperation and group work (shosholoza) [nimbe in Zimbabwean Shona or ilima in Ndebele] ... This understanding of ‘ubuntu’ collectivism correlates with recent research on individualism and collectivism, which has demonstrated that both concepts have sub-dimensions, and are not merely bipolar constructs and that variation on dimensions of individualism and collectivism can occur across and within cultures.

For example, Church (2000, p.662) acknowledges that “... any cultural differences in the validity and utility of trait constructs will be at most a matter of degree”. This implies that cultural differences cannot be downplayed.

In the light of this, the NEO-Personality Inventory may not comprehensively define the African personality. A compelling argument is that it fails to account for the spiritual dimension. A new epistemology termed “Afrikology” is a plausible alternative in mapping personality. Chitindingu and Mkhize (2016, p.77) argue that,

Afrikology is grounded in African cosmology; it seeks to trace the historical contribution of African knowledge traditions from the Cradle of Humankind to world knowledge in order to counter the fragmentation and seeming incompatibilities amongst different knowledge traditions. With the Cradle of Humankind as its important departure point, Afrikology endorses an inclusive epistemology, and aims to create a synthesis, or wholeness.

African psychologists (e.g. Mkhize, 2004) have thus weighed in and argued for a metaphysical ontology that places a premium on this dimension as critical in shaping the African personality. Be that as it may, it can however be argued that the Big Five Personality Inventory is one, among many, inventories which can be used to map personality. Furthermore, its use in this study can only add, and not subtract to the current debate and extant literature on the universality of personality traits. This study adds to current studies in South Africa (e.g. Govender, 2008; Naidoo, 2016; Rothmann & Coetzer, 2003) which used the Big Five Personality Inventory with samples drawn from different service industries. The inventory has also been used with a sample of Zimbabwean students (McCrae & Terracciano, n.d.).

To the best of my knowledge the Big Five Personality Inventory has not been tested using a Zimbabwean sample of teacher’s college lecturers. In using the NEO-PI-

R, I was cognizant that “When instruments and methods [are] developed and validated in one culture [Western], their psychometric properties may be affected ... due to culture-related artifacts” (McCrae & Terracciano, n.d., p. 5).

Below is a brief conceptualization of the Big Five traits. *Extraversion* refers to a sociable, talkative, fun-loving and affectionate personality (Schultz & Schultz, 2009). *Neuroticism* is a negative feeling, which predisposes an individual to be insecure, nervous, highly strung and worried (Costa, Terracciano, & McCrae, 2001). On the other hand, *agreeableness* defines a good natured, soft hearted, trusting and courteous personality (Schultz & Schultz, 2009). *Openness to experience* defines a personality who tries novel ideas, and has unconventional values, while *conscientiousness*, reflects the extent to which an individual is systematic, persistent and accountable (Schultz & Schultz, 2009).

In carrying out this study, I was also aware that research on personality and stress is not a new field. Nnabuike, Onyeizugbe and Onwuka (2012) cite research focusing on Type A personality which revealed that under the same workload, Type A workers reported higher stress than Type B workers because they were determined, forceful and aggressive, and generally showed intolerance and resentment (Friedman & Rosenman, 1974; Kirmeyer, 1988; Payne et al., 1988; Rosenman, 1978). While these types are immaterial in the current study, how personality predicts stress levels and work behaviour is nonetheless highlighted by these studies. This study aims at adding knowledge about a sample of college lecturers whose personalities have not been mapped before using the five-factor model.

People in the helping professions are particularly prone to stress (Kyriacou, 2001). Some scholars have revealed that a good working environment will also result in workers who are more satisfied (Olivier, 2005). Job-stress is a subjective phenomenon involving an employee's subjective appraisal and response stressors (Nnabuike et al., 2012). This study sought to explain how individual lecturers, with different personality traits, appraised and responded to specific stressors in teachers' colleges.

Worldwide, 'massification' has affected tertiary institutions. Massification depicts a phenomenon characterized by the rapid ballooning of student numbers in institutions of higher learning which became more pronounced at the end of the last century (Hornsby & Osman, 2014). Gilbert (2000) points out that "massification" has had a negative effect on staff in higher education due to the increase in student numbers. In Zimbabwe, teachers colleges were also affected by massification. However, there are socio-economic benefits associated with massification which include, improved health and empowerment (Bloom, Canning & Chan, 2005), and meeting the needs of an increased labour force in a rapidly industrializing world (Maringe & Sing, 2014).

However, these positives may have adverse effects on the staff in higher education. For example, the increase in class size is not only due to more students but the number of lecturers which has not increased commensurately (Maringe & Sing, 2014). Because of this, staff in higher education, particularly lecturers who are the focus of this study, are under stress as never before (Altbach, Reisberg, & Rumbley, 2009). Given this, one cannot eschew the potential that large classes have in exposing lecturers to stressful working environments, particularly in Zimbabwe, which is the focus of this study. Current debate on massification has largely focused on the quality of education delivered

to students, but in this thesis, I problematized it in relation to its negative impact on lecturer stress.

At the inception of this study, I noted that literature indicated that many academic institutions the world over were in a state of flux. Given this, Zimbabwe is not an exception. It is still trying to emerge out of a debilitating socio-economic and political crisis exacerbated by a worldwide economic recession, and its own internal political problems. College lecturers are some of the least paid professionals in Zimbabwe and earn salaries that are below the poverty datum line which stood at United States \$552 per month as at December, 2012 (<http://www.herald.co.zw/index.php#>). Some scholars (e.g. Onu, Madukwe & Agwu, 2005; Sur, Mumcu, Soylemez, Atli, & Idrim, 2004; Tutuncu & Kozak, 2006) argue that an important variable associated with the decision to quit a job is job dissatisfaction, and that professionals, such as lecturers, may quit their jobs for a variety of reasons, which include the need for attractive salaries. The focus of my study will only be on the effects of work-related stress.

There is a dearth of lecturer stress research (Olivier, 2005). This scarcity is more pronounced in sub-Saharan African countries (Nkumbo, 2014). I noted a lack of definitive research on the relationship between personality traits and job stress among Zimbabwean college lecturers in the literature. An extensive search on *Google Scholar* and *jstor* indicated that no such studies have been done among Zimbabwean teachers' college lecturers. I however observed that personality and stress studies appeared to be conducted more in the developed world, notably in Great Britain, the United States, Australia, and Canada (Tytherleigh, Webb, Cooper & Rickettset, 2005). In the Southern African Development Community, South Africa has led, owing partly to its advanced

economy, and the highly developed nature of its higher and tertiary education system, which promotes such research.

There are a few Zimbabwean studies in the current literature. For example, Mavundutse (2004) examined stress experienced by student teachers while at college. This study indicated that examination preparation was highly stressful for completing students. Senderayi (2007) examined sources of stress of lecturers in one teachers' college. This study did not examine the relationship between stress and coping. Mapfumo, Chitsiko and Chireshe (2012) explored stress and coping of students on teaching practice. A recent study (Masuku & Muchemwa, 2015), which examined occupational stress among Zimbabwean lecturers at a Christian university, indicated that most of the lecturers experienced added workloads, meeting strict deadlines, and exposure to work long hours caused by an expansion in the university activities.

These studies thus gave credence to my observation that a gap existed in the literature, particularly in teachers' colleges, and that my study was therefore imperative. This imperative was further given impetus by the fact that none of these studies had used traits in examining lived job stress experiences of lecturers in a Zimbabwean context. The need for such a study is also echoed by Barkhuizen and Rothmann (2008, p. 322) who argue that,

Clearly, higher education institutions have to manage stress and protect their staff from increasing levels of stress in order to preserve staff well-being, organizational, and the intellectual health of a nation. However, to achieve this, a greater understanding of the effects of stress on staff within the higher educational sector is needed.

The foregoing observation points to a strong need for research that illuminates how lecturers experience job stress. In view of this, my study aims at addressing this gap by building on the few existing Zimbabwean stress studies by adding a new dimension of the job-stress environment in teachers' colleges. I specifically examined the relationship between personality traits and the dependent variables (job stress, burnout, and coping).

Literature shows disparate but perhaps apparently converging themes underlying stress in academia (Kinman, 2014; Tytherleigh et al., 2005). For example, Coetzee and Rothmann (2005) explored how work experience and languages mediated stress in a South African higher education institution. On the other hand, a study of lecturers in Nigerian polytechnics (Egu, Ogbonna, Comfort & Clement-Ukandu, 2014) revealed that lecturers were generally stressed by an overload caused by handling very large classes. This study also indicated that a lack of critical job resources was another important variable associated with lecturer stress.

Another study (Jackson & Rothmann, 2006) indicated that South African educators were stressed by the close monitoring of their performance and the fact that they had overstayed in their jobs. They also reported that the constant changes in the organization and the fact that colleagues took credit for what they achieved created a stressful working environment. Coetzee and Rothmann (2005) revealed that educators experienced intense levels of job stress as a result of a perception that the organization they worked for was not committed to them. These studies illuminate and confirm that academics, who in the past enjoyed lighter workloads and other benefits, no longer do so in the present (Barkhuizen & Rothmann, 2008). In view of the foregoing studies, specific stressors for Zimbabwean lecturers may include; marking overload, strenuous teaching

practice visits to schools, report writing, academic board meetings, and preparing students for certification.

In this study, I also examined an added variable generally associated with stress; burnout. Burnout is operationalized along two dimensions; disengagement and exhaustion, as given in the Oldenburg Burnout Inventory (Demerouti & Bakker, 2010). Burnout is important because some research (e.g. Maslach, Schaufeli & Leiter, 2001), shows a convergence among scholars that burned-out employees display extreme levels of exhaustion that invariably cause the development of a negative attitude toward work (Demerouti, Mostert & Bakker, 2010). It was therefore my conviction that lecturers who have burnout may perform their duties below expectations, hence short-change students out of appropriate knowledge, coaching and tutoring.

Stress affects all levels of society. Teachers at various levels in the education sector are generally exposed to high levels of stress (Bowen, 2016; Court & Kinman, 2008; Kinman, & Wray, 2014), deriving from a variety of sources (Van Zyl & Buitendach, 2004), which may lead to burnout (Salami, 2009). Lecturers in colleges are a special group of teachers who cannot escape the detrimental effects of stress. Zimbabwean teachers' college lecturers are likely to experience high stress levels resulting from working with large numbers of students, given the government's continued mass education policy. Teachers' college lecturers are therefore susceptible to emotionally draining and discouraging experiences. The lecturers' experiences are likely to negatively affect the delivery of quality education in that the lecturer's well-being and student learning may be compromised (Dorman, 2003). I therefore premised this study on the claim that personality and stress is a thinly studied area in African academia, more so

in Zimbabwe. The veracity of this claim finds support in some studies on the subcontinent (Mkumbo, 2014; Fako, 2010) which have shown that there is a dearth of stress research in higher education, particularly in teachers' colleges.

Methodologically, I opted for a sequential explanatory mixed-methods approach to research. This enabled this study to avoid adopting a constricted purist approach, which holds that "... qualitative and quantitative approaches derive from different, mutually exclusive epistemologic and ontologic assumptions about the nature of research and society" (Collins, 1964 in Rossman & Wilson 1985, p.629). Therefore, my intent in answering the research questions, using this approach, was that I would look into the stress phenomena under study with added depth and breadth. Thus, my study began with a quantitative (survey) phase. The rationale for beginning by collecting quantitative data was that after analysing these data, I would clearly segregate the personality traits which had an impact on the three selected variables; stress, burnout and coping. I would use the quantitative findings to shape the second qualitative phase of the study. I therefore used the interview technique to enable the participants to verbalize their subjective lived experiences of the stress environments they experienced in the course of their duties in the colleges. Mixed method research offered a refreshingly different dimension to the study of stress and personality, where the dominant designs in the literature have been quantitative.

1.2 Problem Statement

Research indicates that educators are experiencing high levels of occupational stress (Bowen, 2016; Court & Kinman, 2008; Masuku & Muchemwa, 2015). Given this, organizations such as teachers' colleges have an impelling need to both understand and manage work-related stress effectively to maximize the quality of the training of student teachers. Therefore, the specific problem under investigation was to determine how personality predicts lecturers' job stress. The study also sought to explore how the lecturers' lived subjective experiences help to explain the stress environments in teachers' colleges in view of the high student numbers and workload.

1.3 Purpose of the Study

This study sought to attain two goals: (a) To determine the relationship between personality traits and three variables; job stress, burnout, and coping among teachers' college lecturers in Zimbabwe, and (b) To explore how these personality traits explain the teachers' college lecturers verbalized lived job stress, burnout and coping experiences. At the conception of this study, no other studies had examined the relationship between personality and the three variables using a teachers' college lecturer sample.

1.4 Research Questions

1.4.1 Main research question

To what extent does personality predict job-stress, burnout and coping experiences of teachers' college lecturers in Zimbabwe?

1.4.2 Research sub-questions

I proposed four research sub-questions. Theoretical issues pertaining to these questions are explored throughout the literature review.

1.4.2.1 Quantitative phase

- a) What is the relationship between personality as measured by the NEO-PI-R and job stress as measured by the OSS among teachers' college lecturers in Zimbabwe?*
- b) What is the relationship between personality as measured by the NEO-PI-R and burnout as measured by the OLBI among teachers' college lecturers in Zimbabwe?*
- c) What is the relationship between personality as measured by the NEO-PI-R and coping as measured by the COPE-DV among teachers' college lecturers in Zimbabwe?*

1.4.2.2 Qualitative phase

- d) How do teachers' college lecturers explain their subjective lived experiences of job stress, job burnout, and the coping strategies they use?*

1.5 Theoretical foundation

To illuminate the complexity of the research variables clearly, it was imperative that I opt for the use of a theoretical toolkit. Using the cameraman metaphor, I coined this as a tripod approach which made use of three interrelated lenses.

The overarching theory was based on the FFM. The FFM is viewed as a contemporary version of the trait theories of personality (McCrae & Costa, 2008), which categorizes personality into five broad dimensions that model the spectrum of variations in individual differences (Goldberg, 1990). These factors are empirically derived because they represent personality and individual differences at their widest level of conceptualization (Gosling, Renfrew & Swann, 2003). The FFM was further supported by the cultural transactional theory of stress and coping, which emphasizes that individual differences are culture-specific, with regard to the manner with which different individuals will appraise and respond to similar stressful events (Wahl, Sukanlaya & Tian, 2010). The third leg of the tripod was the job demands-resources model (Bakker & Demerouti, 2007), which explains the interaction between (a) job demands and job resources, and (b) burnout and work engagement. Job demands are characterized by aspects of the job which are energy-sapping, whereas job resources characterize motivational aspects of the job. Burnout is reflected as exhaustion and disengagement, while work engagement describes the opposite.

1.6 Nature of the Study

I used a mixed methods sequential explanatory approach to research as appropriate to answer the research questions. I adopted a quantitative-dominant-sequential design (QUAN → qual). Data collection was done in two phases. The first phase involved collecting questionnaire data from participants. Numeric data were analysed using multiple linear regression (MLR) to determine the relationship between personality and the dependent variables. The shared relationship between predictor variables identified through MLR and job stress, burnout, and coping dimensions was then established using correlation analysis (CA). The quantitative data helped in exploring the usefulness of the five-factor model in predicting stress, burnout and coping strategies used by teachers' college lecturers. Qualitative in-depth interview data were collected from a smaller sample of lecturers in the second phase. The data were thematically analysed after being coded so that thick rich descriptions of the lecturers' verbalized lived experiences could be extracted.

Data integration was then conducted to thread the quantitative and qualitative data to draw conclusions about the emerging research findings.

1.7 Definitions and terms

This section introduces and defines key terms used in the study. While I give operational definitions in this section, the meaning of these terms unfolds throughout the study.

Burnout is a mental condition which emerges when personnel are exposed to demanding work experiences characterized by a mismatch between job demands and resources (Bakker & Demerouti, 2007; Maslach, Schaufeli & Leiter, 2001). *Lecturer burnout* is the display of exhaustion due to the job demands of working in a teacher's college characterized by a lack enthusiasm for one's job.

Coping is a person's conscious attempt to deal with or avoid a perceived stressor (Carver & Connor-Smith, 2010). In this thesis, coping refers to a lecturer's conscious efforts to ameliorate the negative effects of job-specific stressors.

Disengagement is "... distancing oneself from one's work in general, work object and work content. [It concerns] the relationship between employees and their jobs, particularly with respect to identification with work and willingness to continue in the same occupation" (Demerouti & Bakker 2010, pp.210-211).

Exhaustion results from prolonged exposure to job stress (Demerouti & Bakker, 2007). Exhaustion is a phenomenon resulting from increased exposure to unhealthy levels of job-specific stress in a teachers' college.

Personality refers to an individual's unique discernible pattern of behaviour shown through actions, thoughts, and feelings (Carver & Connor-Smith, 2010).

Stress refers to a condition in which an individual meets situations, either physical or emotional, which are perceived as demanding or strenuous or unmanageable (Carver & Connor-Smith, 2010). Lecturer stress refers to job-specific dimensions that lecturers see as exerting strain on them. This strain is healthy or unhealthy depending on its level.

A *lecturer* is an academic who teaches at a university or college of higher education. In this study, a teachers' college lecturer is a teacher who trains student teachers in a teachers' college.

1.8 Assumptions

Based on my personal experience and background as a lecturer, I made three assumptions regarding this particular study. Because people operate using cognitive information, I assumed that lecturers would vary in personality and job behaviour, and would therefore respond differently to the same stress environment. The assumption is premised on the principle of individual differences (Schultz & Schultz, 2009), and the fact that non-cognitive measures of individual differences, such as personality, also predict how individuals appraise and respond to stressful environments. According to Kelly's Personal Construct Theory, individual differences imply that, on account of individual subjective frames of reference, individuals are unlikely to perceive reality in the same manner, and will thus construct personally derived ideas of that reality (Schultz & Schultz, 2009).

Second, I assumed that sampled lecturer participants would give information with minimum or no bias. This assumption was made because the participants were a

generally well-educated group and would understand the value of giving honest responses in an academic study of this nature. Furthermore, their involvement in the study, would lead to increased knowledge about the stress factors in their college environments which would lower distress associated with those factors. In addition, the anonymity and confidentiality that I guaranteed in written form, together with frequent reminders for completing the survey measures would assist lecturers to use their spare time to concentrate fully to respond to the items therein, fairly and accurately and increase the response rate.

Third, I assumed that lecturers could be exposed to negative pathologically deleterious stress and burnout effects owing to the nature of their work.

1.9 Scope and Delimitations

In this study, I explored lecturers' personal lived experiences of job-specific stress, burnout, and the coping strategies which they used to deal with the stress environments in their colleges. I did not examine stress factors which are external to the job environment of the lecturers. Furthermore, my study included only those lecturers who had been at the colleges for at least two years and were not senior administrators, such as principals and their deputies. The rationale for selecting these lecturers was that they would have been exposed to possibly stressful job environments long enough to be information-rich participants. The exclusion of principals and their deputies was based on the premise that they were exposed to different stressors than lecturers, as they do not have any direct teaching duties, but mainly focus on the administrative responsibilities of running colleges.

Geographically, the study only included participants from three government teachers' colleges which for ethical reasons are named College A, College B and College C. Interest in these colleges derived from the fact that they presented a unique ecological environment because they all offered training for post 'O' Level primary school teachers following the Zimbabwe Integrated National Teacher Education Course (ZINTEC) 2-5-2 model. The ZINTEC programme, which was a distance education teacher education model, was at inception funded by the United Nations Children's Educational Fund. It was a response to the realisation that conventional colleges were clearly unable to meet the demand for teachers in post-independent Zimbabwe (Kangai & Bukaliya, 2011).

In this model, which at the commencement of my study had been adopted by all colleges training primary school teachers in Zimbabwe, lecturers operated in an environment where student teachers are at college for an initial two terms before doing a five-term teaching practice stint that is concluded by a final two term period at college. Thus, the open distance education approach in this model placed a huge demand on lecturers to deal with several intakes of students both on campus and in the field. Furthermore, in light of the government's drive to increase the output of trained Early Childhood Development (ECD) teachers in the country, these colleges were directed to enrol at least two hundred (200) ECD student teachers in addition to their normal enrolments for the Diploma in Education (Primary) classes. The increased enrolments were not always matched by adequate staff levels, as there is currently a freeze on posts in service ministries.

While the three colleges are government institutions, they have diverse historical backgrounds which make them individually unique, in that each college has its own organizational culture, which influences how lecturers appraise and respond to stress.

1.10 Significance of the Study

This study intends to bring a depth of understanding for various sub-sectors in the Zimbabwean Higher Education sector of the lived job stress experiences of lecturers in teachers' colleges. An understanding of the causes and sources of stress, and how stress may be ameliorated by various stakeholders such as directors, principals and the local leadership at college level, will enable more effective planning for the enrolment of the large classes that are a reality of the massification of the higher education sector globally. Furthermore, the study will enable managers at various levels of the higher education sector to understand that individual differences, which manifest in lecturer personalities, are best understood and used as a vehicle to promote a reduced occupational stress environment in the teachers' colleges. This will lead to a better quality of education, and ultimately, the creation of a better society. Methodologically, this study will add to mixed methods research by detailing a research design which is unique to the variables and sample under investigation.

1.11 Dissertation outline

This dissertation includes seven chapters. The current chapter details the background leading to this study.

In Chapter 2, I present and discuss various research findings from previous studies to show how they link with this current study. This chapter is organised into four main themes; the relationship between massification and job stress, teacher stress, teacher burnout, and personality and coping.

Three theoretical frameworks underpinning the study are presented and examined in Chapter 3.

Chapter 4 discusses the research method that details the following key aspects: the research design and its rationale, methodology selected, and ethical procedures followed in conducting the research.

In Chapter 5, quantitative results, which are followed up by qualitative results in Chapter 6 are presented, and analysed.

Conclusions drawn from the finding of the study and implications thereto are presented in Chapter 7, which ends with recommendations for further research.

1.12 Summary and Transition

Chapter 1 has shown that the modern workplace can result in job stress and that occupational stress is a significant problem in higher education institutions the world over. The chapter also shows a convergence among scholars, that burned-out employees display extreme levels of exhaustion, which invariably causes the development of a negative attitude toward work. The specific problem under investigation expounded is how personality predicts teachers' college lecturers' experiences and appraisal of job-specific stressors, and what determines the choice of coping strategies they use in

ameliorating the negative effects of stress. A mixed method approach to research is justified.

The next section, Chapter 2, reviews related literature.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Introduction

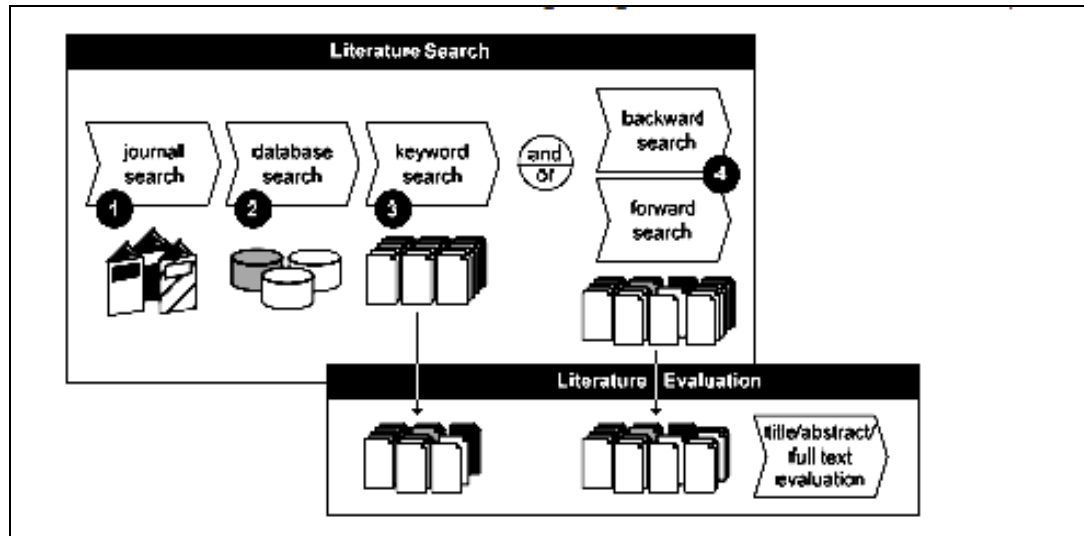
No study operates in a vacuum (McMillan & Schumacher, 2006). In the light of this, I anchored this study on themes and concepts which helped in unlocking the relationship between research variables. The literature review attempts to critically engage and illuminate the research questions asked in Chapter 1. It also links the variables to the theoretical framework presented in Chapter 3, and shows how these relate to the entire study.

2.2 Literature Search Strategy

It is an important norm for doctoral students to discuss, and justify the reasoning for the selection of literature in a formal research document, such as this one (Boote & Beile, 2005). A literature search involving the identification, evaluation, and selection of sources applicable to the chosen study was imperative. Essentially, it is a process of searching, interrogating and screening literature (Webster & Watson, 2002, cited in vom Brocke et al., 2009). I carried out the search for relevant literature in four intertwined stages summarized in a framework proposed by vom Brocke et al. (2009). The framework is shown in figure 1.

Figure 1

Literature search process



Note. From “Reconstructing the Giant: On the Importance of Rigour in Documenting the Literature Search Process,” by J. vom Brocke. et al.. 2009, Paper presented at the 17th European Conference on Information Systems (ECIS 2009), p. 2214,. Copyright 2009 by the authors. Permission not sought.

Using the foregoing framework, I conducted an electronic literature search using the following research databases: Google Scholar, Jstor, and DOJA. The purpose of the search was to identify relevant studies up to the year 2017. The main search terms were: five-factor model OR Big Five personality OR coping OR stress OR burnout OR transactional model of stress and coping OR Oldenburg Burnout Inventory, OR exhaustion OR disengagement AND job demands OR job resources AND higher education AND lecturer OR teacher. A name search of scholars whom I deemed as leading writers in their fields was included as a secondary search strategy. Names of key scholars of interest included: Lazarus and Folkman, Barkhuizen, Rothmann, Carver, Connor-Smith, Demerouti, Bakker, Coetzer, John, Pervin, Buitendach, and Kinman.

This literature search strategy assisted me to refine my search as I used the references in identified sources to further explore related sources systematically (Cruz, da Silva & Capretz, 2015). This stage involved looking at specific titles, abstracts, and full texts to evaluate their significance for this study. Because of the breadth of the study, no publication date limits were set.

2.3 Relationship between massification and job stress

Research reveals that compared to other professions, academics are exposed to higher levels of job stress (Steyn & Kamper, 2006). The research further shows that in higher education, worldwide, these high levels of job stress emanate from an overload of demands (Mxenge, Dywill & Basaza, 2014), a sharp rise in student numbers (Kinman, 2014), work overload (Gilbert, 2000), and demands placed on lecturers as a result of massification of students.

Massification is a worldwide phenomenon that has also affected Zimbabwe's higher education sector, particularly teachers' colleges. Due to the Zimbabwe government's policy of mass education, enunciated in 1980, the number of schools has increased resulting in huge pupil enrolments. Zimbabwean teachers' colleges have seen the re-emergence of large student class sizes following the stabilization of the economy that had progressively deteriorated during the hyperinflation era, from between 2007 to 2009. The net effect of a stabilizing economy has seen an increase in the demand for teacher training in colleges. There has been an expansion of teacher training programmes to cater for the huge demand for teachers.

On the other hand, the government introduced major curriculum changes. The Ministry of Primary and Secondary Education reviewed the national curriculum in 2014 and crafted the Zimbabwe Education Blueprint (2015-2022) (Chitate, 2016). This new primary school curriculum required teachers' training colleges to review their own curricula in an attempt to create synchronicity with the primary school sector, which would enable them to remain appropriate in the production of quality and relevant teachers for the school system. The curriculum change which was timed to coincide with the government's thrust towards industrializing the economy through a vigorous Science, Technology, Engineering and Mathematics (STEM) national initiative started in 2016 (Dekeza & Kufakunesu, 2017), further pressurized primary school teachers' colleges to introduce natural sciences in their curricula.

Government also directed all primary teachers' colleges to train at least 200 Diploma in Education Early Childhood Development students per intake. This was designed to meet the demand caused by the introduction of new ECD classes. Consequently, the directive entailed the training of more teachers for the expanded school system (Dozva & Dyanda, 2012). This ECD programme was an addition to the usual Diploma in Education (Primary) enrolments done once or twice every year depending on the individual teachers' colleges. These changes placed a burden on the lecturers resulting from increased workloads, especially marking and student teacher supervision on Teaching Practice. Table 1 shows the enrolment pattern in all Zimbabwean Teachers' colleges starting from the year 2005.

Table 1

Enrolment in Teacher Colleges by Sex, 2005 – 2014

	Year								
Sex	2005	2006	2007	2008	2009	2010	2011	2012	2014
Male	8 298	8 159	7 514	5 893	3 193	3 603	4 142	5 624	6539
Female	10 552	10 138	10 151	9 700	7 624	8 154	8 683	13 185	14699
Total	18 850	18 297	17 665	15 593	10 817	11 757	12 825	18 809	21238

Copyright 2015 by ZimStat- Education Statistics Report. Permission not sought.

Table 1 reveals that from 2005 the enrolment pattern in teachers' colleges was relatively high, but on the decline, and hit a low in 2009. This was due to the economic meltdown experienced owing to a hyperinflationary economic environment. During this period, teaching lost its appeal to the young, due to extremely low salaries. However, after 2010, enrolment rose steadily and peaked in 2014.

More recently, and following the ushering in of a new government in Harare in December 2017, there has been a policy shift resulting in the changing of the model for primary school teacher training to a 3-3-3 model from the 2-5-2 model. In the new model, students will do a full year at college, another year on teaching practice, and one year at college (See appendix 1 – Policy Circular 3 of 2018). This implies that primary teachers' colleges will be running two different programmes concurrently. Furthermore, as part of the new government's quick-win initiative, some primary teachers colleges were given an additional mandate to train secondary school science teachers with effect from May 2018. This directive (See appendix 2 – Training of Secondary Science Teachers) means that the affected colleges are running three different programmes with more students, albeit with the same number of lecturers. In the short-term, these colleges will use the same lecturers

for these programmes, while the bureaucracy of recruiting specialist lecturers takes its toll on the already overburdened lecturers on the ground.

Given the foregoing rise in enrolment in Zimbabwe's teachers' colleges, the impact this has on the lecturer population is real. While interest in academic stress has grown over the last fifty years, Barkhuizen and Rothmann (2008) indicate that this concern has seen increased articulation dating back to the early 1970s. Despite numerous stress studies in the literature, I noted that much of the research had however not focused on higher education, particularly in Africa. Nkumbo (2014, p.1) correctly observes that "Although a high level of stress has been observed in teachers generally, the higher education sector is a relatively new focus of concern [with] strong evidence to believe that its workforce could represent a particularly vulnerable occupational group." Van Rooyen (2012) adds further credence to this growing concern by highlighting that the modern workplace is a dynamic environment, and poses difficulties for the workers that can result in job stress. It is therefore evident teacher education has not escaped the challenges that have characterized the global demand for higher education. These include; inadequate government funding, inability of institutions to recruit staff resulting in high staff/student ratios, increased administrative responsibilities for lecturers, poorly resourced libraries, and physical infrastructure which has not matched the high student enrolment (Teferra & Altbach, 2004; Altbach, Reisberg, & Rumbley, 2009; Mohamedbhai, 2014).

Lecturer job stress has also been associated with negative outcomes, which inter alia include, underperformance, early retirement, employee turnover and substance abuse. Therefore, the compelling need for higher education institutions to grapple with lecturer

job stress, burnout, and coping, cannot be ignored. An important variable linked to stress, burnout and coping is personality. There is an apparent dearth of studies which specifically focus on personality and how it influences Zimbabwean teachers' college lecturers' working in a 'massified' environment. This justifies the need of a study of this nature and magnitude.

2.4 Teacher job stress in context

Numerous studies have examined various facets of educators' stress, including its prevalence (Adams, 1999; Brouwers & Tomic, 2000; Ngidi & Sibaya, 2002), its effects (Conley & Wooseley, 2000), and coping strategies (Engelbrecht & Eloff, 2001; Jacobsson, Pousette & Thylefors, 2001). Given that the literature search shows that personality and job stress among teachers' college lecturers in Zimbabwe is an area that has not been widely studied, examining job-specific stressors is justifiable. Viljoen and Rothman (2009) cite two critical concerns that have a bearing on this particular study. First, unmanaged job stress is costly to organizations because there is lost productivity. Second, stressed workers result in increased health-care costs. Stressed lecturers may not perform at their best and resort to taking time off to seek medical attention, or simply ignore getting to lectures leaving students stranded. As a Head of Division in one of the teachers' colleges under study, I noted that some lecturers frequently took time off from work on the grounds that they were unwell or to attend funerals. The second concern raised is humanitarian in that it is not desirable to overstress individuals. Given the foregoing concerns, job stress is clearly a major problem for individuals and organizations such as teachers' colleges.

Therefore, organizations must address issues related to job stress. With regard to higher education, comprehending variables that cause stress in teachers' colleges becomes an issue for academic attention and research.

There are various approaches to understanding stress. Dunham (1992) identifies three approaches; (a) the engineering or mechanical, (b) symptomatic, and (c) interactionist perspectives. The engineering perspective finds its roots in Hooke's Law of Elasticity, which states that stress has an elastic or acceptable limit. This implies that when a strain which was placed upon a material is removed, balance is restored. However, if the elastic limit is breached, damage will result. This approach was inappropriate because my study intended to illuminate the relationship between the variables and not only the harm caused by job stress. On the other hand, the symptomatic perspective explains that individuals react to excessive stress biologically by exhibiting observable symptoms such as headaches, muscular tensions, and anxiety. This approach was partly relevant because some lecturers would possibly verbalize symptoms which indicated experiences of unhealthy job stress. The interactionist approach was more appropriate. It defines stress as the interaction between pressures and reactions that require the use of coping resources and would therefore help in answering the qualitative research question more fully.

In this study, job stress is confined to the work environment and is that which emanates from an excessive work burden and role conflict (Rothmann & Cooper, 2008), control, relationships, change and support (United Kingdom's Health and Safety Executive, 2006). Job stress is thus an individual's inability to muster adequate resources to cope with work stressors (Blaud, Kenyon & Lekhi, 2007). I therefore conceptualized

lecturer job-stress as the individual response of lecturers to excessive work-related demands culminating in unpleasant and negative emotions that include frustration, anger and anxiety (Schulze & Steyn, 2007).

The next section of the review examines selected stress studies.

2.5 Stress Studies

I selected five insightful studies adding much value to the study for review. The studies covered both Western and African settings.

2.5.1 Causes of teacher stress

Using ninety-five United Kingdom teachers, Jepson and Forrest (2006) focused on individual factors which caused teacher stress. To identify information-rich participants, the researchers used the snowball sampling technique. Data generated through a self-report stress scale were analysed using multiple regression to determine how Type A personality, and identified demographics, significantly predicted perceived stress levels.

Of significance to the current study, the Jepson and Forrest (2006) study revealed that Type A personality showed a significant positive relationship with stress. This implies that individuals with higher Type A scores are likely to report higher perceived stress. Another important finding which emerged from this study was that occupational commitment showed a strong negative relationship with perceived stress. The conclusion drawn from this finding is that teachers who demonstrate higher occupational

commitment will report lower levels of perceived stress. Furthermore, this study underscores a need to examine personality and stress holistically.

Two important aspects can be gleaned from this study. First, Jepson and Forrest (2006) indicate that other researchers can contribute to stress studies by using a transactional model to determine the relationship between personality and environmental factors together with intrinsic job factors. Second, they suggest that further studies should explore a wider range of factors measuring environmental and intrinsic job features. The current study builds on this gap by examining the five-factor model of personality which offers a broader conceptualization of personality than the Bortner (1969) scale used in the Jepson and Forrest (2006) study. The Bortner scale limits personality to Type A and Type B. To add breadth to the current study, I used the cultural transactional theory of stress and coping to look at stress as a transaction between individual lecturers and the job demands and/or resources within a teachers' college environment. The lens highlights the importance of culture, given that the measures used in the current study derive from Western individualistic societies.

2.5.2 Stress among faculty in diverse cultural groups

An online survey with University and College Union (UCU) members in the United Kingdom (Court & Kinman, 2008) involved 61 000 members of diverse cultural groups. 14 270 questionnaires were returned, giving a 23.4% response rate. 9 740 (68.3%) of the participants were specifically from higher education. The study revealed that UCU members reported *job demands* from different groups at work as a significant stress factor. The members often worked very intensely, and because of work overload,

they neglected some of their tasks, did not have adequate breaks to rest, and worked long hours. Furthermore, they had to work with speed due to unrealistic deadlines. In terms of *control*, the members reported that they exercised autonomy in deciding the nature and pace of their work, and when to take breaks.

However, the UCU members said they received adequate supportive feedback from line managers, who not only encouraged them, but were open to discuss work-related problems. They also reported that they received adequate *peer support* from colleagues, who not only showed them respect, but also actively listened to their work-related problems, in addition to assisting them in some aspects of their work. It was, however, interesting to note that there was no consensus among members on the nature of work relationships and the extent of harassment in the workplace. More importantly, given that the sample was from an individualistic culture, the manner with which the collectivistic lecturer sample in the current study develops and deals with relationships in the work environment will be of interest. Generally, people from collectivistic cultures in the main defer to the collective interest, rather than on the self, as people from individualistic cultures do.

Unlike in the Zimbabwean study by Masuku and Muchemwa (2015) (see Section 2.5.4) UCU members reported a fit between their *roles* and organizational goals and objectives which enabled them to get their jobs done in line with their duties and responsibilities. Regarding change, there were apparently inconclusive findings. There was no consensus whether members were given adequate opportunities to interact and consult managers about change at work.

An apparent conclusion from the findings of the UCU study was that the members experienced moderate to unacceptable job stress levels caused by limited time to conduct research, disproportionate workloads and inadequate funding for research. In the light of these findings, Court and Kinman (2008) confirmed that stress remained a major concern in higher education. While disproportionate workloads may also affect Zimbabwean teachers' college lecturers, research funding is not yet a problem as the "research culture" is still at a formative stage in such teachers' colleges, most of whom have no budgets for research.

The Court and Kinman (2008) study was very extensive and covered a broad spectrum of participants, who included teaching and non-teaching staff. The current study was limited to lecturers in teachers' colleges, but it used a similar measure with the UCU survey. The UCU survey however had a few open-ended questions which limited the extent to which the researchers could probe the participants further. The current study employed an in-depth interview to probe the lecturers to verbalize their experiences in greater detail. Court and Kinman's (2008) study used descriptive statistics, but the current study broadened the analysis by employing both MLR and CA to determine the relationship between the variables.

2.5.3 Occupational stress among university teachers

In a survey which assessed mental health, Kataoka, Ozawa, Tomotake, Tanioka and King (2014) sampled 924 university teachers in Japan. Four measures were used which included a brief Japanese version of the COPE. Results from the General Health Questionnaire (GHQ)-28 revealed that the Japanese sample comprised of unhealthy

university teachers with some mental health problems. The mental health problems of this Japanese sample were associated with factors such as, professional position, job satisfaction, job control and social support. These factors can be considered generic sources of stress which are also of interest in the current study.

Furthermore, this study confirmed earlier research done in the United Kingdom (e.g. Kinman, 2001; Tytherleigh et al., 2001), which reported that educators had a sense that they had little control of their jobs. This finding is also revealed in the Masuku and Muchemwa (2015) study conducted with a lecturer sample from a Zimbabwean Christian university.

The Japanese university teachers mostly used potentially maladaptive emotion-focused coping strategies which included substance use, and behavioral disengagement which confirmed the prevalence of mental problems. The coping strategies used by the Japanese sample were of importance as it would be of interest in the current study to make a comparison with the strategies used by the Zimbabwean sample. Given the low questionnaire return rate (43.8%), and that Kataoka et al. (2014) sampled only one university, the generalizability of the findings was limited. The current study addressed this limitation by using a sample drawn from three colleges. The use of the COPE is significant because the current study, albeit used a similar measure, the COPE-DV.

2.5.4 Stress levels, symptoms and common stressors

Masuku and Muchemwa (2015) examined stress levels, symptoms and common stressors at a Zimbabwean Christian university with a very small sample of twenty-four full-time lecturers. The researchers utilized a modified University and College Union

(UCU) stress questionnaire that was also adapted for the current study. The response rate of 67% was a high return for a survey. The study revealed that the job demands experienced by lecturers included long hours, the need to meet deadlines, and increased workloads owing to larger student classes.

The lecturers also experienced lack of control in decision-making and dealt with competing demands, which made them unable to plan their working days. Furthermore, they reported that they were exposed to changes in their terms and conditions of employment without due consultation, and were given responsibility without the autonomy to make decisions. The lecturers also indicated that they had inadequate time for scholarship and/or research. The job stressors identified by Masuku and Muchemwa (2015) seem to define common sources of stress which cut across many stress studies involving academics.

While lecturers in this particular study worked in a Christian environment, they reported poor relationships characterized by bullying from managers, other staff and students. The lecturers also reported a lack of line management, poor communication with staff, varying styles of institutional leadership and feelings that their work was not valued. This was further exacerbated by unclear job roles and lack of support in these roles. This study which used a small sample, did not explore the job stress experiences of the lecturers fully as data were limited to the questionnaire.

The Masuku and Muchemwa (2015) study, which used the UCU survey measure, offered a building block for the current study because the research setting is Zimbabwean. Furthermore, the lecturer sample shares a common collectivistic culture with the teachers' college lecturer sample which offers a plausible comparison of the two

studies. The major limitation of this survey was its failure to unlock verbalized lecturers' stress experiences which could have been used to buttress the findings which emerged from the UCU questionnaire, given that the sample was manageable and very small.

2.5.5 Sources of stress and the perceptions of teachers

Bowen (2016) conducted a qualitative study which sample forty teachers in seven Johannesburg private schools in South Africa. In-depth semi-structured interview were used to collect data. Using a thematic approach, the study identified three major themes. The *job of teaching* theme revealed that teachers experienced time pressure, and work overload. Teachers felt that there was inadequate training, which resulted in gaps in subject knowledge. The teachers also reported some work-life imbalance because teaching consumed most of their time. The *relationships at work* theme evidenced that teachers had disagreeable relationships with colleagues. Furthermore, the teachers felt the management styles in the schools failed to discourage bullying, which resulted in feelings of humiliation and ridicule at work. The administration ignored teachers' views, and the teachers were victims of malicious gossip that made them feel excluded from the group. Finally, under the *organizational and TESOL-related issues* theme, limited professional growth and inadequate teaching resources were reported as sources of stress. This finding is almost similar to the Chireshe and Shumba (2011) study that reported that demotivated lecturers negatively affected the quality of teacher training in Zimbabwe.

The methodology used in this qualitative study clearly demonstrates the key merit of allowing participants in a study to vocalize their experiences, as this permits the researcher to 'hear' what he could otherwise not have heard using quantitative self-report

measures. Furthermore, this study shows the efficacy of using thick, rich description to support the meaning attached to a phenomenon by a researcher, hence increasing data trustworthiness. The current study focuses on explaining the lived job- stress experiences of lecturers in teachers' colleges using an in-depth interview technique. The thematic approach taken in the Bowen's study was instructive in the current study, as the intention was to support findings in the quantitative phase with verbal evidence from the lecturers. However, Bowen (2016) used a small sample, which restricted the generalizability of the study. Another constraint of this study was the lack of added rigor, as no quantitative measures were used to triangulate the findings. The current study attempts to be more robust by using self-report measures.

In conclusion, the studies which have been reviewed show that job stress affects teachers in a variety of ways. Prolonged exposure to stress can lead to a syndrome known as burnout. The next section thus examines burnout and how it affects stressed lecturers.

2.6 Conceptualizing Burnout

In the 1970s, Freudenberger observed enduring exhaustion marked by an absence of inspiration among New York volunteer guide laborers which he depicted to be 'burnout'. On the premise of his observations, Freudenberger (1974) outlined burnout as a condition of psychological and physical fatigue caused by one's career, which resulted in the gradual disappearance of motivation or attachment to one's work, marked by reduced work output (Bakker, Demerouti & Sanz-Vergel, 2014). Burnout, which is associated with the negative effects of prolonged stress emerged in teaching professional literature at this time (Salami, 2011), The Maslach Burnout Inventory (MBI) was then

developed into the gold standard which conceptualized burnout along three dimensions (Bakker et al., 2014). However, the Oldenberg Burnout Inventory (OLBI) is emerging as a plausible alternative to the MBI. Because my intent was not to be imprisoned to the MBI tradition but explore a new pathway, the current study used the OLBI which conceptualizes burnout as exhaustion and disengagement.

I used the term ‘disengagement’, but in much of the burnout research, ‘work engagement’ is the commonly used term. Work engagement, which is the antithesis of disengagement, is in general exhibited through an affirmative, gratifying psychological state which is defined by enthusiasm, commitment and assimilation in one’s work (Schaufeli et al., 2002). Conversely, disengagement is a psychological state characteristically exhibited through an individual’s disinterest, indolence and loss of enthusiasm towards work.

Burnout is an important variable which has been associated with negative consequences, such as, employee ill-health (Schaufeli, Leiter, & Maslach, 2009) decisions to quit work (e.g. Schaufeli & Bakker, 2004; Spence-Laschinger, Leiter, Day, & Gilin, 2009), and unsatisfactory work outcomes (Wright & Hobföll, 2004). Because of the negative consequences associated with burnout, it is important for teachers’ college lecturers to understand how it develops so that appropriate interventions may be instituted to make the working environments in the colleges conducive for quality work and better lecturer performance outcomes. Salami (2011) states that burnout is level specific, and for this reason, argues for the importance of differentiating teacher burnout as peculiar to the profession. In view of this, teachers’ college burnout should be separated from general teacher burnout. While it shares some common dimensions with other levels in

the teaching profession, teachers' college lecturer burnout is a special form of burnout. Teachers' college lecturer burnout is that which manifests as a direct result of being in the employ of a college which trains teachers for the school system.

2.6.1 Burnout and Personality

Literature documents that there is a relationship between burnout and personality (Alarcon, Eschelman & Bowling, 2009). Numerous studies have examined the impact individual differences have on burnout. Various scholars have reported the Big Five personality dimensions to have varied relationships with burnout, irrespective of the measure used to determine burnout.

Sulea et al. (2012) found that conscientiousness demonstrated a negative relationship with emotional exhaustion, cynicism and professional inefficiency. This finding implied that people with a high conscientiousness score were likely to demonstrate less emotional exhaustion, cynicism and professional inefficiency. This finding confirms the observation that individuals who exhibit high conscientiousness tend to be systematic and restrained (Costa & McCrae, 1992), and because of this trait, such individuals will report lesser stress (Alarcon et al., 2009). A cogent explanation is that individuals with high conscientiousness have a proclivity to employ problem-focused coping strategies (Connor-Smith & Flachsbart, 2007), which predisposes them to less work related fatigue, but aids them to derive a higher sense of achievement from their work.

Neuroticism also showed a positive relationship with pessimism and professional inefficiency, on account that individuals high in this trait also tended to be more

psychological detached from their jobs because they experienced high levels of job stress, which predisposed them to burnout as well (Langelaan et al., 2006). Agreeableness had a negative relationship with professional inefficiency (Hudek-Kneževic, Maglica & Krapic, 2011). This implied that agreeable individuals were more likely to create good work relations and evidence more commitment to their jobs because they were generally more effective at tasks.

On the other hand, some studies have confirmed the relationship between neuroticism and emotional exhaustion (Zellers, Hochwarter, Perrewé, Hoffman & Ford, 2004; Bianchi, 2018). Research has shown that this association emanates from the fact that highly neurotic individuals are susceptible to increased stress sensitivity and are therefore more prone to negative stimuli (Suls, 2001) because they view the world negatively, perceive it to be threatening and depleting of resources (Schneider, 2004), which makes them experience greater difficulty in coping with stressful events resulting in the use of ineffective coping strategies (Heppner, Cook, Wright, & Johnson, 1995).

2.6.2 Burnout: Job demands and job resources

The relationship between main dimensions in the JD-R is examined in this section.

A study by Buitendach, Bobat, Muzvidziwa and Kanengoni (2016) revealed that burnout had negative relationships with job satisfaction and commitment. This study confirmed earlier research (e.g. Bakker, Albrecht, & Leiter, 2011) which has demonstrated that when employees disengage psychologically because of burnout, their commitment levels are also reduced. Buitendach and colleagues (2016), furthermore

point out that their findings confirmed previous research (e.g. Van den Broeck, et al., 2013; Vander Elst et al., 2016) which revealed that commitment, job satisfaction and burnout were predicted by job demands and job resources. Buitendach and colleagues argue that their findings proved the postulate that job resources outline a motivational pathway once workers face high job demands. They found that their sample of Zimbabwean bus drivers, the existence of job demands they did experience burnout but were engaged and satisfied with their jobs, in spite of the stressors. This was attributed to the dwindling job market coupled with an escalating unemployment rate in Zimbabwe which necessitated that drivers preserve their jobs.

Some studies suggest the existence of a negative relationship between burnout and job resources (Bakker, Demerouti, & Euwema, 2005; Bakker, Demerouti, & Schaufeli, 2003; Schaufeli & Bakker, 2004). This implies that individuals with adequate job resources experience less burnout than those with limited resources (Lee & Ashforth, 1996). A Polish study (Basińska & Wilczek-Rużyczka, 2013) also confirmed this relationship, where high job demands and lack of resources had a positive relationship with burnout. Jorgensen, Nel and Roux (2013) also established further confirmatory evidence with a sample drawn from various South African occupations. While the foregoing studies primarily examined burnout at an individual level, Consiglio et al. (2013) found that with regard to work-teams, burnout had a strong relationship with job demands and job resources. These studies, therefore support the assumption in the JD-R model that job resources define a motivational pathway, while job demands define a health impairing pathway. This postulate is tested in this study with a lecturer sample from a collectivistic culture.

2.7 Personality and Coping

Individual differences impact the way people cope with job stress. George Kelly's Personal Construct Theory holds that individual differences imply that people have subjective interpretations of similar events, and therefore form different constructs of the same reality (Schultz & Schultz, 2009). Coping is a very broad concept, and in view of this, it involves the subjective appraisal and response to stressful events (Folkman & Moskowitz, 2004). Coping is an effort to avoid or minimise what an individual appraises to be a stressor (Carver & Connor-Smith, 2010). While extant literature shows that several coping distinctions have been suggested (Carver & Connor-Smith, 2010), in the current study coping is limited to three groups, each with five dimensions, as detailed in the COPE-DV (Carver, 2013). The use of these three groups does not in any way preclude the existence of other distinctions because there is no single categorization which can sufficiently explain coping (Connor-Smith & Flachsbart, 2007).

2.7.1 Problem-Focused Coping

When using *problem-focused coping*, an individual targets the stressor and engages in action designed to circumvent or eliminate the effect of the stressor (Carver & Connor-Smith, 2010).

The first dimension of this form of coping is known as active coping, and involves action aimed at either the form of the stressor, or how the stressor is appraised (Rothmann, Jorgensen & Marais, 2011). This form of coping is a direct and conscious effort by the individual to deal with the stressor (Carver et al., 1989). Planning is a psychological strategy which is invoked on how best to deal with a stressor and

evaluating options of how to effectively manage the stressor. When an individual seeks social support for instrumental reasons, they take counsel or get help including relevant information which can be availed to deal with the problem. Suppressing competing activities is a coping strategy whereby an individual will ignore any diversions and focus their attention fully on the stressor, whereas restraint coping involves the exercise of self-control and the avoidance of impulsive action (Carver et al., 1989).

Research presents varied but nonetheless important findings with regard to coping and work engagement. Active coping has shown a positive relationship with work engagement. For example, Schiffrin and Nelson (2010) found that individuals who opted to use active coping were capable of sustaining high work engagement levels, while those who did not use this strategy were characterized by low levels of work engagement. There is evidence that there is a degree of difference in how each of the Big Five traits influences the choice of the five problem-focused coping strategies (Foley, 2013). Agreeableness and openness to experience both had a positive relationship with active coping and seeking instrumental social support (Leandro & Castillo, 2010; Penley & Tomaka, 2002). This implies that individuals high in both these traits tend to use more active coping and instrumental social support than those who are low in these traits.

Individuals high in conscientiousness opted more for active coping and planning, and infrequently used potentially maladaptive emotion-focused coping (Jelinek & Morf, 1995; Vollrath, Banholzer, Caviezel, Fischli, & Jungo, 1994; Vollrath et al., 1995; Watson & Hubbard, 1996). Paradoxically, active coping had no significant relationship with teacher stress (Griffith, Steptoe & Cropley, 1999). A cogent conclusion drawn was that this form of coping would be naturally embedded in the usual work routines of

proficient and capable teachers. Therefore, in the context of the teachers' college lecturers, it is important to interrogate whether planning is a lecturer competency or a coping strategy. With regard to extraversion, some studies (e.g. Costa, Somerfield & McCrae, 1996; Watson & Hubbard, 1996) confirm that individuals high in this trait engage in active coping strategies (Vollrath & Torgersen, 2000).

Personality and coping research is a growing field. In view of this, some scholars (e.g. Lee-Baggley, Preece, & DeLongis, 2005) have argued for research which examines all the Big Five traits within the same study. They further argue for more studies which interrogate the interaction between personality and context, in the hope that this will create a more coherent understanding of the stress and coping process. The current research attempts to add to the literature gap by using the five-factor model with a lecturer sample from a collectivistic culture. An effort is made in the current study to address this concern by infusing stress dimensions based on the UCU stress survey, together with two burnout dimensions based on the OLBI.

2.7.2 Emotion-Focused Coping

An individual employing *emotion-focused coping* solicits compassion or pity or moral backup in order to reduce stress (Carver et al., 1989). Positive reinterpretation and growth involves side-stepping the stressor itself and focusing on dealing with the feelings which cause the stress. The individual uses optimism in re-evaluating the stressor in a good way. Seeking emotional social support is aimed at galvanizing compassion. Religious coping is the use of one's faith in order to deal with the stressor. The individual who uses this form of coping rationally explains or justifies the stressor that may

otherwise be anxiety provoking. Acceptance entails that the individual resigns to the reality that the stressor is unchangeable. Finally, the use of humour is laughing off, or joking about the stressor, in an attempt to make it lighter than what it actually is.

Humour is a general positive character strength that contributes most strongly to life satisfaction (Peterson et al., 2007). Humour aims at changing the individual's perspective of the stressor and facilitates isolation from potentially harmful circumstances (Keltner & Bonnano, 1997). Samson and Gross (2012) point out that studies which examined humour have produced varied and inconclusive outcomes. Some studies have found humour to be positive and show that individuals who have high levels of humour resist the harmful effects of life stressors better than those who have low levels (Abel, 2002; Kuiper, 2012). Furthermore, such individuals are able to positively evaluate their under-performance on self-threatening tasks (Geisler & Weber, 2010). These findings are clearly supportive of the thought that the conscious use of humour encompasses a stress-mediating impact. It however is imperative to note that some alternative studies have produced negative results. Humour has also been associated with cynical intentions (Kosenko & Rintamaki, 2010; Rowe & Regehr, 2010), but in the teachers' college lecturers' work context humour which is functional is that which is not used for this reason.

Some studies (Bardi & Guerra, 2011; Radman et al., 2011) found that the use of religion was a prevalent coping strategy in non-Western cultures. In Eastern cultures which are largely collectivistic, religion and deferral to hierarchy define the social order, because individuals generally place responsibility outside the self, in either religion or God (Bardi & Guerra, 2011). In contrast, Leandro and Castillo (2010) reported that

religion was one of the least used strategies among Spaniards. The same study showed that the Spaniards opted more for acceptance, positive reinterpretation and growth, and seeking emotional support when dealing with stressful situations. In terms of individual differences, some studies have shown that religious coping is unrelated to extraversion and neuroticism, but shows a small positive correlation with agreeableness. and a negative correlation with openness to experience (Connor-Smith & Flachsbart, 2007).

In conclusion, these different findings confirm culture to be an important variable associated with how individuals from diverse cultures cope with stress.

2.7.3 Potentially Maladaptive Emotion-Focused Coping

Carver et al. (1989) outline five dimensions of potentially maladaptive emotion-focused coping. When an employee ventilates emotions, they openly air out feelings at the source of stress. Denial is akin to a defense mechanism shown by ignoring the source and existence of the stressor and putting up a façade that the stressor is non-existent. Mental disengagement is detaching oneself from the stressor by engaging in an alternative psychological activity away from the source of the stress. Behavioral disengagement describes the behaviour of reducing one's effort when dealing with the stressor, and is associated with resignation (Mitchell, Griffin, Stewart & Loba, 2004). The use of alcohol and drugs is resorting to being intoxicated in order to forget about the existence of the stressor at hand (Chalfont & Bennett, 1999; Rothmann et al., 2011).

The Leandro and Castillo (2010) study reveals that behavioral disengagement and denial were less frequently used coping strategies by their Spanish sample. In terms of gender differences, they found that more men mostly resorted to the use of denial than

women. Other studies have found a relationship between neuroticism and maladaptive coping (Costa, Somerfield & McCrae, 1996; Vollrath, Torgersen & Aln s, 1995; Watson & Hubbard, 1996). On the other hand, neuroticism has been shown to have a positive relationship with venting of emotions and the use of intoxicants (Connor-Smith & Flachsbart, 2007; Leandro & Castillo, 2010). These studies provide ample evidence to prove that neuroticism is particularly important for stress experience and affectivity, and therefore determines stress vulnerability (Vollrath & Torgersen, 2000). Consequently, there is potential that lecturers who are high in neuroticism may resort to maladaptive behaviours when confronted with work-related stress.

Some studies have shown that agreeableness and conscientiousness were negatively associated with the use of alcohol and drugs (Chalfont & Bennett, 1999; Connor-Smith & Flachsbart, 2007). This implies that individuals who are high in agreeableness and conscientiousness will use this coping strategy less, while those who are low on these traits will opt more for the use of alcohol and drug use.

2.8 Conclusion

The extant literature shows that there is concern that teachers at various levels, particularly those in higher education, are exposed to ever-increasing job stress caused by massification. The negative effects of massification, such as increased workloads and student numbers, against a backdrop of inadequate government funding in tertiary institutions, are among the most commonly cited sources of job stress. Zimbabwe's higher education sector has not escaped this global wave. Not much of the stress research has examined the five-factor model with samples from African collectivistic cultures.

This has provided the motivation for the current study. While proponents of the five-factor model have argued for its universality, this claim has to be tested with the knowledge that stress, coping, and burnout are influenced by personal frames of reference and may thus be culture-specific. Studies examined in this chapter report different but non-the-less important findings with regard to stress, burnout and coping in different cultures. This gives justification for the current study to explore these variables using a sample of lecturers from a collectivistic agrarian culture.

The next chapter focuses on the lenses used to illustrate and explain the concepts and variables that form the basis of the current study, namely, personality traits, job stress, burnout, and coping.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 Introduction

Three theories which were deemed to be critical in illuminating the central concepts of this study were adopted. Mkhize (n.d., p.14) explains succinctly that “Theory frames what we look at and how; provides the basic concepts to direct important questions; suggests ways to make sense of the data; enables us to connect our study to the vast body of knowledge; and increases our awareness of interconnections and broader significance of data.” Therefore, the selection of three lenses was meant to offer an enhanced understanding and demonstration of how and why concepts in my study are explained, interconnected and aid in answering the research questions, which are aimed at explaining the lived job stress, burnout, and coping experiences of teachers’ college lecturers in Zimbabwe.

3.2 Why a theoretical framework?

Given that a theoretical framework is more formal and more abstract than a conceptual framework (Casanave & Li, 2015); I opted for a theoretical framework. “A theoretical framework refers to the theory that a researcher chooses to guide the research. Thus, a theoretical framework is the application of a theory, or a set of concepts drawn from one and the same theory, to offer an explanation of an event, or shed some light on a particular phenomenon or research problem” (Sitwala, 2014, p.189).

Three guidelines informed the selection of a theoretical framework. First, the use of theory helped to identify the concepts which would clearly illustrate my research problem. The relevant factors for me were that the framework should map personality, that is, the independent variable, together with stress, burnout and coping, which were the dependent variables. Second, it was important to establish how the key concepts of my study were interconnected into a coherent whole. This was important in view of the fact that the study focused on determining the relationships between the identified variables. Third, it was also important to establish terra firma based on a cultural theory because the participants were from a collectivistic culture, while the measures used were derived from a western individualistic culture.

I opted for a theoretical framework based on what I termed a “tripod approach”, in which three theories are interlinked for purposes of illuminating the research variables (personality, stress, burnout, and coping). Each leg of the tripod thus represented a theory. The use of three theoretical frameworks, as shown in figure 2, was therefore meant to add depth to the understanding of how personality predicts job stress and burnout, and the choice of coping strategies by college lecturers in Zimbabwe.

Figure 2

Theoretical lenses

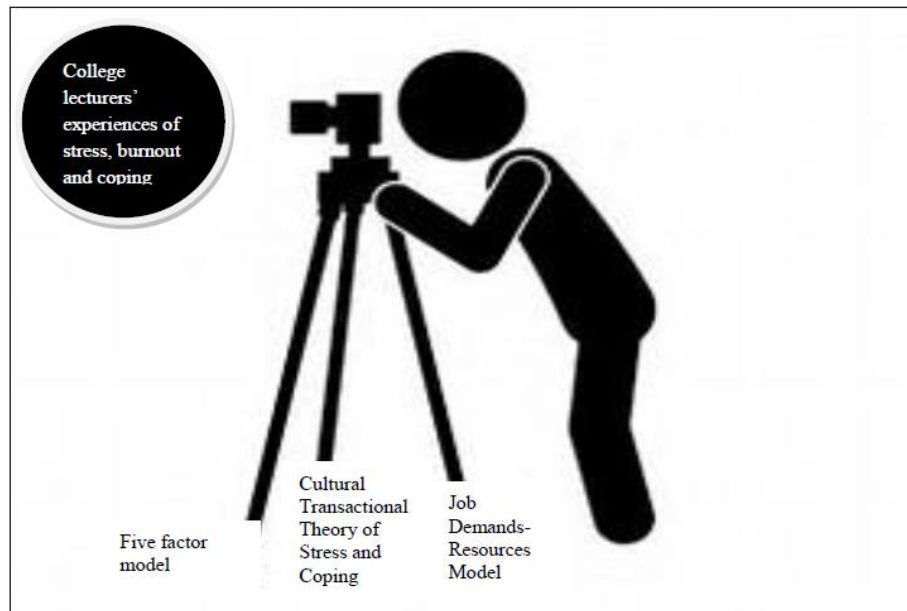


Figure 2 is a visualization of how I envisaged myself to be a video cameraman with an interest in viewing college lecturers with regard to how they experienced job stress and burnout in the teachers' colleges. I selected the cameraman metaphor as I believed it best conveyed the explanatory nature of this study. Each leg of the tripod is used as a support in aiding me to visualize and explain the unfolding phenomenon before my eyes, while the camera demonstrates that the study variables are being looked at objectively and in situ, as symbolized by the sphere. Given that this study was not experimental but explanatory, I attempted to maintain some objective distance. However, I was still an active participant together with the lecturers in sharing their lived experiences within the cultural environments obtaining in their respective teachers'

colleges. I chose three lenses because they attend to the major variables of this study. The five-factor model is discussed first.

3.3 Five-factor model of personality (FFM)

The thrust of this section is to illuminate some of the limitations of the FFM and situate it in the cultural context of this study, which is African and collectivistic in outlook.

3.3.1 Trait approach: Some evidence for cultural psychology

The validity of the FFM has been supported in the literature (Digman, 1990; Mount, Barrick & Stewart, 1998). Some scholars (e.g. Barbaranelli et al., 2007; Weinschenk & Panagopoulos, 2014) argue that this hierarchical model offers a comprehensive understanding of personality and individual differences. However, it is important to guard against the notion that individual differences can be restricted to only five traits (John & Srivastava, 1992). This is on account that Kelly's Personal Construct Theory posits that people perceive reality using subjective personal frames of reference, and therefore the constructs people form are not uniform (Schultz & Schultz, 2009). The universality of the Big Five needs closer examination, to the extent how it appropriately maps the Zimbabwean lecturer sample in this study which is from a largely agrarian collectivistic society. Costa and McCrae (1996. p.56) claim that "This model can be seen as a meta-theoretical framework for describing personality, identifying the categories or variables that a complete theory of personality ought to address [with the added

advantage that] existing theories can be compared in this framework, and new theories might be constructed using it as a guide.”

What however is overlooked in the current debate is the argument presented by scholars (e.g. Mkhize, 2003) with a proclivity toward cultural psychology who have rightly questioned the wholesale universality prepositions derived from Western psychology. Thus, when John and Srivastava (1992) argue that the FFM does not limit personality differences to only five traits, they are correct, but only to the extent that, based on the plethora of extant literature, this model has been studied mainly in individualistic societies that are Western/European. In arguing that we should study psychological processes with reference to the people concerned (Mkhize, 2003), it is plausible to accept that cultural traditions and social traditions shape how we think about the world, implying that there is divergence in psychological process (Shweder, 1991). This argument, at the surface level, demonstrates that cultures differ not only in geography, but also in the manner in which the human personality is shaped and defined.

Proponents of cultural psychology therefore argue strongly for a deconstruction of psychology, currently dominated by Eurocentric perspectives that privilege an atomistic and decontextualized view of the person. In using the FFM in this study, one is therefore not lost to the fact that “Tests that are translated and adapted to local settings do not necessarily erase the philosophic assumptions, values, epistemologies and communicative practices that reflect the way of life of the peoples for whom the tests were originally developed (Greenfield, 1997, cited in Chitindingu & Mkhize, 2016, p.74). The sample of Zimbabwean lecturers in this study, therefore, comes from a unique cultural context. This brings into sharp question the universality of the FFM, and the need to illuminate the

concept of individual differences within cultural contexts, which for all intents and purposes, cannot be essentially perceived as universal.

Extant literature demonstrates the weakness of Western-derived measures such as the Big Five, which derives from the FFM. Piedmont et al. (2002) show that direct tests of the generalizability of the FFM in Africans are restricted to the Republic of South Africa, with most of those studies either using samples that were principally White, or used instruments that were written in English. Furthermore, complications with replicating the structure have been observed. For example, a Zimbabwean study (Piedmont et al., 2002) revealed that some of the constructs of the FFM, especially at the facet level, had no equivalents in Shona culture.

The foregoing debate has led these researchers to agree that there is a need for further research in non-industrialized, rural cultures. Such research will further enhance current literature, and an understanding of personality traits in a cultural context. Lecturers in the current study have Shona and Ndebele backgrounds, raising the possibility that the Big Five personality model used in this study may have serious limitations. The current study however adds to the existing knowledge by using stress, burnout and coping as dependent variables in an attempt to explore the extent to which lived experiences of lecturers in Zimbabwean teachers' colleges relate to the Big Five personality traits.

Despite the foregoing problems associated with the FFM, which have been examined, albeit briefly in this section, the model is an appropriate fit with the Coping Orientations to Problems Experienced (Dispositional Version) (Carver, 2013), which is used in this study to examine coping strategies which lecturers engage when dealing with

job-stress. Again, in view of the fact that lecturers are in constant contact with various students, either through direct lectures, research project consultation, tutorials or counseling, the issue of their personality traits is a critical variable associated with stress, burnout and coping. Lecturers are expected to possess personalities which exude agreeableness, caring, enthusiasm, fairness, friendliness, amiability, honesty, patience, deference and professional responsibility (Gao & Liu, 2013). For this reason, the trait approach is more fitting in the current study because traits give a broader description of both desirable and undesirable human behaviour (Khurshid, 2011).

3.3.2 Brief outline of the Five-Factor Model

I operationalized personality using five broad traits. Each trait has six components that are bipolar in nature. This implies that each component has both low and high levels that describe the individual human personality. The extent to which lecturers in my study sample exhibit the traits motivated the current study. A brief description of each trait is given in the following sections.

a) Openness to Experience

Openness to experience is a quality described by a proclivity towards creative ability, tolerance and stylish affectability (Lee et al., 2000; Kokkinos, 2007). The six components of openness to experience include; creative energy, imaginative interests, emotionality, boldness, astuteness, and liberalism (Costa & McCrae, 1995).

Individuals who have high creative energy have striking creative levels and functional dream lives, while individuals who are low in creative energy are generally

trite and have a mind that is task oriented. Imaginative interests define an individual's proclivity for the arts. Individuals who are high in imaginative interests have a profound thankfulness for subjects, for example, craftsmanship and verse, yet individuals who are low on this quality demonstrate a lack of appreciation for workmanship and excellence. The emotionality facet describes how in-contact an individual is with his or her feelings. An individual high in emotionality demonstrates deep involvement and sentimentality. Conversely, an individual who is low in emotionality is unsentimental and has dull feelings. An individual who is high in boldness will in general lean toward curiosity and assortment in his or her life, while one who is low on this quality wants to have a daily schedule and is commonly unenthusiastic in encountering new experiences. Astuteness defines a person's receptiveness to original thoughts and hypotheses. Individuals high in astuteness appreciate philosophical contentions, hypotheses and learning. Conversely, individuals who are low in astuteness demonstrate a thin philosophical concentration and exhibit muted eagerness. The liberalism facet estimates the individual's probability to adjust to societal standards. Individuals high in liberalism are ready and keen to rethink the qualities and convictions that they hold. Individuals who are low in liberalism are naturally moderate and acknowledge contentions of power and convention.

b) Conscientiousness

Conscientiousness characterizes the degree to which an individual is composed, solid and dedicated, accomplishment oriented, and reliable (Digman, 1990; Mount, et al., 1998; Mondak et al., 2010). The six components of conscientiousness include an

individual's self-efficacy, precision, devotion, accomplishment endeavoring, self-restraint, and mindfulness (Costa & McCrae, 1995).

Self-efficacy defines an individual's competency. An individual high in self-efficacy naturally feels all around readied and capable. An individual low in self-efficacy commonly has a low estimation of his or her capabilities and generally feels incompetent. Individuals who are high in precision esteem their capacity to be flawless and clean, while those low in precision demonstrate disorder. Devotion measures an individual's reliability. Individuals high in this quality will in general be carefully moral and principled, while individuals who are low in devotion have a relaxed principles and integrity. Accomplishment endeavoring individuals have high aspirations and determination, but individuals low in this quality is not as determined, and are commonly lax. Individuals high in self-restraint are self-spurred to take care of business, while those low in self-restraint will in general tarry or give up. Mindfulness alludes to an individual's capacity to reflect or consider before the individual in question acts. Those high in this quality are wise and avoid acting unreasonably or without reflection, while those low in mindfulness will in general make rushed, on the spot choices.

c) Extraversion

Extraversion depicts an individual's activity level, degree of amiability and emphaticness (Lee at al., 2000), and is related with an air towards constructive feelings (Kokkinos, 2007). The six facets of extraversion are an individual's benevolence,

gregariousness, empathicness, activity level, excitement seeking, and gladness (Costa & McCrae, 1995).

Benevolence describes an individual's propensity to be fond of other people or close friendships or to be reticent. An individual high in gregariousness cherishes the company of others, while an individual low in gregariousness will in general be a recluse. An individual who is high in empathicness is in general overwhelming and powerful in social settings, while someone low in this quality is increasingly inactive and keeps a low profile. Activity level refers to an individual's rhythm in life. An individual with a high activity level would keep occupied, while an individual low in activity level would be more relaxed. Excitement seeking describes an individual's need for adventure and thrill. An individual high in gladness is amicable and hopeful, while an individual low in this quality will in general be increasingly skeptical and less cheerful.

d) Agreeableness

Agreeableness characterizes an individual's relational connections and epitomizes charitableness, benevolence and adaptability (Lee et al., 2000; Barrick, Mount & Gupta, 2003). The six components of agreeableness incorporate an individual's capacity to confide in others, ethical quality, selflessness, teamwork, unobtrusiveness, and compassion (Costa & McCrae, 1995). Those low in trust in others will in general be distrustful and apprehensive of others, while those high in this quality put stock in the trustworthiness of others and believe in the honesty of others.

Ethical quality describes an individual's propensity toward being real or controlling. An individual high in selflessness is liberal and worried about the welfare of others. An individual low in selflessness is conceited. Teamwork defines an individual's capacity to work with others. Those high in this quality concede to others, while those low in teamwork are in general forceful and spirited. Unobtrusiveness estimates an individual's inclination toward quietude. An individual who is high in this quality is unassuming and modest, while an individual who is low in unobtrusiveness is haughty and proud. Compassion defines an individual's capacity to identify with other people's problems. An individual who is high in compassion is merciful and easily affected emotionally by other people's distress, while those low in compassion are cruel, sensible, and less slanted toward other people's problems.

e) Neuroticism

Neuroticism characterizes the degree to which an individual will demonstrate the nearness or nonappearance of nervousness, despondency or related negative feelings (Gallego & Oberski, 2012) and is frequently connected with a failure to control urges, inclination to unlikely thoughts and powerlessness to adapt to pressure (Kokkinos, 2007). The six components of neuroticism are uneasiness, outrage, dejection, self-consciousness, hastiness, and helplessness (Costa & McCrae, 1995).

Individuals who are high in uneasiness are frightful, troubled, and stress a great deal. Be that as it may, individuals who are low in uneasiness are composed and untroubled. Individuals who score high in anger are ready to experience anger, quick-

tempered, and tend to over-react to frustrations, while those scoring low in anger are more easygoing and not hostile toward others. Individuals with high outrage are irritable and tend to over-respond to disappointments, while those scoring low on this quality are good-natured and not antagonistic toward others. The self-consciousness component estimates an individual's sense of self-security. Individuals high in this quality are in general touchy and self-doubting, while those who are low in self-consciousness are unperturbed by discomfiting situations and are generally happy with themselves. Hastiness describes a quality which estimates an individual's ability to settle on choices without being impeded by his or her motivations or impulses. An individual who is high in hastiness will in general seek to be alluring and appealing, while individuals low in this quality demonstrate a high resilience and are not effectively influenced by impulses.

Helplessness estimates an individual's capacity to adapt to pressure. An individual who is high in helplessness in general tends to be under pressure, while an individual who is low in helplessness copes with pressure well.

Having examined the five personality traits, I now present the second lens. The focus of this lens is to illuminate the stress and coping process and demonstrate that in extant theory, this process is viewed from a cultural perspective, because currently there is a growing recognition in cultural psychology that there are individualistic and collectivist cultures. In the light of this, stress and coping process experiences are not necessarily universal and similar across these cultures.

3.4 Cultural Transactional Theory of Stress and Coping (CTTSC)

(Chun, Moos & Cronkite, 2006)

This section reviews the second theoretical lens which hinges on cultural psychology. The implications of the theory for the current study are detailed. The selection of this lens is based on the view that a cultural perspective to the study of stress, burnout and coping will further help illuminate the debate on the universality of traits in the context of perceived cultural differences between individualistic and collectivistic societies.

3.4.1 Cultural Psychology: Application in Stress and Coping Theory

In carrying out this study, the starting point was recognizing the dilemma that I would be viewing Zimbabwean teachers' college lecturers, who are rooted in a 'collectivistic society', while wearing Western 'eyeglasses'. However, it was also critical that I dissuaded myself from believing that culture can only be narrowed down to geographic or continental boundaries or even skin colour. Such a stance would seem to ignore that culture is dynamic, and that some societies or individuals within the lecturer sample may have been acculturated to varying degrees by other cultures.

In the discourse on coping, some proponents of cultural psychology (e.g. Dunahoo, Hobfoll, Monnier, Hoosier & Johnson, 1998; Heppner, 2008) are critical of the fact that most of the stress and coping theory, and research has shown a proclivity towards propagating a Western, European, and individualistic worldview, which presents a constricted emphasis on the intrapersonal and the agentic domains of coping. They argue that the personal dimensions of individuality stressed in Western psychology are

not universal, and will of necessity not describe all cultures (Kuo, 2011). In the light of this, the validity of the argument that coping with stress across cultures can be explained using cultural dimensions, such as collectivism–individualism, assumes greater relevance (Kuo, 2011).

Chun, Moos and Cronkite's theory is thus presented as a plausible alternative explanation of the stress and coping process. It is important to note that Lazarus and Folkman's (1984) seminal discussion on stress and coping gave root to the relationship between culture and coping, which has now gained traction in the literature (Kuo, 2011). Chun and colleagues' theory therefore builds upon this seminal work and further justifies the significance of culture in current research. This theory examines cultural differences between individualistic and collectivistic societies. In the literature, there is evidence that individualism and collectivism have been well researched in an attempt to explain personality and coping (Hofstede, 2001; Triandis, 2001). In the current study, I opted to use the Coping Orientations to Problems Experienced (Dispositional Version) to determine the relationship between personality and coping. My study therefore attempted to extend the practical relevance of this measure in a collectivistic culture, mindful that the measure was primarily designed to be used in individualistic cultures.

The next section distinguishes individualistic and collectivistic cultures.

3.4.2 Individualistic versus Collectivistic Cultures

The focus of the current study was to explain personality and behaviour consistent with a collectivistic culture, given that the lecturer sample derives from such a culture. It

was therefore important that from the onset that I establish the cultural context underpinning the study.

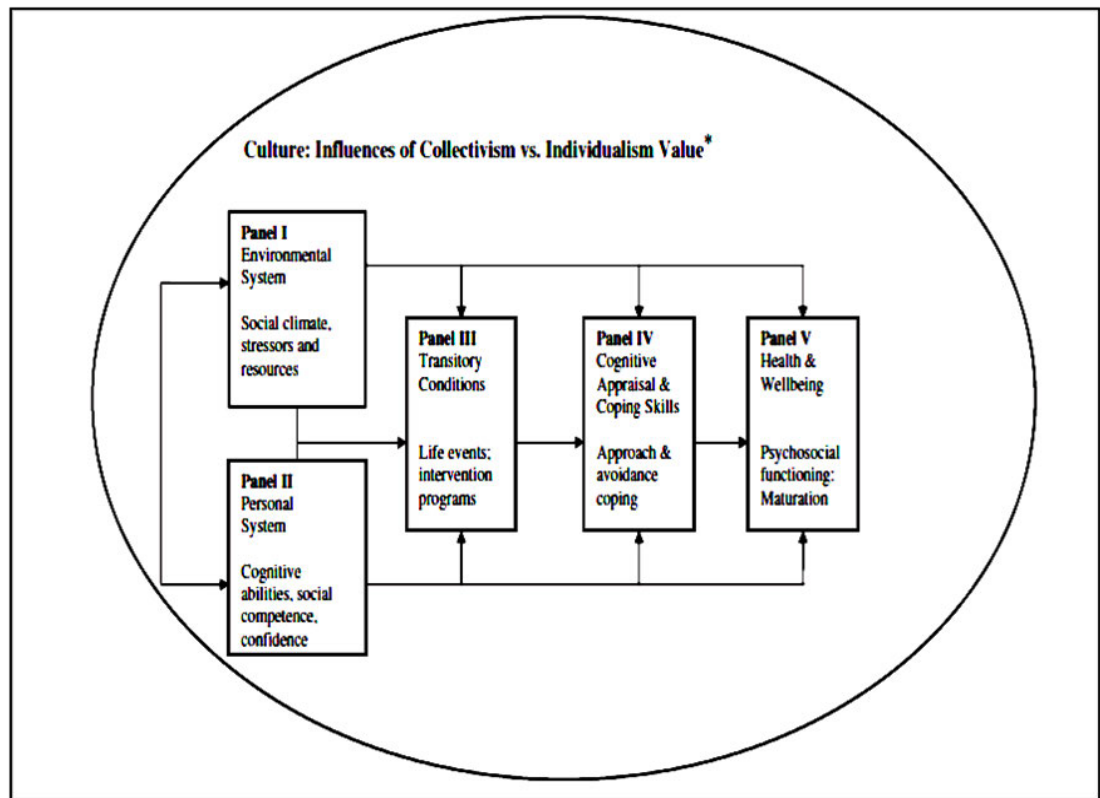
In individualistic western cultures, personality is largely shaped around the self, meaning that in such cultures, people mainly determine their personal needs, aspirations, and aptitudes independently of others in their societies (Sukanlaya, Wah & Tian, 2006). According to Kitayama, Markus and Lieberman (1995), in Sukanlaya et al. (2006, p.4), “The highest priority is accorded to actualizing individual potential and fulfilling one's roles”. Behaviour is viewed as a factor of these personal attributes. On the other hand, in collectivistic cultures the self is interdependent to a group (Smith & Bond, 1993). The self, therefore, finds meaning based on standards, responsibilities and behaviours subservient to, and promoting the wellbeing of the group (Smith & Bond, 1993; Kitayama et al., 1995). The cultural differences which have been highlighted clearly demonstrate that there is a big chasm between individualistic and collectivistic cultures in what constitutes personality.

3.4.3 Theoretical Underpinnings of the Cultural Transactional Theory of Stress and Coping

Chun and colleagues argue that culture impacts the whole stress and coping process based on the value system in that culture (Kuo, 2011). Figure 3 illuminates the transactional process using five panels.

Figure 3

Cultural Transactional Theory of Stress and Coping



Note. From “Cultural variations in work stress and coping in an era of globalization. Cambridge Handbook of Culture,” by BC.H. Kuo. 2011, *Organizations, & Work*, 418-441, p. 6. Copyright 2011 by the author. Permission not sought.

Panel I - Environmental System

In individualistic cultures the environmental system focuses on personal autonomy and independence (Chun et al., 2006). On the other hand, the social support systems centre on a small group of people, mainly family and friends. This is typical of Western industrialized societies. In collectivistic cultures, such as in black African

societies, support systems centre on tightly knit large numbers of social groups, beginning with immediate family, relations, and friends.

The lecturers in this study have collectivistic personalities and behaviours typified by allegiance to the extended family. By way of observation, even in the workplaces, black Africans are quick to establish 'familial' social connections, based in many instances on the commonality of their surnames. Thus, it is common in workplaces, such as colleges, for people to arrange hierarchical social networks. For example, based only on the totem 'Mtungwa', a social order is created where uncles, brothers, sisters, and aunts emerge. The net effect is that people who were hitherto unrelated are bound together, and will defer to authority based on this new hierarchy. Therefore, in terms of coping behaviour, it will be seen that the individual will defer to this new social network, and will seek social support in this new ingroup.

Panel II - Personal System

In this panel, Chun et al. (2006) hypothesize that in individualistic cultures personality gravitates towards, and is centred on the self and independence. The evaluation of stressors and coping is therefore made on the basis on how they influence the individual at a personal level. In such cultures, an individual takes charge of their destiny. On the other hand, personalities of collectivistic cultures are subservient to a destiny controlled by external supernatural forces entrenched in a social order. Stress and coping are therefore dependent on a belief system, which the individual has very little control over.

Panel III - Transitory Conditions

Chun et al. (2006) hypothesize that in individualistic cultures events which interrupt the individual's sense of self growth and independence are evaluated as more harmful. This is because in individualistic cultures people hold, what some scholars (e.g. Schiele 1996; Sue & Sue, 1999; Nwoye, 2015), have aptly described as an atomistic view of the person which is shaped by an orientation towards abstraction and personal insight. In collectivistic cultures, the self co-exists with the group, and individuals would perceive events which threaten the group as more harmful.

It has therefore been argued that collectivists hold a worldview that is communal and relational, context-sensitive and oriented towards an understanding of the human person (Baldwin, 1986; Schiele 1996; Sue & Sue 1999). This implies that in collectivistic cultures, Zimbabwe included, individuals are more concerned about group cohesion than the self. Some scholars (e.g. Ramose, 1999; Mkhize, 2004) point out that “It is by virtue of one's participation in this ceaseless flow, comprising other peoples and the surrounding environs, that one attains the excellences that are truly definitive of what it means to be a human person” (Chitindingu & Mkhize, 2016, p.75). Thus, the view held by (2004), that collectivistic cultures demonstrate a dialogical, rather than a monological account of the human person reflected in individualistic cultures, sums up the marked contrast between the two cultures.

Panel IV - Cognitive Appraisal and Coping Skills

Chun et al. (2006) distinguish primary coping and secondary control coping. Primary coping, which is associated with individualistic cultures, aims at confronting and modifying external stressors. This implies that in these cultures, problem-focused coping is used more prevalently, as individuals are driven by the quest for personal independence, and control of the environment. On account that in collectivistic cultures the emphasis is interdependence, secondary control aimed at modifying oneself is used. Collectivists will use more emotion-focused coping in order to maintain social dependence and harmony (Lam & Zane, 2004). Chun et al. (2006) add that collectivists tend to seek support from their in-groups with the aim of maintaining interconnectedness with the ingroup.

Panel V - Health and Wellbeing

In Panel V, the overriding influence of culture on the eventual outcomes of coping which impact physical and emotional wellbeing are underscored (Chun et al. (2006). Research shows that individualists assess coping outcomes in terms of a decrease in stress (Kuo, 2011). In collectivistic cultures, coping is evaluated in terms of social and relational consequences, such as, the need to maintain the group together and preserve in-group harmony aimed at enhancing mutual interdependence. It was thus of interest to hear the lived coping experiences of lecturers, and determine whether they could confirm this collectivistic characteristic.

3.4.4 Cultural Transactional Theory of Stress and Coping and the Current Study

By recognizing the importance of cultural variations between and within societies, Chun et al. (2006) suggest the importance of studying stress and coping behaviour from a broader perspective. The theory underscores the importance and relativity of culture in the whole stress and coping process (Scherer, Hwang, Yan, & Li, 2000; Goh, 2003). It can be concluded that while job stress is universal, Chun and colleagues theory highlights that cultural differences influence the appraisal of stress and coping (Sukunlaya, Wah & Tian, 2006). In explaining the lived experiences of the teachers' college lecturers, the theory offers an appropriate caveat that one's interpretation of the unfolding experiences should be looked at broadly, but with the hindsight that the measures used in the study may not adequately capture the cultural context of the African lecturers.

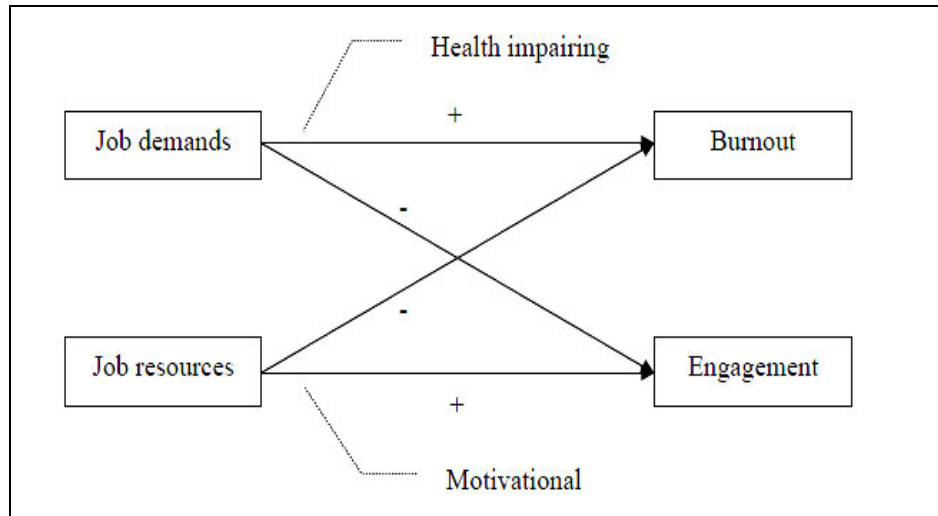
The next section examines the third lens that aims to illuminate the burnout component of this study.

3.5 The Job Demands Resources Model (JD-R) (Bakker & Demerouti, 2007)

In the extant literature, job characteristics are segregated into two interrelated constructs; job demands and job resources. The JD-R is a tool which was designed to evidence the relationship between these constructs (Van den Broeck, 2010). The main proposition of the model is that while there could be differences, all jobs will of necessity characteristically be defined by these two dimensions which influence employee wellbeing (Demerouti and Bakker, 2011). Figure 4 illustrates the model.

Figure 4:

Basic outline of the JD-R model



Note. From “The Job Demands-Resources model and the international work context: A systematic review,” by L.T.B. Rattrie and M.G. Kittler, 2014, *Journal of Global Mobility*,. Copyright 2014 by the authors. Permission not sought.

Job demands define a health impairment pathway and encompass all dimensions of the job which exert strain on the employee (Bakker & Demerouti, 2007). Job demands are thus energy depleting (Van den Broeck, 2010), and are associated with negative job outcomes which include decisions to quit the job (Qiao & Wilmar, 2011), and burnout (Schaufeli & Bakker, 2004). Employees who experience excessive exposure to high levels of unhealthy strain caused by job demands naturally trigger defense mechanisms to reduce or avert exhaustion. This ends up in underperformance and depleted efficiency, and could be a sign of burnout (Van den Broeck, et al., 2010; Vander Elst et al., 2016). I examined the relationship between personality traits and burnout with the intention to explicate whether lecturer job demands cause exhaustion and disengagement.

On the other hand, job resources define a motivational pathway. These encompass all dimensions of the job that positively create an enabling work environment which stimulates and enable the employee to commit to and be more engaged in the job resulting in productivity (Bakker, Demerouti, & Euwema, 2005; Parzefall & Hakanen, 2010; Van den Broeck et al., 2013). The current study sought to examine how job resources in teachers' colleges, such as peer and supervisor support, impacted lecturer job stress and burnout. In the light of this, Cavanaugh, Boswell, Roehling and Boudreau (2000) raise an important dimension by illuminating two critical components to job demands namely, challenge and hindrance stressors. Challenges are those demands which present opportunity for development and are seen as incentives, while hindrances are those demands which place undue limitation on the motivation and development of the employee (Cavanaugh, et al., 2000).

The relationship between personality and burnout is illustrated in a number of ways (McGregor et al., 2016). The model advances that there is flexibility across professions (Van den Broeck, 2010). It specifies that each occupation is unique in terms of inherent risks. This supports an earlier proposition that lecturing in a teachers' college has its peculiar risk factors. Furthermore, while there is a strong argument regarding the limitations of western derived tools; the efficacy of the model is explored in this thesis because the model allows for the examination of occupations in the unique contexts within which they occur. This perhaps makes the lens generalizable across cultures. For example, Hoonakker, Kubicek and Schaufeli (2009) have shown this generalizability in studies with heterogeneous samples comparing blue and white-collar workers. Llorens, et al. (2006) also found evidence of cross-cultural constancy of the associations of the key

concepts proposed in the model. Some African studies have supported the efficacy of the model as well. A South African study (De Braine & Roodt, 2011) confirmed the existence of a positive relationship between job resources and work engagement. Karatepe's (2012) study involving frontline hotel employees in Cameroon also confirmed this finding. An important dimension attached to the De Braine and Roodt (2011) study was that the sample was multicultural, as it included a spectrum of Black, White, Coloured, and Asian/Indian participants. This demonstrated that the lens' utility is crosscutting.

While the JD-R continues to influence burnout research, the validity of the model has been queried (Van den Broeck, 2010). Furthermore, the dearth of studies using this model in cross-national settings (Rattrie & Kittler., 2014) would suggest the need for further research.

3.6 Conclusion

The use of a theoretical framework in research is critical because it validates how key concepts are connected. Based on the results of MLR, the FFM helps in identifying traits which have a relationship with the dependent variables, hence guide the researcher to explain the lived experiences of the lecturers more fully. It has been argued that the trait approach is a useful framework, though its universality is debatable. Furthermore, this study examines the lived experiences of lecturers based on a cultural psychology framework, in order to enhance the understanding of stress and coping from the verbal expressions of participants from a collectivistic culture. I was however conscious that the measures used to map personality, identify sources of stress and burnout, and coping

strategies are derived from a western individualistic culture. Finally, the JD-R model has been presented to argue that job demands and job resources are important dimensions which impact employee well-being. Because the model specifies that each occupation is unique in terms of inherent risks, its use in the current study enhances an understanding of lecturing as a unique profession, which adds to the literature on teacher stress.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

In this chapter, I define and illustrate factors which I deemed important in the origination of the method for this study. I begin by justifying the orientation of the research, and proceed to outline the plan of enquiry, data collection, analysis and interpretation methods, and instrument selection. The chapter concludes by detailing ethical procedures followed in conducting the study.

4.2 Mixed Methodology

There are neither good nor bad research methods. Rather, the selection of a method of inquiry is shaped and informed by particular research purposes (Wisdom et al., 2012). Orthodoxy in research currently recognises three approaches; quantitative, qualitative, and mixed methods. In the light of this, the approach used in any research naturally resides with the researcher's theoretical orientation, the research problem, and strategies which are appropriate to address the problem (Maree, 2007). I opted for mixed methods research.

4.2.1 Pragmatism and Mixed Methods Research

There is objectivity in arguing that every "... methodology rests on the nature of knowledge and of knowing" (Corbin & Strauss, 2008, p.1). This implies that the researcher's worldview is the starting point. Given this, philosophical frameworks, called

paradigms, guide researchers. I therefore chose pragmatism because it was the most suitable paradigm for this study.

It is generally accepted that “A paradigm is a set of assumptions or beliefs about fundamental aspects of reality which gives rise to a particular world-view” (Maree, 2007, p.47). In defining a paradigm, Teddlie and Tashakkori (2009) accept that it encapsulates a researcher’s worldview and is informed by theoretical hypotheses linked to that particular worldview. Paradigms therefore aim at addressing the researcher’s beliefs regarding ontology, epistemology, axiology and methodology. Hall (2012) points out that in the Western worldview, post-positivism, constructivism, transformativism and pragmatism constitute the four most commonly used paradigms. In addition, only transformativism and pragmatism are well-suited with mixed methods research (Hall, 2012).

My study was based on pragmatism because I did not wish to imprison myself to one specific research inquiry. My choice of paradigm would philosophically allow me to accept the existence of numerous viewpoints that are open to research, and lend themselves to understanding real life problems (Creswell & Plano-Clark, 2007). Pragmatists essentially argue that research methodologies should not be rigidly dichotomized as either positivist or constructivist (Onwuegbuzie & Leech, 2005). Therefore, for pragmatists, the integration of methods, when it is appropriate, is advised. To add credence to the relevance of a pragmatic approach to research, it is important to note that the utility of pragmatism rests on its philosophical assumption that in order to solve problems in the actual world, the plurality of truth ought to be affirmed (Creswell & Plano-Clark, 2007). In adopting pragmatism, I therefore accepted the view that such a paradigm did not ‘imprison’ one to make a forced choice dichotomy between paradigms.

Furthermore, pragmatism was ideal because the intent of my research was to explain a practical and real problem regarding stress, burnout and coping in teachers' colleges, and not to make unproven hypotheses about the problem (Feilzer, 2010).

Some scholars have also advanced that mixed methods can be informed by other paradigm options which include: the a-paradigmatic, the multiple paradigm and the single paradigm stances (Greene & Caracelli, 2003; Teddlie & Tashakkori, 2003; Creswell & Plano-Clark, 2007; Greene, 2007; Hall, 2012). The a-paradigmatic stance is dismissed on account that no research can be paradigm-free (Hall, 2012). Teddlie and Tashakkori (2003) opine that the multiple paradigm approach assumes one of three structures. The first is the *complementary strengths thesis* in which methods are kept separate in order to draw on the strengths of each (Morse, 2003). The second is the *dialectical thesis* in which mental models are mixed (Greene & Caracelli, 2003; Greene, 2007). And, the third is the *multiple paradigms thesis* in which the mixed-methods design determines the appropriateness of paradigm choice (Creswell & Plano-Clark, 2007). Again, this stance is viewed as rather opaque in that it fails to make clear which paradigms are to be mixed (Hall, 2012). These arguments consequently left me with the option to select the single paradigm stance as the most applicable to this study. I thus chose pragmatism because it accommodated both quantitative and qualitative research methods.

4.2.2 Mixed Methods Research Approach

Mixed method research enables a researcher to combine quantitative and qualitative research methods in a single study (Johnson & Onwuegbuzie, 2004). This implies that in this approach, both narrative and numeric data help in unpacking the

phenomenon being studied (Teddle & Tashakkori, 2009). Mixed methods research infers that the data or the findings are fused to derive a holistic understanding of the research problem (Ivankova, Creswell & Clark, 2007).

As I journeyed through mixed methods research literature, I tended to accept the perception held by some leading scholars of this approach, such as Johnson, Onwuegbuzie and Turner (2007), who have recognized the existence of three imperatives essential for a mixed-method study. First, it was important to optimize the sampling procedures in order to enhance the selection of appropriate participants. Second, I also paid attention to the selection of my instruments to ensure that their reliability was within reasonable reliability coefficient alpha limits. Third, it was critical that I ensured significance enrichment of the study in my data analyses, in order to present interpretations based on thick rich descriptions of the lecturers' experiences (Collins, Onwuegbuzie, & Sutton, 2006).

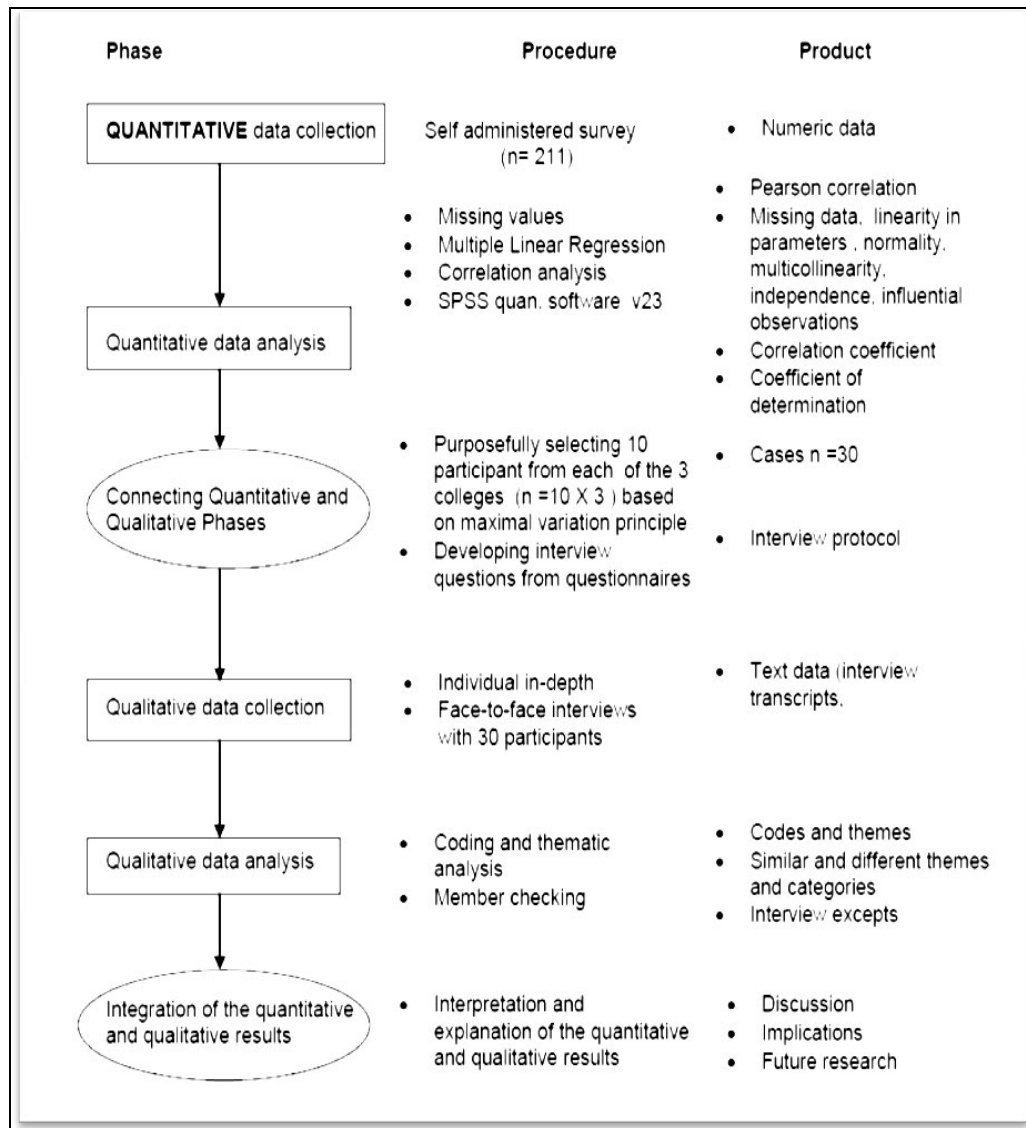
I preferred a mixed methods approach because of the sequential nature that makes it direct, feasible and easy to implement, and for its ability to use findings from the quantitative phase to inform the qualitative phase for a more complete analysis of the lecturers' job-stress environments. The choice of this approach was made necessary because I had to engage both hard (quantitative) and soft (qualitative) data (Feilzer, 2009). The following section outlines the research design.

4.2.3 Mixed Methods Sequential Explanatory Research Design

A mixed methods sequential explanatory design was seen as fitting to answer the research questions. Creswell (2014, p.44) points out that a sequential mixed method approach “... is one which [allows] the researcher [to conduct] quantitative research, analyze the results, and then build on the results to explain them in more detail with qualitative research”. In view of this, I determined to use a sequence of first conducting a quantitative (survey) phase in which four questionnaires were administered, and then followed this with a qualitative (in-depth interview) phase. Figure 5 illustrates the visual model.

Figure 5

Mixed methods sequential explanatory design procedures



The rationale for developing a visual model is to enable the reader to conceptualize the entire research process, and sequence adopted much more easily (Ivankova, Creswell & Stick, 2006). Unlike in the Ivankova et al. (2006) study, I preferred to use a quantitative dominant-sequential design. As seen in Figure 5, the data

collection and analysis procedures are indicated in the boxes, while the procedures and products are aligned to the right of each box, so as to give the reader a clear perspective of how my study was conducted. Because the study was quantitative dominant, the term ‘quantitative’ is capitalized and bolded to emphasize this.

Mixed-methods research is informed by three critical imperatives; what the researcher will prioritize how the plan will be executed, and combination (Creswell, Plano-Clark, Guttman & Hanson, 2003). In setting out priority, I allocated more emphasis to the first quantitative phase. This was because in the quantitative phase four Likert-type measures were administered. On the other hand, execution determines the sequence in which data is collected, either in sequence (or one phase following the other), or in parallel or (concurrently). In this study, I deemed it appropriate that quantitative numeric data is first analysed to determine how it shaped the qualitative data collected later. Finally, combination involved integrating the two phases into a coherent whole.

4.2.3.1 Quantitative Phase Research Variables

The thrust of quantitative research is identifying variables and determining the underlying associations between these variables (Charles & Mertler, 2002). In this study, personality was the independent variable. This was conceptualized using the five-factor model. Personality traits were used to predict; (a) stress as measured across nine dimensions, (b) burnout as measured using two dimensions, and (c) coping as measured using fifteen dimensions.

Research sub-questions 1.4.2.1 (a), (b), and (c), stated in Chapter 1, are quantitative in nature and sought to explain these variables using the NEO-PI-R, OSS,

OLBI, and COPE-DV respectively. I selected the four quantitative measures because I believed they would yield reliable scores on account that they had been used in other studies. Research sub-question 1.4.2.2 (d) was the mixed method question, referred to as a “hybrid” or “integrated” question (Tashakkori & Creswell, 2007, p.208), as it added depth to the research process by soliciting lecturers’ lived experiences of their stress environments in the colleges.

Mixed-methods research hinges on three important principles; induction, deduction, and abduction (Johnson & Onwuegbuzie, 2004). Induction implies that the purpose of research is to unearth and configure patterns. Deduction involves the testing of theories and hypotheses, and abduction involves determining the most appropriate way of presenting the research findings. The discovery part of this study, thus sought to explore the stress sources as perceived by the lecturers through the in-depth interview. The deductive part determined the relationship between personality traits and the dependent variables. Finally, the abduction part of the study explained the meaning conveyed by the findings.

In this study, techniques of the survey and the in-depth interview were applied in sequence to gather data from the research sites. The survey technique of self-administered questionnaires was used in the first stage to generate the dominant quantitative data.

4.2.3.2 In-depth Interview

The rationale of using the in-depth interview was to unlock the job stress situation in teachers’ colleges by interacting with lecturers to fully explain their personal lived experiences. The decision to use an in-depth interview helped in producing a

comprehensive and unbiased perspective, constructed from the findings of the quantitative phase (Denscombe, (2008). This view is given credence by Feilzer (2010), who argues that in effect the use of a survey alone is akin to producing a lifeless still picture of the phenomenon under study. Feilzer (2009) aptly summarizes this by opining that quantitative researchers prefer using measures with tick boxes which provide accurate and exact responses based on three assumptions. First, it is taken for granted that those who are being surveyed understand the items in the same manner as the researchers. Second, it is also assumed that the participants will have viewpoints on all the questions asked. Finally, there is an assumption that participants are keen to communicate these views to the researchers.

These assumptions were evidently disproved in the current study as some participants did not respond to all items resulting in the rejection of some returned questionnaires. An in-depth interview however is able to overcome this apparent weakness of survey instruments, as the researcher can probe the participant when a response is evaluated as incomplete or unclear. Green et al. (2001) cited in Feilzer (2009, p.8), further defend such a position, which I chose as well, by arguing that, “In isolation, survey research [is often] unable to offer much in the way of explaining the findings, their meanings, and how to understand and thus interpret them”. It was my view that this explanatory study would be more informative if the participants were allowed, at some point of the research, to vocalize their subjective experiences without being constricted to answering the self-report measures administered in the first stage. However, the use of an explanatory sequential mixed approach presented challenges because the interview phase was both time consuming, expensive, and resulted in a prolonged duration of the study

(Creswell, 2009; Wei & Lin, 2017). Furthermore, this approach is yet to gain momentum in psychology, whose landscape is largely dominated by quantitative researches, which have mainly depended only on self-report measures, such as questionnaires and personality tests.

4.3 Population

All active teachers' college lecturers in Zimbabwe formed the population of interest. The term 'population' entailed the entire group of lecturers about whom the study would draw inferences (Babbie & Mouton, 2005). There are currently twelve (12) colleges, of which nine (9) specialize in training primary school teachers, and three (3) specialize in training secondary school teachers. The population in these colleges is ± 1000 lecturers.

4.4 Sampling Procedures

In view of the fact that this was a sequential mixed methods study, I opted for a non-probability *convenience-purposive sampling* design. The sampling procedures for each phase are detailed in the following sections.

4.4.1 Sampling: Quantitative (Survey) Phase

While there is no consensus on what an adequate sample is, a general framework is to consider samples less than 100 as small, those between 100 and 200 as medium, and those larger than 200 as large (Kline, 2005). 211 lecturers were conveniently sampled from three colleges. Onwuegbuzie and Collins (2007, p.286) define convenience sampling as "Choosing settings, groups, and/or individuals that are conveniently available and willing to participate in the study." I opted for convenience sampling

informed mainly by two factors; the accessibility of participants, and their willingness to participate (Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007). Furthermore, this option leaves the researcher with ‘captive’ and ‘volunteer’ samples (Teddlie & Yu, 2007). The decision to use a ‘volunteer’ convenience sampling strategy was based on feasibility and efficiency, as the colleges provided a setting where I could access only those lecturers who demonstrated eagerness to contribute to the study. I was able to use data obtained from the sample during the quantitative phase to determine the sampling criteria in the qualitative phase (Johnson & Christensen, 2008). Convenience sampling was therefore a practical and economical way of getting the quantitative data (Teddlie & Yu, 2007).

The sample comprised three categories of lecturers based on the following criteria: (a) lecturers with a minimum of two years’ lecturing experience; (b) senior lecturers with up to four years of lecturing experience, and (c) principal lecturers with more than six years of lecturing experience. Despite the practical utility of using convenience sampling, Robson (2002) cited in Foley (2013, p.164), aptly warns that “This approach is regarded as convenient and conducive to the recruitment of large numbers of participants. However, it is quite limited in that generalization of findings is difficult, as it is impossible to establish whether they represent real issues in the population of interest.” It was therefore difficult to generalize findings to other settings because no attempt was made to render the sample representative through the convenience sampling strategy I used.

4.4.2 Sampling: Qualitative (In-depth Interview) Phase

A purposive sample of thirty lecturers (14%) of the quantitative phase participants was determined. Purposive sampling is a technique used by a researcher to target specific individuals who help to illuminate the research problem (McMillan & Schumacher, 1994; Miles & Huberman, 1994a). It is a technique used when the underlying reason is to “... address specific purposes related to the research questions; selection of cases deemed most informative in regard to research questions, [focusing] on depth information [based] on narrative data using a typical sample of thirty or fewer cases” (Teddlie and Tashakkori, 2008, cited in Graff, n.d., p.55). The selection was restricted to only those lecturers who had participated in the quantitative phase because the intent was largely to connect the quantitative phase with the qualitative phase, and provide for continuity as the lecturers were already familiar with the main focus of each measure which they had responded to earlier.

Purposive sampling was meant to generate a sample of lecturers that would address the qualitative research question (1.4.2.2). I specifically determined to employ a purposive sampling strategy similar to what Ivankova et al. (2006) proposed as the maximal variation principle. Maximal variation sampling involves selecting participants in order to create a wide variety of perspectives regarding the phenomenon under inquiry (Onwuegbuzie, & Collins, 2007). My primary interest was to study how a range of different lecturers in Zimbabwean teachers' colleges experienced stress based on their demographic characteristics. Table 2 profiles the qualitative phase sample.

Table 2

Maximal variation sampling based on ratio of quantitative phase participants

	Group 1	Group 2	Group 3	Group 4	Total
Age range	<40	40-49	50-59	59<	
	3	16	10	1	30
Gender	M=2, F=1	M=10, F=6	M=6, F=4	M=1	30
Marital status					
Single	2	6	2	-	
Married	1	9	6	1	
Divorced	-	-	1	-	
Widowed	-	1	1	-	
Separated	-	-	-	-	
					30
Designation					
Lecturer	1	4	1	-	
Senior :Lecturer	1	6	3	-	
Principal Lecturer	1	6	6	1	
					30
Experience					
< 4 years	1	-	-	-	
4-6	1	3	2	-	
6>	1	13	8	1	
					30
Post of responsibility					
None	2	6	3	-	
Head of Subject	1	5	3	1	
Lecturer in Charge	-	2	1	-	
Head of Department	-	3	3	-	
					30

Using the demographic data generated in the quantitative phase, I selected thirty (12 female and 18 male) lecturers for interviewing. These lecturers were segregated using different demographic characteristics. I placed them into four groups as seen in table 2 based on age range, gender, designation, experience, and post of responsibility. These demographic dimensions were important in that I attempted to include diverse lecturers from the different sub-groups as seen in table 2. The rationale for this variation in the selection of participants was to have a wide representation of participants from different groups who could verbalize their lived experience of the stress environments in the

teachers' colleges from different levels and perspectives. For example, the designation of one as either a Head of Department or Lecturer-in-Charge relates to the level of experience one has, and this in turn has an effect on the stress, burnout and coping one experiences. At each level of the teachers' college system, the workload and responsibilities differ. This, in turn, imports differing perceptions of how stress is appraised.

4.4.3 Procedures for Recruitment, Participation, and Data Collection

The recruitment of participants and data collection was done sequentially in two separate phases.

4.4.3.1 Quantitative Phase

I first sent emails to principals informing them of the intention to carry out the study in their respective colleges. The emails were supported by a permission letter from the head of Ministry (Refer to appendix 3). At each college a collaborator was identified. I then personally visited each college. The decision to personally visit each college, at this stage, was informed by the fact that this would accord me an opportunity to explain and illustrate the completion of the questionnaires, then leave the participants to complete the measures in their free time before submitting them to the identified collaborator. The questionnaires were packed as one battery with the four questionnaires put together. The rationale of distributing the questionnaires in this manner was premised on the recognition that other modes, such as email surveys to individual lecturers, would make the process cumbersome and complicated, and perhaps result in a very low return rate.

Creating some visible contact with the participants was primarily meant to develop familiarity and rapport with them to maximise their participation. This allowed me to create a “physical persona” which the participants could relate to. Questionnaires were distributed to lecturers present at the time of the visit, and the remainders were left with the collaborators for further distribution to absent lecturers. In the verbal explanations to lecturers at each research site, I stressed the point that participation was voluntary as indicated on my consent form appended at the beginning of each questionnaire. It was also explained that confidentiality would be guaranteed, as required by the UKZN Research Ethics Policy.

Finally, I informed the participants that I would select a small sample of lecturers from each college from whom I would obtain interview data. I explained that this selection process would be done at the discretion of the researcher, and was not meant to target any lecturers. Furthermore, I stressed that only lecturers who would have completed the questionnaire would be sampled for the in-depth interview. I also indicated that there could be a possibility of a follow-up interview with some participants, where necessary. During the quantitative phase, ninety (90) questionnaires were distributed at each of the three colleges. Of the 270 questionnaires distributed, 224 (83%) were returned. Thirteen (5.8%) of these returned questionnaires were not completed in full and were rejected. This left a valid sample of 211 questionnaires, which accounted for a 78.1% return rate. Table 3 reflects the questionnaire distribution return rate figures per college.

Table 3

Questionnaire distribution and return

Column I	Column II	Column III	Column IV	Column V	Column VI	Column VII
College	Lecturers	Questionnaires distributed	Questionnaires returned	Questionnaires rejected	Original questionnaires	Valid Final
A	98	90	84 (93.3%)	5 (5.9%)	79 (87.7%)	79 (87.7%)
B	95	90	67 (74.4%)	4 (5.9%)	24 (26.6%)	63 (70%)
C	101	90	73 (81.1 %)	4 (5.4%)	54 (60%)	69 (76.6%)
Total	294	270	224 (82.9%)	13 (5.8%)	157	211
Return rate						78.1%

Table 3 also reflects the challenge that I faced in the quantitative data collection phase, particularly at College B and College C. The quantitative data collection was initially planned to be carried out in one phase lasting a month at each college, but owing to the non-availability of some lecturers, and perhaps some reluctance to complete the questionnaire during the planned collection phase, particularly at College C, which had a very low initial return rate, as shown in Column VI, I had to visit the sites several times to encourage lecturers to complete and return the questionnaires. I observed that in College B and C, lecturers had a sense that the questionnaires were time-consuming given the busy schedules they had. The repeated and extended visits to each of the two colleges, which were eventually spread over five months, were thus meant to encourage the lecturers to complete the questionnaires. This was a costly but necessary exercise. However, what can be seen in table 3 is that at College A, the return rate of questionnaires was high, as this was my work station, and colleagues demonstrated a high willingness to participate in the study.

4.4.3.2 Qualitative phase

One month was set aside to visit each college in order to conduct individual interviews. However, the practical reality on the ground necessitated that each site be visited several times. This was because by the nature of their jobs, I was not able to access some lecturers who would be out of campus on other duties, such as teaching practice, seminars and workshops. Some of the lecturers were unavailable due to being on vacation leave or sick leave. This process was time consuming and strained the limited financial resources at my disposal, in addition to being physically exhausting, as a lot of driving to the research sites was involved. After identifying and verifying individual participants, with the assistance of my collaborators, I distributed interview questions to the participants. This was done to familiarize them with the questions.

To enhance privacy, interview sessions were then conducted in the lecturers' offices. These were done only at times agreed to by the participants, and were recorded using either a Smartphone or a laptop voice recorder. The interview process began with a briefing session, which explained how the interview would be done, together with an explanation of key terms that I would be using. This was necessary to further remind the participants that the questions I would be asking were gleaned from the questionnaires, which they had completed prior to the interview. I then invited the interviewees to highlight any aspects of the interview process which they were not clear about so that these could be verified for them before the interviews began.

4.5 Instrumentation and Operationalization of Constructs

This study used five data collection instruments; Occupational Stress Survey (2008), Oldenburg Burnout Inventory; Coping Orientations to Problems Experienced (Dispositional Version); The Big Five Personality Test (International Personality Item Pool – IPIP), and a semi-structured interview. The instruments were selected because they dovetailed with the variables which I was interested in, and in this light, they would yield the data I required.

4.5.1 Occupational Stress Survey

The OSS is an instrument which seeks to measure stress in an occupational environment. (Refer to appendix 5 - Occupational Stress Survey). The instrument was originally designed for the University and College Union in the United Kingdom (Court & Kinman, 2008). Permission to use the measure was sought and granted (Refer to appendix 6 – Approval to use OSS). The measure has fifty-three items. For purposes of this study, it was slightly adapted to have forty items. The original measure is appended as appendix 4. I adapted the measure to make it compatible with my own study. The nouns ‘manager’ and ‘staff’ were replaced with ‘supervisor’ and ‘lecturers’ respectively. This was designed to fit in with the terminology used in the colleges by the lecturers. Participants rated various facets of job stress on a scale of 1 to 5: (1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always).

Items 1 to 23 were adopted without alteration. Items 24-35 were also adopted without alteration. These items required the participants to rate the various forms of

support that they received from colleagues and supervisors on a scale of 1 to 5 with 1 indicating strong disagreement and 5 indicating strong agreement.

Item 36 (a) was rated in the same manner as the previous items, but the suffix letter (a) was removed. Item 36 (b) was renumbered as Item 37, while Item 37 was renumbered as Item 38, and Item 38 became Item 39. Item 39 on the original measure was omitted as it was open-ended, and in my perception would disrupt the flow in responding to the questionnaire. Furthermore, lecturers pressed for time would perhaps not respond adequately to the item. Item 38 thus became item 40. Item 45 was renumbered Item 40, while the remaining items which sought biographical data, were not used, as I developed my own biographical data format that would capture specific detail (Refer to appendix 5).

Twenty-three (23) items in the measure were reverse-coded. The reverse-coded items are shown in Appendix 5 and are marked by an **R**. The reverse-coding was done to synchronize the scoring pattern for all items, so that all items reflected low to high stress levels, contrary to the actual scoring shown on the measure. The OSS has seven sub-scales. In this study, overall perception of stress and main stress factors were added as sub-scales. For purposes of the study, mean scores for each dimension were summed into an overall stress score.

4.5.2 Oldenburg Burnout Inventory

I obtained permission to use the OLBI (German/English translation) from the developers (See appendix 8). This measure operationalizes burnout as comprising two dimensions (Demerouti et al., 2010). It consists of sixteen (16) items to evaluate the two

subscales of burnout, each which includes four positively worded items and four negatively worded items (Bakker & Demerouti, 2010). Disengagement is measured by items 1, 3R, 6R, 7, 9R, 11R, 13, and 15; while exhaustion is measured by items 2R, 4R, 5, 8R, 10, 12R, 14, and 16.

Items marked with an R are reversed. This means that a score of 1 becomes 4, while a score of 4 becomes 1. Average scores for each sub-scale are then calculated. Higher scores indicate higher levels of burnout on each dimension (Demerouti et al., 2003). The answering categories used, as given by the developers, ranged from “strongly agree” to “strongly disagree” (Refer to appendix 7). Mean scores for each dimension were summed to arrive at a burnout score.

4.5.3 Coping Orientations to Problems Experienced (Dispositional Version) (COPE-DV)

The sixty-item COPE-DV is available free online for use for academic purposes. This self-report tool determines how people cope with various stressful situations. In this study the stress environment was limited to the teachers’ colleges, where the lecturers worked. The measure is dispositional because the items are structured to ascertain what an individual does when in a stressful situation (Donoghue, 2004). Participants complete a Likert-type scale by rating each item from 1 to 4. The lower score of 1 indicates what a person does not usually do, and the highest score of 4 is indicative of a behaviour which is done frequently.

The sixty items are arranged into three broad groups, each with five coping dimensions (Villada, Hidalgo, Almela & Salvador, 2016). The COPE-DV was seen as

appropriate for the current study because it offers a broad spectrum of coping behaviours, which makes it useful in assessing the coping behaviours of the lecturers.

To arrive at a score for each dimension, an average is calculated by totaling the responses indicated and dividing it by four. A total coping score is then derived by summing up the averages for all the fifteen dimensions.

4.5.4 Goldberg's Lexical Factor Markers – The Big Five Personality Test

A fifty-item IPIP scale with ten items per dimension was used to map the personality traits of lecturers. This measure is a free online tool that researchers can use without seeking written permission. Participants were asked to indicate their preferences on Likert scale items which had a range from 1 to 5. On each trait, the final calculated score ranges between zero and forty. Appendix 10 shows the positive and negative keyed items for each trait.

A number of reasons motivated the selection of this measure. First, the Big Five personality test dovetails well with the COPE-DV used to examine coping strategies of lecturers, as both measures focus on a dispositional framework of understanding personality. Second, I acknowledge the veracity of the claim by Buchanan, Johnson and Goldberg (2005) that the NEO-PI-R is a widely used inventory which is applicable in several applied fields. Third, the IPIP was also selected as it is relatively short and would not highly burden the lecturer participants who had to respond to four (4) self-report measures. I was keen to avoid an occurrence where large numbers of participants would abandon the study because of the length of the instruments used (Knapp & Heidingsfelder, 2001). Finally, in the Western world view, the IPIP is being increasingly

seen as an antidote for slow research progress in personality research. I found it appropriate for my study because it was easily accessible, not restricted by copyright regulations and it could be used flexibly in a manner suiting the current study (Goldberg et al. 2006).

Given that this study sought to explain how personality traits predicted job stress, burnout and coping, I was not lost to the fact that it could present challenges and limitations. The personality traits of the lecturer sample in the study had not been mapped before, and the measure used might fail to capture and explain all the personality traits of the Zimbabwean lecturers, responding to a measure initially designed in a Western individualistic society.

4.5.5 Semi-structured interview

In-depth interviews were seen as appropriate in the qualitative component of the study with a few purposively sampled participants, from each of the three colleges. Flick (2006) supports the use of this form of interview because while it is not too rigid, it is also not too open but it maximises the collection of a lot of data. In line with the suggestion by Johnson and Christensen (2012), I developed a schedule with specific topics which had open-ended questions that were to be covered. Questions and probes were gleaned from the OSS (Court & Kinman, 2008), OLBI (German/English version) (Demerouti & Nachreiner, 1999), and COPE-DV (Carver, 2013). This approach was thus in line with the view that “One important area is that the quantitative results cannot only inform the sampling procedure, but it can also point toward the types of qualitative questions to ask participants in the second phase” (Creswell, 2014, p.274).

The interview schedule enabled me to demonstrate that the questions I asked the interviewees were generally similar and connected directly to the questionnaires they had completed. The interview schedule also afforded me the opportunity to probe for clarification at different stages (Mkhize, 2003), and to develop a solid and consistent framework with which to probe the interviewees.

The interview was a form of method triangulation, as questions which I asked the participants were derived from the questionnaires they had answered before. The interview guide (Refer to appendix 11- Interview Schedule for Lecturers) was divided into three sections with four main questions. Section A focused on sources of job stress. Section B was on job burnout. It had two main questions that covered the burnout dimensions in the Oldenburg Burnout Inventory, namely, disengagement and exhaustion. Finally, Section C dealt with coping. There was one question with probes designed to examine a variety of coping strategies.

I was mindful that the purpose of interviewing participants was not to extract information from interviewees. Rather, it was to arrive at a shared understanding of how interviewees experience aspects of their own lives (Mkhize, 2003). I therefore moved away from viewing the participants narrowly as objects for manipulation. The interview, thus took a conversational format with the aim of deriving a shared meaning with the participants.

Furthermore, the interview allowed me to be more sensitive to contextual variations in meaning (Phellas, Bloch & Seale, 2011), and was therefore my effort of demonstrating that knowledge can be generated between people through conversation. It offered me the opportunity to have a one-on-one interface with the participants in order to

engage specific topics regarding the stress environments of the college lecturers in my study (Harrel & Bradley, 2009). It involved the examination and interpretation of these lecturers' experiences to identify any underlying meanings and patterns of relationship.

By using qualitative interviewing, I therefore sought to confirm that I could arrive at a deeper comprehension of my research questions, by encouraging informants to describe their lived subjective experiences in their own words. Finally, by interviewing the participants in their own workspaces, I made the process stimulating by maintaining the familiarity of the surroundings of the participants. This allowed them to have a degree of relaxation and confidence during their interviews which could not have happened had the interviews been done in unfamiliar surroundings.

4.6 Issues of Reliability and Validity

It is standard practice that before and after collecting data, researchers have to take into account both the reliability and validity of their data (Zohrabi, 2013). Reliability and validity are therefore central tenets in research. Broadly, reliability encapsulates the measures taken by a researcher to ensure that both data and research findings are judged as consistent, dependable and replicable (Nunan, 1999; Clark & Adler, 2011). Validity primarily focuses on making the research authentic and accurate by assessing whether it is evaluating what it purports to evaluate (Thorndike, 1997; Zohrabi, 2013). Five measures, which included questionnaires and an in-depth interview, were used in the data collection process. I now discuss in detail how I attempted to magnify the reliability and validity of the data and findings.

I began with a pilot study in one other teacher's college which had not been selected for this study. The questionnaires I selected have been used extensively in stress research, notably in developed countries and in South Africa and therefore, the pilot study sought to ascertain their practical utility in a local setting (Cohen et al., 2006). I sampled five volunteers for the pilot study.

Piloting helped to enhance the stability or test-retest reliability of the questionnaires. There were no changes to any of the research instruments during and after the pilot study. All participants indicated that the language in the Likert-type measures was clear and understandable. They also indicated that the scoring method used was expedient and enabled them to go through the items by either ticking or crossing responses. The participants' responses demonstrated that the questionnaires and the interview protocol appeared to measure what they claimed to measure. This helped in determining their face validity. On the other hand, I ascertained content validity by using questionnaire instruments previously used by other researchers, albeit in different settings. This also ensured the content validity of the interview as statements were based on these questionnaire instruments. However, the participants observed that the measures took over an hour of concerted effort, and given their busy work schedules, it was difficult for them to submit them timeously. In the actual study, I allowed the participants an extended period to complete the questionnaires.

I also established the reliability of the four quantitative measures in my study. The aim was to minimise error, as it is generally accepted that all psychological measures will have a degree of error (Nunnally, 1978). There are three broad classes of reliability, namely interjudge, test re-test and internal consistency. Internal consistency is considered

the most important form (Charter, 2003), because it measures how close an examinee's score is near to the true score. The true score, is in general, seen as that which an examinee would score if a measurement is considered error-free (Charter & Feldt, 2002)). I decided to use Cronbach's alpha on account that it would provide a unique estimate of the reliability of the four measures, which would administered once as a single test. It is defined as the average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests. Cronbach's alpha can take values between 0 and 1, and values nearer to 1.0 are considered to be a reflection of how consistent the items in a measure are (Gliem & Gliem, 2003).

4.6.1 Occupational Stress Survey

The Court and Kinman (2008) study reported the alphas of the OSS as follows; demands =.87; control =.86; peer support =.85, managerial support =.84, relationship stress =.84, role clarity =.83, and management of change =.84. On the other hand, the computed alpha values for this sample of 211 Zimbabwean lecturers were as follows; demands =.70, control =.68, peer support =.67, managerial support =.66, relationship stress =.67, role clarity =.69, and management of change =.68. The overall alpha of the OSS was therefore =.68. Based on the Ponterotto and Ruckdeschel (2007) matrix (See appendix 15, figure 21), a sample size of 211, and that the OSS had less than six items per subscale, values of = .66 to =.70 are considered "Fair" to 'Moderate'. The OSS measure was therefore adequately reliable for use with this lecturer sample.

4.6.2 Oldenburg Burnout Inventory

The OLBI is a relatively new measure in burnout literature. According to Demerouti and Bakker (2007, p.5-6),

The factorial validity of the OLBI has been confirmed in studies conducted in Germany (Demerouti, Bakker, Nachreiner, & Ebbinghaus, 2002; Demerouti, Bakker, Nachreiner & Schaufeli, 2001), the United States (Halbesleben & Demerouti, 2005), and Greece (Demerouti et al., 2003). Results of these studies clearly showed that a two-factor structure with exhaustion and disengagement, as the underlying factors, fitted better to the data of several occupational groups than alternative factor structures. Additionally, the convergent validity of the OLBI and MBI-GS has been confirmed in the United States (Halbesleben & Demerouti, 2005) and Greece (Demerouti et al., 2003).

The foregoing is evidence that the OLBI is gaining ground as an alternative measure in burnout literature. The OLBI was chosen because it can be used to measure burnout in all employees, irrespective of their occupations. According to Demerouti and Bakker (2007), the OLBI can be applied to a wide spectrum of professions. Demerouti and Bakker (2007) have reported alphas of $\alpha = .85$ for exhaustion and disengagement. Buitendach et al. (2016) reported alphas of $\alpha = .76$ for overall burnout, exhaustion $\alpha = .72$ and $\alpha = .73$ for disengagement.

Alpha reported for the OLBI on the exhaustion subscale was $\alpha = .88$, while on the disengagement subscale it was $\alpha = .83$. The overall internal consistency of this measure was $\alpha = .86$. Based on the Ponterotto and Ruckdeschel (2007) matrix, a sample size of 211

lecturers, and given that the OLBI had ≤ 12 items per subscale, the values of $= .88$ and $.83$ for the exhaustion and the disengagement subscales were rated 'Excellent'. Therefore, these alpha levels rendered the OLBI to be a reliable measure.

4.6.3 Goldberg's Lexical Factor Markers – The Big Five Personality Test

A South African study (Vogt, 2007) using the BTI (a South African adaptation of the NEO-PI-R) established Cronbach's alpha coefficients as follows: Extraversion $= .89$, neuroticism $= .94$, conscientiousness $= .94$, openness to experience $= .90$, and agreeableness $= .88$. The alphas calculated for the five scales in the current study were as follows; extraversion $= .79$, neuroticism $= .76$, conscientiousness $= .74$, openness to experience $= .73$, and agreeableness $= .72$. Based on the Ponterotto and Ruckdeschel (2007) matrix, a sample size of 211, and that the Big Five Personality Test had ten (10) items per subscale, the alpha coefficients reported in this study were in the "Fair" to "Moderate" range.

4.6.4 Coping Orientations to Problems Experienced – Dispositional Version (COPE-DV)

The Donoghue (2004) study reported alpha reliabilities which ranged from $= .45$ to $= .92$. Villada et al. (2016) also reported satisfactory Cronbach's alpha ranging from $\alpha = .66$ to $= .81$. In the current study each subscale had ≤ 6 items. The reliability statistics ranged from $= .71$ to $= .74$. The COPE-DV has four items per subscale. Using a matrix proposed by Ponterotto and Ruckdeschel (2007), the computed alpha were rated

“Moderate”. The COPE-DV was therefore deemed reliable for use with the lecturer sample.

4.6.5 Semi-structured Interview

The pilot study showed that questions and probes were appropriately structured and sequenced. The items allowed the participants to discuss the issues raised in a free-flowing conversational manner. The pilot study proved that there was no variation in the interpretations of the items by the sample participants. The participants’ answers to the questions showed that these could be interpreted uniformly. Flick (2006) argues that the rationale for conducting an interview is to expose what the participant knows in a form which is easily interpreted. Thus, the pilot study demonstrated that the interview protocol, because it was well tested, had moderately high measurement validity.

The interview duration was between forty-five minutes and an hour. This time included the briefing done prior to the main interview. By carrying out the interview in the personal spaces and offices of the lecturers, I realized that this helped the lecturers to unwind freely and express open and honest opinions about their lived job stress experiences.

4.7 Quantitative Data Analysis Procedures

The statistical analysis to examine the relationship between the variables was done in two stages using two methods; multiple linear regression (MLR) and correlation analysis (CA). MLR was used to identify dominant personality traits that predicted each of the dependent variables. CA was then used to determine the relationship between

personality and dimensions in the dependent variables. In view of this data analysis approach, it was expedient and practical that in Chapter 5, the research sub-questions are dealt with first and the main research question examined last. Version 23.0 of the Statistical Package for Social Sciences (SPSS) was used to analyse data.

4.7.1 Multiple Linear Regression Analysis (MLR)

Multiple linear regression (MLR) analysis is used to investigate a relationship between a dependent variable and at least two predictor variables. Thus, “Multiple linear regression analysis (MLR) enables us to predict future [outcomes] based on values of predictor variables” (Field, 2009 in Plotts, 2011, p. 56). Furthermore, MLR was seen as the best technique because it determines the effect of the independent variables on the dependent variables enabling the researcher to rank independent variables through comparing Beta weights (Mursalin, n.d., p.18).

4.7.1.1 Preliminary Analysis

Prior to making a preliminary analysis of the questionnaires, I checked all the returned questionnaires and rejected questionnaires which were incomplete (Refer to table 3). However, as a further precautionary measure, before classical MLR analysis, I assessed the data on missing values and sample size requirements. This assessment was important to ascertain the necessity of replacing any missing values, normally done by using the mean of the variable (Hair, Black, Babin & Anderson, 2010). There were no missing values in all the data sets.

A regression model with one predictive variable needs at least thirty observations (Burombo, 2014). A general rule is to include a minimum of 10 observations for each predictive variable in the model (Person, 2011). This translates to a minimum of 15 observations for each predictive variable (Burombo, 2014). The data on job stress, burnout and coping had complete data on 211 lecturers. This therefore enabled me to test 14 predictive variables. The sample size requirements were thus exceedingly satisfied since there were five predictive variables in the data. The preliminary analysis demonstrates that the observations were adequate to determine the relationship between the independent and the dependent variables (Burombo, 2014).

I discuss the classical MLR procedures in the following section.

4.7.1.2 The Multiple Linear Regression Model (MLR)

Most researchers prefer to use multiple linear regression (MLR) first-order models of the form:

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \dots + \beta_k X_{ik} + \varepsilon_i, \text{ with } i = 1, 2, \dots, n.$$

where, “ Y_i is the value of the dependent variable in the i th observation, β_0 is the intercept parameter, β_j is the slope parameter (regression coefficient) representing the effect in the dependent variable, Y associated with a unit change in X_j holding other predictive variables constant, X_{ij} is the value of the j th predictive variable in the i th observation, ε_i is a random error term of the i th observation, k is the number of predictive variable, and n is the number of observations” (Burombo, 2014, p. 33). The

estimates of parameters are obtained using the ordinary least square (OLS) estimation procedure used to find a related function that best fits a given data set (Shaffer, 2007).

Three models were developed for each dependent variable. Predictive variables were simultaneously entered into the model to determine the relationship between personality and the dependent variables. Because personality had five predictive variables, which constituted a small number, the simultaneous enter method was used. The statistical significance of the predictive variables which contributed to each of the three dependent variables was also determined. The significance of the overall relationship was determined by using an F statistic. A p-value of $\leq .05$ demonstrates relationship between the predictive and dependent variables (Shaffer, 2007; Hussien, 2010). The T test was used to determine the significance of individual parameter estimates. A p-value of the T statistic $>.05$ indicates that the predictive variable has no influence on the dependent variable (Shaffer, 2007; Hussien, 2010). The relative importance of each significant predictive variable was checked by examining the standardized Beta coefficient of each significant predictive variable. The standardized Beta coefficients do not depend on the units of measurement and therefore, facilitate a comparison of the significant predictive variables (Hair et al., 2010).

The MLR model is based on assumptions of normality, independence, and constant variance (Burombo, 2014). The validity of these assumptions was assessed using standardized residuals (i.e. estimates of random error terms) from the three multiple linear regression models for job stress, burnout and coping. Non-normality testing was performed using normal probability plot (NP-P), histogram and Kolmogorov-Smirnov test (Hair et al., 2010). A straight line is formed in the normal P-P plot if the normality

assumption is fulfilled, while skewness and kurtosis values equal to or close to 0 or 3 indicate that the normality assumption is satisfied (Hussien, 2010). On the other hand, p-values $< .05$ of Kolmogorov-Smirnov test show violation of the normality assumption (Burombo, 2014).

I conducted a scatter plot of standardized residual values versus standardized predicted values to ensure that the assumption of constant variance is not infringed. A distinguishable pattern of the scatter plot instead of random scattering of points shows assumption violation (Hussien, 2010). I checked to ensure that the assumption of independence was not infringed by using the Durbin-Watson (D-W) statistic. The D-W value must be equal or close to 2 for independence (Fox & Weisberg, 2010). The strength of the predictive variable relative to the dependent variable was assessed by using a partial regression plot. The best-fit straight line was drawn through the points. Points closely following a highly sloping line suggest a strong relationship between the variables being assessed (Burombo, 2014).

Additional diagnostics involved calculating determination coefficient (R Square), tolerance, variance inflation factor (VIF) and Cook's distance statistics. R Square was used to determine the goodness of fit of the models for the data. A model with the R Square value close to 1 was considered adequate, because the personality variables explain the variation in the dependent variables almost perfectly well (Bowerman & O'Connel, 1990; Draper & Smith, 1998). Tolerance and VIF statistics were used to detect multicollinearity.

Multicollinearity is a phenomenon in which at least two predictive variables are related in a MLR model (Ryan, 2008; Hair et al., 2010), which increases the standard

errors of the estimated parameters (Hair et al., 2010). This causes the p-values of the T test to be insignificant, making it difficult to obtain accurate estimates of the individual effects of the predictive variables. As a result, false conclusions are drawn on the effects of predictive variables on models (Hair et al., 2010). A predictive variable with tolerance values below 0.1 and VIF values above 10 shows that variables are closely related (Shaffer, 2007). Such variables are removed from the model.

An observation is influential if its removal from the data set causes large changes in the estimated parameter values (Ryan, 2008). Influential observations cause distortions of the meaning of estimated parameters by shifting the estimated regression plane in different directions (Bowerman and O'Connell, 1990). Cook's Distance (C_i) was used to determine influential observations where observations with C_i values greater than 1 were dropped from the data sets (Hussien, 2010).

4.7.2 Correlation Analysis (CA)

Correlation analysis (CA) was seen as the best technique to determine the relationship between personality variables identified by the MLR analysis and job stress, burnout and coping dimensions. This technique is used to evaluate the degree of relationship between two quantitative variables (Mertler & Vannatta, 2002). Pearson's Product Moment correlation coefficient or r coefficient was used. It is a measure of the strength of the linear relationship between two such variables (Hauke & Kossowski, 2011). The r coefficient has a magnitude and direction of either positive or negative on a range of values from -1 to 0 to + 1, where the values are absolute and non-dimensional (Taylor, 1990). Therefore, a correlation of zero indicates that there is no relationship

between the measured variables, while the closer the r coefficient approaches ± 1 , regardless of direction; the stronger is the existing association between the two variables (Taylor, 1990).

If a relationship between two variables is positive, an increase in one variable will result in an increase in the other variable. Conversely, if there is a negative relationship, it implies that higher levels of one variable are associated with lower levels of the other. In correlation analysis, a p -value $< .05$ identifies the predictor variables significantly related to the dependent variables' dimensions correlations (Taylor, 1990). I used CA as an expedient way of gaining a general impression of the dimensions that contributed to job stress, burnout and coping. Correlation coefficients that were $\leq .35$ represented low or weak correlations, $.36$ to $.67$ were modest or moderate correlations, and, $.68$ to 1.0 were high or strong correlations (Taylor, 1990).

Data were interpreted using the determination coefficient (r^2). It is the percentage of variance in the dependent variable that can be predicted from the independent variable (Weber & Lamb, 1970; Congolesi, Taylor & Rice, 1983; Mason, Lind & Marchal, 1983). The interpretation of the results is easier by determining a per cent value. Taylor (1990) argues that it is a more conservative measure of the relationship between two variables that many statisticians prefer. This study thus intended to contribute to literature on job stress, burnout and coping using the coefficient of determination technique. With the hindsight that the participants were humans whose behaviour can vary over time rendering it unpredictable, the coefficient of determination cut-off point was determined to be 4 per cent.

4.7.3 Research site preliminary analysis

At the commencement of the study it was critical to establish whether there were disparities among the colleges which could influence the outcome of the research. The three government-funded colleges showed some minor differences in the funding of the their programmes. College A was a polytechnic which offered teacher training programmes and a stand-alone technical education programme. In view of this, it received extra support for the purchase of consumables, library books and extra equipment basically directed towards the technical education programme from the Zimbabwe Development Education Fund (ZIMDEF). College B and College C only offered teacher education programmes. In the teacher education programmes, all three colleges were generally well funded and supported by the government. Each college used fees collected from students to supplement government budgetary support. This extra funding was used to purchase equipment and vehicles for use by the college staff on teaching practice programmes. However, owing to the fact that College A was a relatively new polytechnic established in 2001, classroom space was a serious constraint. There was a total lack of lecture theaters for mass lectures which forced the administration to put up temporary structures like tents to house the large numbers of students. Some lectures were also conducted under trees making the use of support electronic gadgets such as projectors to be impractical. College B and C were adequate in terms of infrastructure having been established during the colonial era in the 1970s.

It was therefore, the general conclusion that the issue of classroom space was a major difference which could seriously confound the findings of the study. Despite that all the three teacher education programmes were similarly and adequately funded by the

government, given the prevailing economic climate in Zimbabwe, it was however observed that all three colleges had major difficulties in timeously recruiting the right levels of staff particular in the Natural Sciences, where there was an acute shortage of qualified teachers. This forced some staff members to teach more classes in view of the fact that these colleges were now offering an additional Science Teacher Secondary programme in addition to their normal primary teacher programmes.

4.8 Qualitative Data Analysis Procedures

In-depth interview data were analysed using a thematic approach. This section details how I ensured that the qualitative data analysis and presentation process would ensure the trustworthiness of the study.

4.8.1 Interview Data Transcription and Coding

Thematic analysis was the most appropriate data analysis strategy for the in-depth interview data because it allows the processing of large quantities data, without the loss of the richness of the initial data (Braun & Clarke, 2006). Themes are focused responses which are grouped together in sets of data to explain a research problem (Braun & Clarke, 2006). Similarly to an approach used in the Foley (2013) study, I also used an inductive or ‘bottom up’ strategy in identifying themes. I did not attempt to impose my preconceptions; rather I allowed the data to shape my analysis, in line with the realist epistemology, which holds that it is not that language mirrors the world, but that speakers mirror the world (Putnam, 1977), and in this light, people use language to express knowledge and sense (Potter & Wetherell, 1987).

To arrive at a more comprehensive but unbiased understanding of the stress experiences as mirrored by the lecturers, I followed an approach used by Mkhize (2003) and enlisted the assistance of a female colleague in the data analysis and interpretation process. However, we initially worked independently of each other in the open and axial coding stages. This decision was taken to ensure that I got an independent audit of the emerging ideas and themes from my colleague, with whom I would then compare my analysis.

I first transcribed audio-recorded interview data into Microsoft Word format and then subjected the data to a coding process. In qualitative data analysis, coding is a technique used to break down data into analogous fragments which are then clustered to become theory which explains the unfolding phenomenon (Glaser, 1978 in Garst, Scheider & Baker, 2001). Codes therefore reflect characteristics of data which are of interest to the researcher, thus illuminating the initial process of giving meaning to the data (Charmaz, 2006).

Open coding is the breaking down of transcribed data according to words, phrases and sentences which converge into a concept (Garst, Scheider & Baker, 2001). I did this by selecting segments of text and highlighting the specific quotation to be coded (Bosit, 2003). This process involved intense immersion into the data by listening to and scanning the transcripts intensely, to house relevant excerpts or text from these transcripts. I identified key words and phrases/sentences. These were highlighted and supporting ideas underlined. Ideas and concepts, which were somehow connected and formed vague thematic frames, were identified.

I then did axial coding, which involved putting back together the data in new ways. Key phrases and words which had been highlighted were then grouped in order to develop data categories. I then numbered the identified codes to ensure that these codes could then be identified in the interview texts. This process allowed for the development of candidate themes. I then reviewed the themes to ensure their robustness. The review process allowed for the merging of potential themes and the discarding of those that lacked adequate supporting data. After deciding on the final list of themes, I then went back to the text data again to crosscheck that indeed the themes matched with relevant supporting data.

Through the thematic analysis, my intention was thus to gain access into the actual world of the lecturers, and not simply what they said about it (Silverman, 2011). Thematic analysis therefore enabled me to arrive at an in-depth comprehension of the lived job stress, burnout and coping experiences of the lecturers based on the realist epistemology. Similar to the Mkhize (2003) study, but with the hindsight that the qualitative data needed to speak to the quantitative data, the thematic analysis enabled me to maintain the richness of the data by using extracts of supporting lecturer vocalizations. After finalizing the themes and supporting data excerpts, the presentation of the findings commenced with the primary objective of narrating and explaining the lecturers' story vividly using thick rich description.

The next section focuses on issues of trustworthiness.

4.8.2 Issues of Trustworthiness

Generally, qualitative research tends to be judged differently from quantitative research. Despite that each qualitative study is done within a unique context (Ivankova & Stick, 2002), enhancing the generalizability of findings is still a concern for qualitative researchers (Creswell et al., 2003). In order to seek the study's legitimacy, it was imperative to use rigor in the process of data collection and analysis to increase the study's trustworthiness or credibility.

Trustworthiness in qualitative research imports the removal of researcher bias and the creation of confidence that the research process and the ensuing findings are above board. This is necessary to satisfy both the researcher and the users of the findings to have faith in the outcomes of the research (Cochran & Patton, 2002). In the light of this, the selection of the interviewees was done systematically. I used maximum variation sampling. This was to ensure that I had an array of divergent perspectives from the interviewees which reflected variation in their actual personal lived experiences, and not my own preconceived conclusions about the phenomenon under study. Maximum variation sampling ensured that I could derive a normal, rather than unusual understanding of the stress environment in the teachers' colleges. This was achieved by asking all interviewees similarly ordered questions so that I could generate legitimate accounts of their experiences.

Member checking was also done by involving the participants in the interpretation of my findings. This process was necessary so that I could arrive at a shared interpretation of the findings with the participants thereby maximising both the trustworthiness and credibility of the conclusions made from the data (Bhebhe, 2012).

Miles and Huberman (1994b) rightly observed that because of being the data collector and analyst, researcher bias is a reality which needs to be addressed in qualitative research. Mason (2002) also correctly warns that if unchecked, the researcher's voice can dominate the research process and consequently result in the imposition of the researcher's personal worldview. I therefore used member validation interviews with a smaller sample of selected interviewees.

Doyle (2007) correctly advises that credibility is further enhanced if a researcher gains the trust of the participants' throughout the member checking process. I returned transcripts to four lecturers and allowed them time to read my transcriptions over a comfortable period of time, after which I then conducted member check interviews which involved playing back the audio recording while the participants followed the recording using transcripts. While Creswell (2009, p.191) is perhaps correct to point out that "member checking is best done with polished interpreted pieces such as themes and patterns emerging from the data rather than the actual transcripts", I determined that any editing would possibly distort the participants' original voice in the interview audio recordings. In the light of this, I decided not to edit or condense the transcripts.

The member checking process was important for four reasons. First, I did not wish to place undue pressure on the participants. Second, the time difference between the issuance of the transcript and the second validation interview would not only help me to evaluate the trustworthiness of my findings (Doyle, 2007 cited in Birt et al., 2016), but also make the participants co-members of the research process. Third, this afforded me an opportunity to request the participants' permission to correct any grammatical errors, and

use brackets to indicate these where necessary. Fourth, I could clarify that their narratives were going to be used exactly as they appeared in the transcripts (Carlson, 2010).

Finally, the interpretation of the qualitative data was also enhanced by my collaborative analysis with a colleague. During the coding stages, we worked independently of each other before coming together to verify our individual findings, which we then categorized and developed into themes.

The next section outlines the ethical considerations adhered to in this study.

4.9 Ethical Considerations

Recognizing and upholding ethics (Abdelsalam, 2013) based on a set of standards to ensure the privileges of participants (Somekh & Lewin, 2011; McMillan & Schumacher, 2014) is a central tenet in research. In line with the ethical principles stated in the College of Humanities Masters/PhD Research Proposal and Ethical Policy at the University of KwaZulu-Natal, together with research standards and benchmarks as dictated by Emanuel, Wendler, Killen and Grady (2004), I detail the ethics adhered to in conducting this study.

4.9.1 Ethical clearance and negotiating entry

To begin with, I sought and obtained ethical clearance from the University of KwaZulu-Natal's Humanities and Social Sciences Research Ethics Committee, reference number HSS/0730/017D (See appendix 12 – Ethics Approval Certificate). I negotiated entry at the beginning of the enquiry by obtaining a letter from the University of KwaZulu-Natal's College of Humanities and Social Sciences explaining the research I

would undertake. Written permission to conduct research was sought. This was granted by the Permanent Secretary in the Ministry of Higher and Tertiary Education in Zimbabwe (see appendix 3). I sent individual principals of teachers' colleges emails requesting further permission for site visits. This request was supported with the permission letter from the Head of Ministry. The aim of the emails was to advise the principals of the motivation behind the study. I also attached a sample of the research instruments to clarify the nature of my study. I then telephoned each principal. This step was necessary to check that each of them had actually received the email, and to also verbalize my request formally. I also ensured that I informed the principals of the colleges of my presence each time I visited a college to carry out the study.

4.9.2 Informed consent

Adult lecturers in teachers' colleges were recruited. A critical issue that I addressed from the beginning was that of informed consent. Wasunna, Tegli and Ndebele (2014, p.57) view informed consent as "the practical application of the principle of autonomy and respect for persons, whereby the researcher demonstrates ... respect for each research participant as a person, who is capable of decision-making." Wasunna et al. (2014) contend that potential participants ought to have sufficient information of the investigation and its implications (including any potential harm) before accepting to voluntarily participate.

I first made myself known to the participants by introducing myself and addressing groups of participants in their colleges. At these briefings, I disclosed to the participants the nature and reason for my study and what benefits would accrue to them

from their participation. I gave them opportunities to ask questions and get clarification about my intended study and the instruments they would be asked to complete. The briefings were likewise intended to show regard for the participants, who were verbally educated that they had the independence to pick whether to take an interest or not in my study.

To create familiarity and trust between the participants and myself, I used both IsiNdebele and ChiShona to communicate with the participants on issues that they could not explore fully in English. I used the indigenous languages spoken by the participants to some degree to communicate information in a socially and etymologically suitable manner (Emanuel et al., 2004), and also to acknowledge that to get “... meaningful informed consent, researchers have to understand the cultures and beliefs of the communities from which they recruit research participants” (Mkhize, cited in Wasunna, Tegli & Ndebele, 2014, p.57).

After the verbal briefings, I gave the participants an informed consent form to peruse (refer to appendix 13 – Informed Consent – Participant). This form included a description of participants’ rights at each point in the study, including the freedom to refuse to participate or withdraw (Emanuel et al., 2004). I gave my contact details and those of my supervisor at the University of KwaZulu-Natal. The intention was that the participants could have somebody to contact in the event that they had inquiries regarding the study, or on the off chance that they had a worry about a specific issue identified with it.

Participants were given an option to fill in the form, or affirm their voluntary participation by completing only the questionnaires. This safety measure was taken after

many of the participants indicated that they felt discomforted by either writing their names or signing the forms for both the quantitative phase involving only the questionnaires, and the interview phase, which would be done at a later stage in the study, with fewer participants in each college. Furthermore, this safety measure guaranteed the participants that the information they gave was confidential.

4.9.3 Confidentiality and Anonymity

Confidentiality and anonymity is a principle that assures participants that what they disclose in private is protected and that they have the right not to allow the disclosure of findings that they believe may hurt them (Merriam, 2009; Somekh & Lewin, 2011). To maximize confidentiality, I assured the participants in writing that all confidential communications, such as personal records, interview recordings and questionnaire returns, would be fully protected and not disclosed except for academic use. All recordings of interviews were to be kept in a secure locker in my office. All participants were given nom de plumes to protect their personalities and data that they gave. Furthermore, all records obtained during the course of the study would be shredded after the thesis defense and approval.

4.9.4 Social Value and Beneficence

In accordance with benchmarks proposed by Emanuel et al. (2004), I educated the participants that the study was basically a collaborative partnership in which they were the primary beneficiaries. The college lecturers derived ‘inclusion benefit’ through active participation. They would be the first to be informed of the outcome of the research

through a summary report to the Ministry of Higher and Tertiary Education, Science and Technology Development. I ensured justice by selecting interviewees who were information-rich and suited the demographic criteria set out in my maximal variation technique in terms of sex and work experience, among other variables.

Finally, the participants' wellbeing was also taken into account by arranging with each college to offer a room at the campus clinic that would be used to counsel any lecturers who would need helping during and after the interview process. The college clinics all have manned by qualified State Registered Nurses (SRNs) and a visiting medical doctor. The clinics are within walking distance of the lecture rooms which makes them easily accessible. During the course of the interviews, none of the lecturers felt the need to seek any counseling services. The researcher only got confirmation from the nurses that those lecturers who visited the clinic went there to get their normal prescriptions or to have minor ailment attended to. However, it is important to note that seeking professional counseling help, especially from a stranger, is generally not a practice associated with this sample of lecturers from a collectivistic culture. This may in part explain why there were no counseling visits to the clinics on account that the lecturers would perhaps have preferred to talk with their families or in-groups.

4.10 Summary and Transition

This chapter outlined and justified mixed methods research methodology adopted in this study. Pragmatism was used as the fundamental rationality driving the selected research design. Key issues identified and legitimized included sampling procedures and instrumentation. The chapter concluded by detailing ethical considerations followed in

conducting the study. The following part, Chapter 5, centres on the quantitative phase results.

CHAPTER 5

QUANTITATIVE PHASE RESULTS AND FINDINGS

5.1 Introduction

The reason for this investigation was to fill a gap in research by explaining how personality predicts lecturer job stress. This chapter focuses on the quantitative findings and discussion of research sub-questions 1.4.2.1 (a) to (c) of my study. I begin by profiling my sample and then present the findings using the dependent variables (stress, burnout, and coping) as the main headings for the subsequent discussions.

5.2 Demographics

Two hundred and twenty-four (224) lecturers initially volunteered to take an interest in completing the measures. Of this figure, 13 (5.8%) of the questionnaires were regarded deficient and were rejected, leaving a legitimate sample of 211, which accounted for a 78.1% return rate. A slight majority of 53.1% of the participants were male. The age profile demonstrated a close typical dissemination, with 113 members in the 41-50 age category, which mirrored that the lecturers in the sample were generally middle-aged. The majority of these lecturers were married, as is shown in table 4.

Table 4

Quantitative Phase Participant Profile

N = 211				
Variable	Items	Frequency	%	
Age	Below 30	2	.9	
	31-40	21	9.6	
	41-50	113	53.6	
	51-60	71	33.7	
	61-65	4	1.9	
Sex	Male	112	53.1	
	Female	99	46.9	
Marital status	Single	37	17.5	
	Married	141	66.8	
	Divorced	8	3.8	
	Widowed	16	7.6	
	Separated	9	4.3	
Qualifications	Basic Education			
	‘O’ Level	102	48.3	
	‘A’ Level	109	51.7	
Designation	Professional			
	CE/DE	2	.9	
	First degree +CE/DE/GradCE	109	51.6	
	Senior degree	100	47.4	
	Lecturer	27	12.8	
	Senior lecturer	73	34.6	
Experience	Principal lecturer	111	52.6	
	2-4 years	9	4.3	
	+4-6 years	46	21.8	
	+6 years	156	73.9	
Post of responsibility	Head of Subject	24	11.4	
	Lecturer in Charge	9	4.3	
	Head of Department	7	3.3	
	None	171	81.0	
Disability	Yes	3	1.4	
	No	208	98.6	
Disability known	Yes	1	.5	
	No	2	.9	
	Not applicable	208	98.6	

As seen in table 4 the majority of lecturers did not hold any posts of special responsibility. Heads of Subject made 11.4 per cent, Lecturers’ in Charge, 4.3 per cent, and Heads of Department 3.3 per cent. Furthermore, the majority of lecturers were in the senior to principal lecturer grades, implying that they had six or more years of teaching

experience. However, the majority of these lecturers had only a first degree and a teaching qualification, while 47.4 per cent of the sample had senior degrees at master's level. Only 1.4 per cent of the lecturers indicated living with a disability. However, only one lecturer expressed that the disability was known.

The next section presents and discusses the three quantitative research questions.

5.3 Relationship between Personality and Stress

5.3.1 Research Question 1a

What is the relationship between personality as measured by the NEO-PI-R and job stress as measured by the Occupational Stress Survey among teachers' college lecturers in Zimbabwe?

To respond to this question, I entered the personality dimensions in the five-factor model simultaneously into the MLR model with job stress as the dependent variable.

The fitted classical MLR model was assessed for statistical assumptions. Figure 6 as seen in appendix 15 shows the standard P-P plot and histogram of standardized residuals for the fitted model. Results in figure 6 show that the normal P-P plot does not deviate much from a straight line. The data is approximately normal as shown by the histogram (skewness coefficient = -.007, kurtosis coefficient = .251). The p-value for the Kolmogorov-Smirnov (p-value = .2>.05) test statistic is highly significant at alpha .05. The conclusion is that in the fitted model there is no severe non-normality of standardized residuals. Figure 7 in appendix 15 shows a scatter plot of the standardized residuals

versus the standardized predicted values. Examination of figure 7 does not reveal any evidence of a distinguishable pattern in the scatter plot. Therefore, the assumption of constant variance is satisfied. The Durbin-Watson value stood at 2.002. This suggests that the job stress data satisfies the standardized residuals assumption of independence.

To check the existence of influential observations in the data, Cook's distances for the prediction model were examined (Refer to figure 8 as seen in appendix 15). In the fitted model, the Cook's distance values of the observations in the job stress data set are less than 1. This confirms that none of the observations influenced the parameter estimates in the fitted MLR model. Two checks, namely, Tolerance and VIF values for multicollinearity, are in table 5.

Table 5

Multiple linear regression model for job stress

Model	Unstandardized coefficients		Standardized coefficients	T	p-value	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	25.652	1.277		20.092	.000		
Extraversion	-.128	.035	-.256	-3.632	.000	.882	1.134
Agreeableness	-.075	.035	-.173	-2.186	.030	.704	1.421
Conscientiousness	.007	.037	.014	.183	.855	.703	1.422
Neuroticism	-.011	.035	-.022	-.309	.758	.850	1.177
Openness to Experience	.088	.037	.180	2.380	.018	.764	1.309
Regression Equation Statistics							
F	4.586						
P-value of the F-Statistic	.001						
R Square	.101						
a. Dependent Variable: Job Stress							

The tolerance values are higher than .1 and the VIF values are below 10. The analysis shows that no predictor variables influence each other. The statistical

significance and regression coefficients were examined as seen in table 5. The simultaneous MLR analysis is statistically significant at the .05 level (p -value of the F-Statistic = .001 < .05). This justifies that the dependent variable (job stress) is related to at least one of the predictor variables among agreeableness, openness to experience, neuroticism, extraversion, and conscientiousness.

Three predictor variables showed significance at the .05 level. These are extraversion ($B = -.128$, $Beta = -.256$, p -value = .000 < .05), agreeableness ($B = -.075$, $Beta = -.173$, p -value = .030 < .05), and openness to experience ($B = .088$, $Beta = .180$, p -value = .018 < .05) as seen in table 5). The variables extraversion and agreeableness have a negative relationship with job stress. This implies that lecturers with high extraversion and agreeableness experience lower levels of work stress, while those with low extraversion and agreeableness experience higher levels of work stress. Openness to experience has a positive relationship with job stress. This means that lecturers high on this trait also tend to experience high levels of job stress and those low on this trait experience lower levels of job stress.

Figure 9 as seen in appendix 15 shows the partial regression plots of extraversion, agreeableness and openness to experience relative to job stress. Figure 9 reflects points following a straight line sloping to the right for extraversion and agreeableness. This suggests a weak negative relationship or inverse relationship, with greater dispersion of the predictive variables, extraversion and agreeableness with the dependent variable, job stress. For openness to experience, the scatter plot demonstrates points following loosely a straight line sloping down to the left as seen in figure 9. This implies a weak positive

relationship or direct relationship, with greater dispersion of the predictive variable, openness to experience with the dependent variable, job stress.

Based on the relative strength of the Beta coefficients, the rank order of the significant predictive variables relative to the dependent variable, job stress is: (1) extraversion (-.256), (2) openness to experience (.180), (3) agreeableness (-.173). Conscientiousness (Beta = .014, p-value = .855>.05), and neuroticism (Beta = -.022, p-value = .758>.05) were not shown to have a significant impact on job stress at alpha .05.

Figure 10 as seen in appendix 15 shows the partial regression plots of conscientiousness and neuroticism relative to job stress. The scatter plot as seen in figure 10 displays points following loosely an almost horizontal line for conscientiousness and neuroticism. The points show a weak discernible pattern with greater dispersion of the predictive variables, conscientiousness and neuroticism with the dependent variable, job stress. This implies that job stress has no relationship with conscientiousness and neuroticism.

The regression equation characteristics of job stress indicate an R Square of 10.1 per cent. The conclusion drawn is that extraversion, agreeableness and openness to experience, combine to explain 10.1 per cent of the variation in job stress. This suggests that with regard to job stress, the dominant personality traits of the Zimbabwean teachers' college lecturer sample are restricted to these three traits. These three traits were thus extracted for further analysis using CA.

5.3.2 Research Question 1b

To what extent do identified traits as measured by the NEO-PI-R predict job-stress experiences of teachers' college lecturers in Zimbabwe as measured by the Occupational Stress Survey?

Since the MLR in Table 5 indicates extraversion, agreeableness and openness to experience as influential traits evident in this sample, I then established the extent to which these traits predicted dominant job stress dimensions using CA. The job stress dimensions were those captured in the adapted Occupational Stress Survey. The correlation coefficients are in Table 6.

Table 6

Job stress dimensions correlation analysis

Job Stress Dimensions	Extraversion			Agreeableness			Openness to Experience		
	r	r ²	p-value	r	r ²	p-value	r	r ²	p-value
Demands	-.215	.046	.002	-.106	.026	.125	-.151	.023	.028
Control	-.208	.043	.002	-.020	.000	.776	.071	.005	.307
Peer support	-.122	.014	.077	-.035	.001	.614	.071	.005	.134
Managerial support	-.116	.013	.093	-.154	.024	.095	.104	.011	.134
Relationships	-.098	.009	.157	-.082	.007	.237	.039	.002	.577
Role clarity	-.099	.009	.153	.054	.003	.438	.039	.002	.574
Management of change	-.121	.015	.080	-.146	.021	.034	-.034	.001	.619
Overall perception of stress	-.141	.020	.041	-.007	.000	.917	-.054	.003	.434
Main stress factors	-.109	.012	.113	-.115	.013	.096	.044	.002	.522

Table 6 shows that extraversion has no correlation with six stress dimensions; peer support, managerial support, relationships, role clarity, management of change, and

major stress factors relative to the standard alpha level of .05. Extraversion has a significant but weak and negative correlation with three stress dimensions: demands ($r = -.215$, $p = .002$), control ($r = -.208$, $p = .002$), and overall perception of stress ($r = -.141$, $p = .041$). This means that lecturers who are high in extraversion are likely to experience very low levels of job demands, control and overall perception of stress in the college environment. Extraversion explains 4.6 per cent of the variation in the dependent variable demands. It also explains 4.3 per cent in the dependent variable control, and 2 per cent in the dependent variable overall perception of stress. Overall perception of stress is not practically significant, as it indicates that it has only 2 per cent overlap with extraversion.

Among all stress dimensions, agreeableness has a weak and negative correlation with management of change ($r = -.146$, $p = .034$) relative to the standard alpha level of .05. Lecturers who are high on agreeableness will tend to experience lower levels of the job stress variable management of change. However, based on the coefficient of determination, the predictor variable agreeableness explains 2.1 per cent in the dependent variable management of change. On the strength of the coefficient of determination, the predictor variable agreeableness explains a practically insignificant variation per cent in the dependent variable management of change.

From the three predictor variables, extraversion, agreeableness and openness to experience, only openness to experience has a weak and negative correlation with demands ($r = -.151$, $p = .028$) relative to the standard alpha level of .05. This implies that lecturers who score high in openness to experience are likely to be subjected to less stress associated with job demands. However, based on the coefficient of determination, the

predictor variable openness to experience seems to explain a practically insignificant variation of 2.8 per cent in the dependent variable demands.

Given the findings of this study, it can be inferred that extraversion is the main predictor variable with a significant relation with two job stress dimensions, demands, and control.

The next section of the discussion focuses on the relationship between personality traits and burnout.

5.4. Relationship between Personality and Burnout

5.4.1 Research Question 2a

What is the relationship between personality as measured by the NEO-PI-R and burnout as measured by the Oldenberg Burnout Inventory among teachers' college lecturers in Zimbabwe?

To respond to this question, I entered the personality dimensions into the MLR model with burnout as the dependent variable. The fitted model was assessed for statistical assumptions.

Figure 11 in appendix 15 shows the normal P-P plot and histogram of standardized residuals for the fitted model. The normal P-P plot as seen in figure 11 does not seem to deviate much from a straight line, suggesting that the assumption of normality is not violated. The data is almost normal as evidenced by the histogram (skewness coefficient = -.453, kurtosis coefficient = 1.374). The Kolmogorov-Smirnov test for the fitted model was performed on standardized residuals. The p-value for the

Kolmogorov-Smirnov ($p\text{-value} = .2 > .05$) test statistic for the standardized residuals is highly significant at alpha .05. This implies that the normality assumption is fulfilled.

Figure 12 as seen in appendix 15 presents the scatter plot of the standardized residuals versus the fitted model's standardized predicted values. Figure 12 does not show a systematic pattern. Therefore, the assumption of constant variance is fulfilled. The independence test result of Durbin-Watson in the fitted model is 1.872 and is close to 2. This suggests that the assumptions of the residuals are satisfied.

The Cook's distance plot is presented in figure 13 as seen in appendix 15 to check the existence of influential observations in the data under the fitted MLR model. The Cook's distance plot reveals that each of the observations is less than 1. This implies that the parameter estimates in the fitted MLR model were not influenced by any observations.

Table 7 shows the fitted MLR model for predicting burnout. As shown in table 7 Tolerance and VIF values were calculated among the predictive variables. Tolerance values are all higher than 0.1 and VIF values are all lower than 10. This suggests that the predictive variables are unrelated. The simultaneous MLR analysis is statistically significant at the .05 level ($p\text{-value of the F-Statistic} = .001 < .05$) as seen in table 7. This means that the dependent variable burnout is related to at least one of the predictive variables.

Table 7

Multiple linear regression model for burnout

Model	Unstandardized coefficients		Standardized coefficients		T	p-value	Collinearity statistics	
	B	Std. Error	Beta				Tolerance	VIF
(Constant)	6.202	.346			17.917	.000		
Extraversion	-.026	.010	-.194		-2.748	.007	.882	1.134
Agreeableness	.019	.009	.157		1.982	.049	.704	1.421
Conscientiousness	-.020	.010	-.156		-1.967	.050	.703	1.422
Neuroticism	-.022	.010	-.169		-2.343	.020	.850	1.177
Openness to experience	-.001	.010	-.007		-.087	.931	.764	1.309
Regression Equation Statistics								
F					4.466			
P-value of the F-Statistic					.001			
R Square					.098			
a. Dependent Variable: Burnout								

Four predictive variables as seen in table 7 showed significance at alpha .05. These are extraversion (B= -.026, Beta= -.194, p-value= .007<.05), agreeableness (B= .019, Beta= .157, p-value= .049), conscientiousness (B= -.020, Beta= -.156, p-value= .050), and neuroticism (B= -.022, Beta= -.169, p-value= .020<.05). Therefore, burnout is negatively related to extraversion, conscientiousness and neuroticism. It is also positively related to agreeableness.

The partial regression plots of extraversion, conscientiousness, neuroticism and agreeableness are in figure 14 of appendix 15. The scatter plot as seen in figure 14 reflects points following loosely a straight line sloping down to the right for extraversion, conscientiousness and neuroticism. This suggests a weak negative relationship with greater dispersion of the predictive variables, extraversion, conscientiousness and neuroticism with the dependent variable, burnout. The scatter plot demonstrates points following loosely a straight line slightly sloping down to the left for agreeableness. This

implies a negligible positive relationship with greater dispersion of the predictive variable, agreeableness, with the dependent variable, burnout. Based on the relative strength of the Beta coefficients, the rank order of the significant predictive variables relative to the dependent variable, burnout is: (1) extraversion (-.194), (2) neuroticism (-.169), (3) agreeableness (.157), and (4) conscientiousness (-.156).

The scatter plot as seen in figure 15 of appendix 15 displays points following loosely an almost horizontal straight line for openness to experience. The points show greater dispersion. The discernible pattern depicted in figure 15 is very weak. Thus, there is little or no relationship between openness to experience and burnout.

The regression model summary as seen in table 7 shows an R Square of .098. The conclusion drawn is that extraversion, conscientiousness, neuroticism and agreeableness explain 9.8 per cent of the variation in burnout. This suggests that with regard to burnout, the dominant personality traits of the Zimbabwean teachers' college lecturer sample were restricted to these four traits. These four traits were thus extracted for further analysis using CA.

5.4.2 Research Question 2b

To what extent do identified traits as measured by the NEO-PI-R predict burnout experiences of teachers' college lecturers in Zimbabwe as measured by the Oldenburg Burnout Inventory?

The fitted MLR model for predicting burnout as seen in Table 7 shows that extraversion, neuroticism, agreeableness and conscientiousness are the dominant traits

exhibited by the lecturer sample. It was important to establish the relationship between personality and these four predictive variables and the dependent variable, burnout, in order to identify the significant burnout dimensions. Correlation analysis was used to determine the shared relationship between these two variable sets (i.e. personality and burnout). The correlations are in table 8.

Table 8

Burnout dimensions correlation analysis

Burnout dimensions	Extraversion			Neuroticism			Agreeableness			Conscientiousness		
	r	r ²	p-value	r	r ²	p-value	r	r ²	p-value	r	r ²	p-value
Disengagement	-.134	.116	.052	-.112	.013	.104	-.021	.000	.759	-.052	.003	.454
Exhaustion	-.217	.047	.002	-.292	.085	.000	.006	.000	.937	-.214	.046	.002

Table 8 reveals that the four personality traits, extraversion, neuroticism, agreeableness and conscientiousness do not show any significant correlation with disengagement at alpha .05. However, extraversion ($r = -.217$, $p = .047$), neuroticism ($r = -.292$, $p = .000$) and conscientiousness ($r = -.214$, $p = .002$) have a significant negative weak correlation with exhaustion at alpha .05. This suggests that lecturers who have high extraversion, neuroticism and conscientiousness scores are likely to experience low levels of exhaustion.

The coefficient of determination indicates that neuroticism explains a significant variation of 8.5 percent in the dependent variable exhaustion, while the variation of 4.7 and 4.6 percent in the dependent variable exhaustion is explained by extraversion and conscientiousness. On the other hand, agreeableness explains an insignificant zero per

cent variation in the dependent variable exhaustion. The findings suggest that, from the four dominant traits identified in the MLR analysis, neuroticism, extraversion and conscientiousness emerge as the traits which significantly explain exhaustion.

Having examined the relationship between identified personality traits and burnout, the next section discusses the relationship between personality and coping.

5.5 Relationship between Personality and Coping

5.5.1 Research Question 3a

What is the relationship between personality as measured by the NEO-PI-R and coping as measured by the COPE-DV among teachers' college lecturers in Zimbabwe?

To answer this question, a simultaneously multiple linear regression model was constructed that considered the coping data. The regression model was evaluated for statistical assumptions. Figure 16 as seen in appendix 15 shows the normal P-P plot and histogram of the standardized residuals.

Figure 16 portrays a normality pattern of standardized residuals as evidenced by a normal P-P plot on a straight line. The histogram shows the normal distribution of standardized residuals (coefficient of skewness = $-.119$, coefficient of kurtosis = $.407$). The Kolmogorov-Smirnov test was carried out on standardized residuals. At the level of significance of $.05$, the p-value for the Kolmogorov-Smirnov test statistics (p-value = $.20 > .05$) is highly significant. Therefore, the assumption of normality is satisfied. The scatter plot of standardized residuals versus standardized predicted values is shown in

figure 17 of appendix 15. No distinguishable pattern is shown in the scatter plot (figure 17). Therefore, the assumption of constant variance is satisfied.

The Durbin-Watson independence test in the built model was calculated. The Durbin-Watson value was 1.712, which is close to 2, implying that the residuals assumption of independence is satisfied. Cook's distance was used to check the existence of influential observations in the data for the constructed model. The Cook's distance plot is presented in figure 18 of appendix 15 for the constructed regression model. The Cook's distance values in the data set as seen in figure 18 are less than 1. This indicates that none of the observations influenced the parameter estimates of the constructed model. Table 9 presents the constructed regression model for predicting coping. Tolerance and VIF values were calculated among the predictive variables. Tolerance values are all higher than .1 and VIF values are all lower than 10. This shows that among the predictive variables there is no multicollinearity. The simultaneous MLR analysis is statistically significant at the .05 level (p-value of the F-Statistic= 0.009<.05). This means that the dependent variable, coping, is related to at least one of the predictive variables.

Table 9

Multiple linear regression model for coping

Model	Unstandardized coefficients		Standardized coefficients			Collinearity statistics	
	B	Std. error	Beta	T	p-value	Tolerance	VIF
(Constant)	33.902	2.200		15.408	.000		
Extraversion	.055	.061	.065	.901	.369	.882	1.134
Agreeableness	-.037	.059	-.050	-.622	.535	.704	1.421
Conscientiousness	.143	.064	.178	2.225	.027	.703	1.422
Neuroticism	-.140	.061	-.168	-2.304	.022	.850	1.177
Openness to experience	.142	.063	.172	2.233	.027	.764	1.309
Regression Equation Statistics							
F	3.179						
P-value of the F-Statistic	.009						
R Square	.072						
a .Dependent Variable: Coping							

Three predictive variables showed significance at the .05 level. These are conscientiousness ($B = .143$, $Beta = .178$, $p\text{-value} = .027 < .05$), neuroticism ($B = -.140$, $Beta = -.168$, $p\text{-value} = .022 < .05$), and openness to experience ($B = .142$, $Beta = .172$, $p\text{-value} = .027 < .05$). Coping is positively related to conscientiousness and openness to experience, but is negatively related to neuroticism.

The scatter plot as seen in figure 19 in appendix 15 reflects points following loosely a straight line sloping down to the left for conscientiousness and openness to experience. This suggests a weak positive relationship with greater dispersion of the predictive variables, conscientiousness and openness to experience with the dependent variable, coping. The scatter plot as seen in figure 19 demonstrates points following loosely a straight line, slightly sloping down to the right for neuroticism. This implies a negligible negative relationship with greater dispersion of the predictive variable, neuroticism, with the dependent variable, coping. Based on the relative strength of the

Beta coefficients as seen in table 9, the rank order of the significant predictive variables relative to the dependent variable, coping is: (1) conscientiousness (.178), (2) openness to experience (.172), (3), neuroticism (-.168). Extraversion ($B = .055$, $Beta = .065$, $p\text{-value} = .369 > .05$) and agreeableness ($B = -.037$, $Beta = -.050$, $p\text{-value} = .535 > .05$), do not have a statistically significant impact on coping.

Figure 20 as seen in appendix 15 displays the partial regression plots of extraversion and agreeableness. The scatter plot in figure 20 displays points following loosely a straight line slightly sloping down to the left for extraversion and agreeableness. As seen in figure 20, the points show a weak discernible pattern with greater dispersion of the predictive variables, extraversion and agreeableness with the dependent variable, coping. Thus, coping has no relationship with extraversion and agreeableness.

Since the summary of the regression model as seen in table 9 shows an R Square of 0.072, the conclusion drawn is that the predictive variables, conscientiousness, neuroticism and openness to experience explain 7.2% of the variation in coping. This suggests that the dominant personality traits of the Zimbabwean teachers' college lecturer sample were restricted to these three traits. These three traits were thus extracted for CA analysis.

5.5.2 Research Question 3b

To what extent do identified traits as measured by the NEO-PI-R predict coping experiences of teachers' college lecturers in Zimbabwe as measured by the COPE-DV?

Data in table 9, suggests that conscientiousness, neuroticism and openness to experience were the dominant personality traits exhibited by the lecturer sample. The relationship between these three predictive variables and coping dimensions was then established to determine the dominant coping dimensions preferred by the lecturers. Correlation analysis was used to determine the shared relationship between the two variable sets (i.e. personality and coping). The coping dimensions levels were those captured in the COPE-DV and are shown in table 10.

Table 10

Coping dimensions correlation analysis

Coping Dimensions	Conscientiousness			Neuroticism			Openness to Experience		
	r	r ²	p-value	r	r ²	p-value	r	r ²	p-value
Positive reinterpretation and growth	.321	.103	.000	.205	.042	.003	.241	.058	.000
Mental disengagement	-.159	.025	.021	.162	.000	.019	.120	.014	.091
Focus on and venting of emotions	-.126	.016	.067	-.380	.004	.000	.033	.001	.636
Use of instrumental social support	.223	.050	.001	.148	.002	.031	.997	.994	.158
Active coping	.377	.142	.000	.331	.110	.000	.333	.110	.000
Denial	-.204	.042	.003	-.256	.066	.000	-.076	.006	.272
Religious coping	.152	.023	.027	.027	.001	.693	.145	.021	.035
Humour	.073	.005	.290	.065	.084	.347	.210	.044	.002
Behavioral disengagement	-.198	.039	.004	-.395	.156	.000	-.021	.000	.003
Restraint	.263	.069	.000	-.035	.001	.610	.093	.001	.177
Use of social emotional support	-.020	.000	.771	-.083	.007	.229	-.035	.001	.612
Substance use	-.097	.009	.162	-.232	.026	.001	-.016	.000	.815
Acceptance	.136	.018	.049	.009	.000	.896	.049	.002	.490
Suppression of competing activities	.091	.008	.005	.021	.000	.760	.137	.019	.047
Planning	.344	.118	.000	.275	.076	.000	.288	.083	.000

Table 10 reveals that conscientiousness has no correlation with focusing on and venting emotions, using social emotional support, humor, and substance use. This implies

that lecturers in this sample who exhibit this trait do not opt for the four coping strategies in the job stress environment of the teachers' colleges.

However, conscientiousness reveals a weak positive correlation with four problem-focused coping strategies; use of instrumental social support ($r = .223$, $p = -.001$), restraint ($r = .263$, $p = -.000$), suppression of competing activities ($r = .091$, $p = -.005$), and planning ($r = .344$, $p = -.000$) at alpha .05. Lecturers who are high on conscientiousness are thus more likely to frequently resort to these problem-focused coping strategies than those with low conscientiousness. In rank order, the coefficient of determination indicates that conscientiousness explains a significant 11.8, 6.9, and 5 per cent variation in the dependent variables planning, restraint, and use of instrumental social support respectively. Conscientiousness, however explains an insignificant .8 per cent variation in the dependent variable suppression of competing activities. The results reveal that lectures high in conscientiousness are likely to use more planning, restraint, and instrumental social support as coping strategies, than those with low scores. Furthermore, the suppression of competing activities is considered to be the least preferred coping strategy.

Conscientiousness also shows a weak positive correlation with three emotion-focused coping strategies; positive reinterpretation and growth ($r = .321$, $p = -.000$), religious coping ($r = .152$, $p = -.027$) and acceptance ($r = .136$, $p = -.049$). In rank order, the percentage of variation explained in the three dependent variables is 10.3, 2.3 and 1.8 respectively. Lecturers who are high on conscientiousness are likely to employ positive reinterpretation and growth more often than those who are low in conscientiousness. The

results also show that religious coping and acceptance are not generally used by this sample of lecturers.

Conscientiousness also shows a weak negative correlation with three potentially maladaptive emotion-focused coping strategies; mental disengagement ($r = -.159$, $p = .021$), denial ($r = -.204$, $p = .000$), and behavioral disengagement ($r = -.198$, $p = .039$). This implies that lecturers who are highly conscientious opt less frequently for these potentially maladaptive emotion-focused coping strategies. In rank order, the coefficient of determination indicates that conscientiousness explains a significant 4.2 per cent variation in the dependent variable denial and an insignificant 3.9 and 2.1 per cent variation in the dependent variables behavioral disengagement and mental disengagement. This reveals that of the less frequently used potentially maladaptive emotion-focused coping strategies, the lecturers opt more for denial which is operationalized as the refusal to believe that the stressor exists (Carver, et al., 1989). For lecturers high in conscientiousness, it is plausible to conclude that because of being well organized, the lecturers will use this coping strategy less, as they have a more or less pragmatic approach to stress situations in their college environments.

Table 10 shows that neuroticism has no correlation with six coping dimensions; religious coping, humour, restraint, use of social emotional support, acceptance, and suppression of competing activities. Neuroticism, however, has a low or weak positive correlation with three strategies: use of instrumental social support ($r = .148$, $p = .031$), active coping ($r = .331$, $p = .000$), and planning ($r = .275$, $p = .000$), relative to the standard alpha level of .05. In rank order, neuroticism explains a significant 11 per cent variation in the dependent variable active coping and 7.6 per cent variation in planning,

while use of instrumental social support explains an insignificant .2 per cent variation. Therefore, lecturers who are high in neuroticism are likely to use more active coping and planning to deal with stressful situations in their colleges than those who are low in this trait.

Neuroticism also has a low or weak positive correlation with positive reinterpretation and growth ($r = .205$, $p = .003$) which is an emotion focused coping strategy, and mental disengagement ($r = .162$, $p = .019$), which is a potentially maladaptive emotion-focused coping strategy. Lecturers high in neuroticism are likely to use less of these coping strategies than those with low scores. It can be seen that neuroticism explains a significant 4.2 per cent variation in the dependent variable positive reinterpretation and growth, while the variation explained for mental disengagement is zero. This implies that of these two coping strategies, highly neurotic lecturers are likely to use more positive reinterpretation and growth to cope with stress. In addition, lecturers high in neuroticism will opt less for mental disengagement as a preferred coping strategy.

Neuroticism has a negative correlation with four potentially maladaptive emotion-focused coping strategies; denial, substance use, venting emotions, and behavioural disengagement. First, neuroticism shows a low or weak negative correlation with denial ($r = -.256$, $p = .000$), and substance use ($r = -.232$, $p = .001$) at alpha .05. Of these two coping strategies, neuroticism explains a moderate per cent variation in the dependent variable denial (6.6%) than in substance use (2.6%). This suggests that lecturers who score high on neuroticism are more likely to use denial as a coping strategy than to use substances. Second, neuroticism has a moderate negative correlation with focus on and venting of emotions ($r = -.380$, $p = .000$), and behavioural disengagement ($r = -.395$, $p =$

.000) at alpha .05. Neuroticism accounts for a 15.6 per cent variation in behavioural disengagement, but a virtually insignificant .4 per cent variation in venting of emotions. Highly neurotic lecturers are likely to use behavioural disengagement less frequently than those who are low in this trait.

Table 10 reveals that openness to experience has no correlation with ten of the fifteen coping dimensions; mental disengagement, focus on and venting of emotions, use of instrumental social support, denial, religious coping, humour, restraint, use of social emotional support, substance use, and acceptance.

Openness to experience, however, has a weak positive correlation with three emotion-focused coping strategies; positive reinterpretation and growth ($r = .241$, $p = .000$), religious coping ($r = .145$, $p = .035$), and humor ($r = .210$, $p = .002$) at alpha.05. This implies that lecturers who score high in openness to experience are also likely to use these emotion-focused coping strategies more often than those whose scores are low. In rank order, openness to experience accounts for 5.8, 4.4 and 2.1 per cent variation in the dependent variables positive reinterpretation and growth, humour, and religious coping respectively. Therefore, lecturers who are high in open to experience are likely to use more positive reinterpretation and growth, and humor as coping strategies, while those who are low in openness to experience are also likely to use less positive reinterpretation and growth, and humor to cope with stress.

Openness to experience also has a weak positive correlation with three problem-focused coping strategies; active coping ($r = .333$, $p = .000$), suppression of competing activities ($r = .137$, $p = .000$), and planning ($r = .288$, $p = .000$) relative to the standard alpha level of .05. Therefore, lecturers who are high in openness to experience are more

likely to use these coping strategies than those with low scores. In rank order, openness to experience explains a significant 11 and 8.3 per cent variation in the dependent variables active coping, and planning respectively. However, it explains an insignificant 1.9 per cent variation in suppression of competing activities. In the work context, this means that highly open-minded lecturers are likely to resort more to the use of active coping, planning and less suppression of competing activities. Those who are low in openness to experience are also likely to use less active coping and planning to deal with stress.

Table 10 also reveals that openness to experience has a weak correlation with behavioural disengagement ($r = -.021$, $p = .003$), which is a potentially maladaptive emotion-focused coping strategy. However, openness to experience accounts for zero per cent variation in the dependent variable behavioural disengagement. This implies that this coping strategy is not often used.

It is also important to note that as seen in table 10, openness to experience shows no correlation with the rest of the coping dimensions.

5.4 Conclusions

Four main conclusions are drawn from the findings. First, the predictor variables, extraversion, agreeableness and openness to experience explain job stress. However, from the nine (9) job stress dimensions, extraversion emerges as the main predictor variable which has a significant negative correlation with only two job stress dimensions; demands, and control. The conclusion drawn is that in carrying out their lecturing duties, lecturers who are high in extraversion are likely to experience very low levels of job

demands and control, while those who are low in extraversion are likely to experience high levels of job demands and control as stressors. On the other hand, it is important to note that conscientiousness and neuroticism showed no relationship with any of the stress dimensions in this lecturer sample.

Second, with regard to burnout, the predictive variables, extraversion, conscientiousness, neuroticism and agreeableness explain only one dimension, exhaustion. The conclusion drawn is that there is a significant negative weak correlation with exhaustion, which suggests that lecturers who score highly on extraversion, neuroticism and conscientiousness are likely to experience low levels of exhaustion, while those who score low on this trait are likely to experience high levels of exhaustion.

Third, the coping results show that conscientiousness explains a significant variation in a number of dependent variables. Conscientiousness showed a positive relationship with three problem-focused coping strategies namely, use of instrumental social support, restraint, and planning. Lecturers high in conscientiousness will more likely opt for these three problem-focused coping strategies, and those low on this trait will use less of the three coping strategies. Conscientiousness showed a positive relationship with positive reinterpretation and growth, an emotion-focused coping strategy. This trait also showed a positive relationship with denial, a potentially maladaptive emotion-focused coping strategy. Lecturers who are high in conscientiousness are more likely to use more positive reinterpretation and growth and denial to deal with job stress than those who are low on this trait.

Neuroticism showed a positive relationship with three problem-focused coping strategies namely, use of instrumental social support, active coping, and planning.

Neuroticism furthermore had a positive relationship with positive reinterpretation and growth, an emotion-focused coping strategy, and mental disengagement, a potentially maladaptive emotion-focused coping strategy. The conclusion drawn is that lecturers who are high in neuroticism will employ these various coping strategies than those who are low in the trait. A negative relationship existed between neuroticism and behavioural disengagement which is a potentially maladaptive emotion-focused coping strategy implying that lecturer who are high in behavioural disengagement will opt for less behavioural disengagement than those who are high in this trait.

Fourth and finally, the coping results showed that openness to experience has a positive relationship with two emotion-focused coping strategies (i.e. positive reinterpretation and growth, and religious coping). Highly open to experience lecturers will be likely to use positive reinterpretation and growth, and religious coping in stressful job situations than those who are low in this trait. Openness to experience also showed a negative relationship with active coping and planning, which are problem-focused coping strategies. Lecturers who are high in openness to experience will use more active coping and planning than those who are low in this trait.

The next chapter presents and discusses the qualitative findings.

CHAPTER 6

QUALITATIVE PHASE RESULTS AND FINDINGS

6.1 Introduction

The chapter presents and illustrates the psychological perspective of the lecturers' stress, burnout and experiences in the cultural context of the Zimbabwean teachers' colleges. Extracts that highlight the lecturers' actual lived experiences were selected. This was done to give a voice to these experiences. Thematic analysis of the in-depth interviews helped to illuminate valuable detail of the lecturers' lived experiences. The OSS, OLBI and COPE-DV were used to craft interview questions. To fully explore the lecturers' lived experiences, the fourth question (1.4.2.2) was therefore framed as:

How do teachers' college lecturers explain their subjective lived experiences of job stress, job burnout, and the coping strategies they use?

6.2 Demographics

Thirty lecturers were sampled for the interview as seen in table 2. The lecturers who availed themselves for the interview consisted of 19 (63.3%) males and 11 (33.7%) females. Each was given a pseudonym in order to conceal and protect their actual identity. Tables 11a and 11b profile the interview sample of lecturers.

Table 11a

Lecturer interview sample profile

Chamutsa is a 47 year old male who teaches Professional Studies Syllabus 'A'. He is an open minded person who engages animatedly in conversation. His personality data profiles high agreeableness and conscientiousness scores.

Nqobile aged 52 is a male who teaches Theory of Education. He has a personality with a high level of openness to experience and has above average scores on all other traits.

Sicwebu is a young male lecturer aged 29 who teaches Tonga. He comes across as a very quiet and reserved person. He has four years of lecturing experience. He has a high score on agreeableness but is low on openness to experience.

Maswera is a 48 year old male who teaches ChiShona. He is high on agreeableness but low on extraversion.

Sharai aged 49 is a female who teaches Home Economics. She indicated a strongly conscientious personality marked by low extraversion.

Maidei a female aged 41 teaches Professional Studies Syllabus 'A'. She has a high score on agreeableness but is very low on both extraversion and openness to experience.

Lungile is aged 53 is a male who teaches Mathematics. His personality is more pronounced on the agreeable trait and much lowly on the extraversion trait.

Bhasera teaches Science. He is 50 years old and has a personality with high conscientiousness and low on agreeableness.

Simangele is a 46 year old female who teaches English. She has a personality with a very high conscientiousness score contrasted by a very low extraversion score.

Tungamirai is a 43 year old male who teaches Music who personality scores indicate high neuroticism and conscientiousness.

Makandifunga aged 50 is a female who is in charge of coordinating Distance Education programmes and also teaches Research. She has a high score on the conscientiousness trait but has balanced scores on the other four traits.

Sithabile is a female aged 36 who teaches Physical Education. She has high conscientiousness and neuroticism score accompanied by very low extraversion.

Rufaro is a female aged 53 who teaches Home Economics. She is a balanced personality with all personality traits indicating slightly above average scores.

Munatsi is a male aged 55 who teaches Science. His personality reflects very high agreeableness but very low conscientiousness.

Uratile is a female who teaches Health and Life Skills Education. At age 57, her personality pronounces high levels of agreeableness and neuroticism.

Table 11b

Lecturer interview sample profile
Mlungisi is a 47 year male who teaches TjiKalanga. His personality data profiles high agreeableness but very low extraversion.
Batora is a male aged 59 who teaches Art whose personality scores show a propensity towards agreeableness and low levels of conscientiousness.
Jati is a male aged 43 who teaches Computers. He has a personality with high levels of openness to experience but very low levels of agreeableness.
Sifefe a 50 year old male teaches National and Strategic Studies has high scores on three traits; conscientiousness, neuroticism and openness to experience
Madodana aged 44 is a male who teaches Physical Education. Based on the data, he has a personality with high conscientiousness and agreeableness.
Majaha is a male aged 57 who teaches National and Strategic Studies. He has a personality with high levels of agreeableness and openness to experience.
Silindile teaches Teaching Practice. At age 43, she portrays a balanced personality with above average scores on all five traits.
Mushavi is a 40 year old male who teaches Music. He exhibits high levels on the agreeableness and conscientiousness traits but indicates low neuroticism.
Musoni is a 52 year male lecturer who teaches Religious and Moral Education. He came across as a rounded personality who reveals high scores on extraversion, agreeableness, conscientiousness and openness to experience.
Shamiso is a 54 year female who teaches English. Her personality reflects high levels of agreeableness and conscientiousness
Sipho is a 41 year old male who reveals a high score on neuroticism but has above average scores on all the remaining traits.
Thembinkosi is a 38 year old male who has a high score on the conscientiousness trait and a slightly below average score on the neuroticism trait.
Bandile is a 40 year old male who teaches Computers. He came across as a personality high on agreeableness and conscientiousness but showed very low extraversion.
Bangani aged 41 is a female who teaches Social Studies who reveals a generally agreeable personality fused with low levels of extraversion, neuroticism and openness to experience
Sithobile is a female aged 42 who teaches Music and has a highly agreeable personality fused with above average scores on the conscientiousness, neuroticism and openness to experience traits.

Table 11a and 11b are presented to show the personality traits of the interview sample. The tables give thick description aimed at illuminating the age of the interviewee, the subject area the individual teaches, before profiling the high and low personality dimensions as typed by the Big Five Personality Test administered in the

quantitative phase of the study. This gives context to the supporting excerpts which were extracted to support what each individual verbalized during the interview.

6.3 Teachers' College Lecturers' Lived Job Stress Experiences

Job stressors are organised under the following two themes: *lecturer job demands* and *lecturer job resources*. A detailed discussion of these themes using the JD-R model follows. To add emphasis sub-themes are italicized. Where necessary, my interpretations of the lecturers' vocalizations are indicated in square brackets.

6.3.1 Lecturer Job Demands

Job stress is a harmful response to excessive and deleterious job demands associated with a job role (Kinman & Wray, 2014). Job demands are work-related stressors which place a strain on an employee (Bakker & Demerouti, 2007). Marking overload and job control emerged as the major sources of job stress for the lecturers.

6.3.1.1 Marking Overload

Marking overload was reported as a dominant source of lecturer stress. A plethora of issues were raised regarding this stressor. Chamutsa, a male lecturer with high scores on both agreeableness and conscientiousness and teaches Professional Studies, a subject done by all students in the General Course, remarked:

Okay, to begin with I think the main source of stress is the workload. For instance, in my subject we are supposed to be six or seven, but we are only four [in the subject area]. We have to cope with whatever workload we have. So

sometimes, it becomes stressful to handle lectures, TP supervision, as well as project consultation. Sometimes, the workload weighs you down. The amount of work I am supposed to do on a daily basis ... Like I have already given an example to say, I have to lecture, so what it also means is that I do research in preparation for my lectures. I have to mark quite a number of assignments because per intake there will be about 400 or so students. Dividing those assignments amongst the four of us is a mammoth task.

A female lecturer, with a high conscientious personality trait score marked by low extraversion, who teaches a practical subject indicated that she had no issue with the actual lecturing, but had problems with the amount of marking she had to do.

I would say marking, given the large student numbers we have. There is no problem with lecturing, as the schedule is designed to give all members in the department equal time for lecturing. But the marking is strenuous. I teach a practical subject and our syllabus requires that students do many practical pieces of work.

Sharai_Female

Another female lecturer whose personality score reflected a high level of agreeableness but very low extraversion and openness to experience pronounced that,

There is a lot of marking to be done as we deal with many students. The marking load is quite excessive at times. I teach all students in the college, that is the General and ECD groups and this translates to marking many assignments. Again, the quality of work produced by the students is mediocre. You find that you

have to spend a lot of time marking a single assignment. The students also generally do not submit their work on time, and this creates pressure, especially towards presentation times when we must meet stringent deadlines.

Maidei_Female

The foregoing excerpts indicate that participants were of the opinion that their marking problem was exacerbated by four interrelated factors; *understaffing* in the departments in which they teach, *large classes*, the *type of student teacher* they interact with, and *deadlines*.

There is currently a staff recruitment freeze in the Zimbabwean Public Service that has caused very serious staff shortages in teachers' colleges. The college system is now generally characterized by delays in replacing lecturers who exit the system. The large classes in the teachers' colleges were a major source of stress as these have entailed an increased workload. A plausible explanation for this stress was that lecturers were from colleges that are now offering the newly introduced Secondary Science Teacher training programme, over and above the normal Diploma in Education (Primary) programmes. Lecturers reported that student teachers were generally problematic as they did not take their work seriously. There was an observation that student teachers did not submit work on time. Furthermore, there was concern about the standard of the student teachers' work, which lecturers noted was of '*poor quality*'.

I think the marking load is heavy, especially with the kind of student that we have. I am particularly referring to language usage, especially English. The student that we have today is not very proficient in English.

Simangele_Female

Another variable associated with the overload in marking was *adherence to deadlines*. The lecturers felt that the deadlines pressured them to complete the immense amounts of work, which caused them strain. A male lecturer, whose personality scores reflected more openness to experience and above average scores on all other traits, reported that:

Other sources of stress are issues of deadlines and timelines. Where you have more people [students] and rigid deadlines, that is a possible source of stress because the system is still behaving like the numbers when it was set. In a normal situation, when you create a programme it is set towards a certain target number, but I think currently, those numbers have not been revised. It comes back to the issue of [the] lecturer ratio, where initially you are ideally giving the lecturer twenty assignments to mark in a deadline of a month, and you have given now that [same] lecturer fifty assignments to mark, but the deadlines have not changed.

Nqobile_Male

6.3.1.2 Job Control

There was consensus among the majority of lecturers that they had very *little control* over some aspects of their job. This was evident in the remarks made by Sicwebu

whose personality score reflected high agreeableness but low openness to experience who retorted:

Well, we do have a bit of control, but most of the things are more of administration. As a lecturer, yes, I prepare, I do whatever. I go in and lecture within the given time but some of these other things, really we don't control. It is difficult ... when I am given almost eighty, ninety projects to supervise; it's no longer within my control.

Sicwebu_Male

The lecturers reported that meetings and students often disrupted their schedules. For example, Makandifunga, a female lecturer whose personality score was high on conscientiousness expressed that,

Sometimes it's planned, sometimes it's unplanned like when you have meetings, when you are told to attend a meeting and you just leave whatever you are doing and go to attend that meeting. In addition, sometimes two students just come for project supervision; you will not have planned for that but for lectures you plan. When you are [going] to lecture or when you are marking you plan but as far as attending students, you cannot plan for that ...It is not planned, they will just come anytime.

This was evident in corroboratory statements by other lecturers, who said:

As an HOD, I must attend many, many, many meetings and many of these are unscheduled. This makes me to delay my marking and in my position it is difficult

for you to ask others to meet deadlines when you can't. I therefore do a lot of marking at home in the night to try and catch up.

Lungile_Male

I try to control what I do. I give myself targets. I tell myself that by such, such a day or such, and such an hour, I will have done this and that. Of course sometimes, I do not meet my target, but I try because there are other things, which disturb my target, such as meetings. You may just be relaxed, maybe you may be busy with your marking, you are told, the Principal wants to see you on [some issue]. You go there, you sit waiting for the Principal to call you and time will be ticking. Your work will be parked there.

Sithabile_Female

For personalities with high conscientiousness, such as Sithabile, disruptions will be a source of distress on account that conscientiousness individuals focus a lot on order, meticulous preparation, and exceptional time management. This predisposes such individuals to do their work timeously and expediently, thereby minimizing work conflict (Barrick & Mount, 2001). Furthermore, her high score on the neuroticism trait makes to be generally negative and susceptible to burnout (Langelaan et al., 2006) which can be heightened by the disruptions when she sits idle waiting for a meeting.

Doing *extra duties* was a cause for disruptions.

Well, if I am given the lecture schedule and my assignments, I try to do it within the stipulated time but problems arise if you are given, maybe extra work. You are

supposed to do extra work that you haven't planned for, and then there is stress. Right, let us say you have your assignments or you have your lectures and someone is not there, you have to do those lectures or you are just given extra work from your supervisor.

Rufaro_Female

In summary, the dominant job demands that affected this lecturer sample negatively included; an immense workload, made more stressful by understaffing, large classes, type of student teacher, and adherence to deadlines.

6.3.2 Job Resources

Four levels of job resources are identifiable. Bakker and Demerouti (2007) categorize the levels as; organizational, interpersonal and social, organization of work, and tasks. These levels form the broad themes under which the various lecturer experiences are illuminated.

6.3.2.1 Organizational Level

Job resources at an organizational level encompass variables, such as remuneration, career development and resources (Bakker & Demerouti, 2007). There was concern among the lecturers that at the organizational level, job resources, such as *inadequate equipment*, negatively influence the efficient execution of teaching duties. The following excerpts demonstrate the magnitude of the problem that the lecturers vocalized.

I can say the subject area has many demands, and we do not always have the required resources to use, as and when required. A new buying system was introduced, and this is cumbersome. When you make a requisition for consumables, you have to make numerous follow-ups to the Admin Department. Very often, you find that requisitions are lost and you have to start the process over again. We also have no individual computers for use to research, but we are expected to research and present lectures using PowerPoint.

Sharai_Female

For instance, if we ask from the Admin to say can you give us laptops so that we work? Can you give us projectors? The answer is always the college does not have money. So at the end of the day, it becomes difficult to cope because you need to use those gadgets.

Bhasera_Male

It will be noted that in the job-demands resources model job resources define a motivational pathway by creating a stimulating work environment which enables the employee to obligate to and be increasingly engaged in the job resulting in productivity (Bakker, Demerouti, & Euwema, 2005; Parzefall & Hakanen, 2010; Van den Broeck et al., 2013). Individuals who are high on conscientious, such as Sharai and Bhasera, will generally be concerned a lot about executing their work tasks to perfectly and correctly (Kaur, 2013) but the failure by the administration of the college to provide job resources as shown in the foregoing excerpt creates an environment marked by conflict with colleagues, stress and the possibility of burnout.

While the interview was not primarily concerned about remuneration, the findings of this study show that lecturers had a pronounced concern about the *reward structure*.

... If one looks at the amount of work I do and then at the end of the month the salary I get compared to other lecturers in the university system. Definitely, I often ask myself whether I should continue in this job, but life must go on.

Tungamirai_Male

I think having worked for years, there must be something you would talk about; you would point at and say yes this is what I have done. But looking at what we get at the end of the month, the salaries and so on. Especially, when it comes to month end, I think at month end a lot of people will be having high blood pressure. Those are stressful days. And you really feel that what is it that I am working for?

Sicwebu_Male

The foregoing excerpts confirm that the lecturers had very little motivation to continue working and were thus disgruntled.

6.3.2.2 Interpersonal and Social Relations Level

Managerial and peer support, together with organization climate define job resources at the interpersonal and social relations levels (Bakker & Demerouti, 2007). Generally, support was at two levels; peer and supervisor support, and administration. In

the context of this study, peer and supervisor support entails that which lecturers get at the shop floor level, and at administration, it is the support that comes from higher offices such as the Vice-Principal and Principal, aided by ancillary staff, such as the Procurement Officers.

At the peer and supervisor support level, lecturers enjoyed *collegial relationships with colleagues*, particularly at department level. The emerging sub-theme was that there was a *supportive colleague social structure*. One female lecturer indicated that:

Colleagues support me a lot. When I am not there or when work is too much for me they will help me. And I can also ask for some ideas from them. And also my supervisors, they really help a lot when there are new concepts or something I am not familiar with, they help me a lot on that one. I want to say they are okay. The relationships, they are really okay.

Makandifunga_Female

One senior male lecturer seemed to be satisfied by the support which he got from his peers, but also hinted that at higher levels relationships were somehow tense and distant.

At subject area and department level, I enjoy very cordial relationships with my work mates. At college, there are some people I prefer not to interact with because we have different personalities. Therefore, I mainly keep to my immediate colleagues.

Mlungisi_Male

I have a lot of support from my colleagues. We specialized in different areas and so we help each other in many things. When we design marking guides, we also come together, so I can say I am happy with the support I receive from colleagues. My immediate supervisor is a wonderful person. She is always ready to listen to you, and she helps you when there are problems. She actually inspires us and has always encouraged us to upgrade our qualifications, which I am currently doing. However, some supervisors are not helpful and always like to blame you when things go wrong.

Sharai_Female

I am enjoying with my colleagues, I don't think I have any problems with anyone, except the Principal.

Sithabile_Female

The quantitative phase results indicate that agreeableness has a negative relationship with job stress. The two excerpts seem to indicate that lecturers, such as Mlungisi and Sithabile, who are high on agreeableness, enjoyed more social support from their colleagues. This finding would seem to reveal that lecturers with high extraversion and agreeableness will experience lower levels of work stress particular with engaging with colleagues. However, lecturers also reported that they had *abrasive superiors*, from whom they preferred to keep a distance.

The lecturers also expressed unhappiness at the newly introduced appointment procedure into posts of responsibility such as Head of Subject, Lecturer in Charge and Head of Department. A male principal lecturer reported that:

The new type of lecturer we work with now is difficult. Because people have applied and have been appointed into positions of responsibility, there is a problem. A junior someone suddenly becomes your boss, what do you expect? There is very little support which I can get from such a person who still learning the ropes. It's pathetic at times.

Nqobile_Male

Table 4 (Quantitative Phase Participant Profile) shows that 184 (87.2%) of the lecturers are in the Senior Lecturer or Principal Lecturer grade, thus the source of their disgruntlement is based on their level of experience, which in this case was being ignored. Thus, there was a general feeling by the lecturers that their current jobs did not offer much *career progression*.

6.3.2.3 Organization of Work and Tasks Level

Organization of work, *inter alia*, encompasses how the employee's job is defined and the extent to which the employee partakes in the organization's decision making process (Bakker & Demerouti, 2007). Tasks include the degree of independence afforded the employee, performance reinforcement, the importance placed on the job, and the range of skills required to execute the particular job (Bakker & Demerouti, 2007).

Some lecturers strongly felt that they had *minimal control* over how they worked. A female principal lecturer reported that,

As far as control is concerned, I would like to think that I have control over marking because I can always do this at home, but when I am at work I can't say I know what I will do on a daily basis. I simply respond to what is thrown at me.

Bangani_Female

A male lecturer echoed a similar concern,

We hardly control, like a big intake, we don't control that, that's administration. So there is little control over our tasks. But things are just thrust upon us.

Sicwebu_Male

The lecturers seemed to indicate that they had very little *autonomy* over work tasks, which were literary being thrust on them by administration. The lecturers' sentiments seem to decry the management styles that are used by top management in the colleges. The findings thus suggest a top-down approach to business, characteristic of an *autocratic leadership style*. A female lecturer sums up the lack of positive feedback by top management when she expresses that:

When you are doing well, they don't acknowledge the good work, but it seems they are only interested in pointing fingers.

Sharai_Female

The lecturers' sentiments expressed varied views with regard to *role clarity*. This depended mainly on the institution and its organizational culture. Some lecturers expressed that they were clear about their roles, while others lamented a lack of clarity,

which exacerbated their experience of job stress. Those who were conscious of their roles as lecturers expressed general statements such as the following:

I think I am very clear about my roles at work. The job description makes it easy for me to know what I should do and when.

Batora_Male

I don't have problems. I am quite clear what I am supposed to do. I know what I am supposed to do, that's right.

Jati_Male

Not really, I think the roles are clearly laid out except maybe it could be here and there role conflict, but generally the roles of a lecturer are very clear.

Silindile_Female

Those who reported role conflict expressed some of the following sentiments:

If you get my drift, there are no clear roles despite the structure in place. I know what to do, but my boss does not.

Dumakude_Male

Sometimes, you discover that your subordinates also have to answer to someone else, then sometimes it causes conflicts, especially if you have assigned somebody to do something and somebody else assigns the same person something else to do. In such a situation, I think the line of command is not very clear.

Simangele_Female

My roles are very clear but there are times, especially during presentation, when I think we are taken advantage of as we have to help in the meal preparations. As a lecturer, I do this but I feel that this is not in line with my duties.

Sithabile_Female

The foregoing excerpts reveal that at the organization of work and tasks level, lecturers had concerns about the lack of autonomy they experienced, coupled with unsupportive superiors who did not recognize their efforts.

6.4 Teachers' College Lecturers' Lived Burnout Experiences

Interest in how stress leads to teacher burnout became more pronounced from the mid-1970s (Salami, 2011). In the current study, the two OLBI burnout dimensions, namely, disengagement and exhaustion, framed the major themes. The lecturer sample in the current study had not been studied before using the OLBI. The focus of the in-depth interview was to explore the lecturers' lived experiences, given that they were from a Zimbabwean collectivistic culture and would thus perhaps express their experiences differently from what has been reported in largely Western studies.

6.4.1 Lecturer Work Disengagement

Employee engagement is a concern for today's organizational managers. Some studies reveal that engagement has a beneficial relationship with employee work attitudes (Schaufeli, Taris, & van Rhenen, 2008), which have led to increased performance outcomes at the individual and group levels (Xanthopoulou et al., 2008; Schneider,

Macey, Barbera, & Martin, 2009). This study paid attention to the antithetical antecedents of work engagement that managers, at different levels in the teacher education system in Zimbabwe, could focus on so as to foster greater work engagement.

What emerged as the leading source of disengagement among the lecturers was the *lack of motivation* that characterized their jobs. This was attributed to many job factors. A female principal lecturer noted that,

You have a sense that your work is no longer as exciting when you first started. Having been in the profession for a long time, I really want to say that there is nothing which I can describe as new and interesting ... I get to see the same old faces aging along with me, doing the same routines of lecturing, attending meetings at various levels, the stressful marking and some workshops and the usual TP.

Uratile_Female

Another female lecturer weighed in by reporting that,

I can say my job is very repetitive as I have to do almost the same things with different year group students. I can safely say there are no new and interesting aspects to my job. It is usually routine. My work is just marking, lecturing, supervising the project and going on teaching practice. It is very difficult to say that I do not feel negative about my job.

Bangani_Female

A recurrent observation was that the lack of motivation was caused by the nature of the job which lecturers did routinely. Owing to their length of experience they now saw their job as *mechanical and routine*. This is summed up by another female lecturer who said,

There is nothing, it is redundant. It is the same thing every day. Because it is all about marking assignments, deadlines, marking assignments, deadlines ...Most of the time I just feel tired about it. My job is routine. There is routine. We are doing maybe the same thing, but that same thing that you are doing, you are supposed to do it repeatedly.

Shamiso_Female

It was also pertinent to observe that some lecturers expressed *feelings of helplessness* owing to the prevailing situation in the country, where as professionals, they appeared to have no options but to be imprisoned in their mundane jobs, which they described as mechanical. This was emphasized by a male senior lecturer, who reported,

What else can I do, honestly? You know the situation in our country; people do not have any options, you know.

Sifefe_Male

The issue of *poor salaries* was echoed consistently as a cause for the lecturers' lack of motivation. Two female lecturers put it tersely that:

In truth, yes I would like to say that there are times when I feel depleted in terms of energy levels. There is just too much work, but very little, little in terms of financial rewards. It is very disheartening, to say the least.

Simangele_Female

I just feel demotivated by the rewards that I get. At times, I get the feeling that I should simply resign and start my own projects at home.

This was further corroborated by a male lecturer, who said,

I feel we are now only wasting our time. Those who were working when things were normal were earning for a living, now we are what ... earning for food and the mouth. We do not really budget for the future, and you do not save for the future but you only save for the time being.

Madodana_Male

It is critical to note that in the quantitative phase of the study, the four personality traits, extraversion, neuroticism, agreeableness and conscientiousness which were extracted for further statistical analysis from the MLR model did not show any significant correlation with disengagement. The verbal experiences of the lecturers garnered in in-depth interview there helped to illuminate the actual lived experiences of the lecturers which could have gone undetected.

Generally, functional organizations are characterized by effective teams which are well organised. Lecturers described the organization climate obtaining in the teachers' colleges as one characterized by *long and frequent meetings*, which made them to feel disconnected from their jobs. The following excerpts amplify this observation:

I do feel disconnected from some aspects of my work. I hate the long meetings we have. As if that is not enough, there now is a culture of us meeting almost over any small issue. You tend to wonder whether people are serious.

Majaha_Male

Yes at times I feel my energy levels are low. For me, the numerous and very long meetings deplete my energy resources.

Maidei_Female

I think things to do with unplanned work. For example, if you come to work, you will have planned your day, and then suddenly you are called for a meeting or some issues that crop up where you are told you have to go for Teaching Practice, and yet you have your own maybe departmental issues that you will have planned. It really causes stress. It is very stressful.

Jati_Male

Lecturers highlighted the negative effects of massification. Some lecturers felt that *teaching large classes* was not conducive.

However, when you go to lecture there, it is not interesting at all because those students will be so much crowded. In addition, most of the time, they do not even hear what you are saying. Because where we are taking our lectures, it is not pleasant at all. Some of the students will be making noise at that corner and you are supposed to shout here to the few that are listening to you.

Mushavi_Male

The foregoing excerpts reveal that lecturers reported being disengaged from their jobs mainly because they now viewed their occupations as mechanical and routine.

6.4.2 Lecturer Work Exhaustion

Exhaustion describes an emotional state where the employee feels overloaded, helpless, inundated and psychologically drained by the demands of the job (Poulsen et al., 2014). For the exhaustion dimension, the emerging sub-theme was an *excessive workload*. Work exhaustion was explained differently by lecturers.

My energy levels? Well, well, well, there are times when these are very low, especially towards presentation when we have to prepare many items to display with students. This drains your energy a lot.

Musoni_Male

Pressure is not always there. There are times when there is lots of pressure, for instance towards presentation, graduations and maybe if you are given work, which is supposed to be done there and there. Maybe you are just given a short period to do that work; that is when we have pressure.

Rufaro_Female

There are times, especially when there are other things to do, like towards presentation. Ah, there will be a lot to be done ... Yes towards presentation there is a lot to be done, ... meetings. So you really ... some kind of lose track. Yes, there is pressure of work at times but it's usually during that presentation time. .. There will be no rest, whether I want to rest, but I do not get that time to rest.

Sithabile_Female

For many of the lecturers, the *pressure of deadlines* associated with marking, particularly in the period leading to the presentation of students for external academic examining to the University of Zimbabwe, was a serious source of strain leading to exhaustion. Furthermore, preparing for the yearly graduation ceremonies was a source of exhaustion. While the event happens on a single day, the preparations that go towards it take months. Lecturers also reported that they were under duress through engaging in *unscheduled work activities*, which drained their energy. The following excerpts mirror the major concerns raised by the lecturers:

There are times when I get home and slump into a sofa and sleep till my children wake me up. I think I have very high levels of fatigue. Yes, like I said, the unscheduled events at work pressurize me at times, as I have to then find time to do my own work. This is emotionally straining.

Uratile_Female

Oh yes, I am more and more engaged in my work. The meetings we have at times drag late until after dismissal time and I find myself having to spend a lot of unplanned time at work.

Maidei_Female

The extent of the exhaustion is described succinctly by a male lecturer, Sicwebu.

Sometimes it is quite... its killing. You die slowly. Once your soul and spirit are unhappy, definitely physically you will be dying slowly. Tired and worn out, definitely, especially if you think of mountains to mark and the rewards at the end of the month, that does not tally. You feel demotivated. You really feel demotivated. Definitely, I would not mind resting. You need more time to rest. The

question of resting is because of a demand that you see you are being drained out, yes.

Sicwebu_Male

The death metaphor was a clear amplification of the extent to which the work could possibly cause deleterious health concerns. Furthermore, the lecturers also reported that owing to the pressure at work, they often resorted to carrying some of the work home in order to be able to manage the workload. This was evident in the following remark:

Sometimes you see because of the pressure of work, at times you have to carry home a few of the you know... assignments to mark when you feel you are a bit free, and that also doesn't give you much time to relax.

Sipho_Male

It is also clear from the remarks that the lecturers no longer have adequate time to rest and recoup their energy levels, as they frequently have to take home some work. This is clearly illustrated by a male lecturer who reported,

Oh no, I just do not have time for leisure activities. Perhaps during the holidays, that is when there is chance [sic] of meeting friends and catching up, but our boss is unpredictable and very often we are called to work. For example, in the last holiday we had interviews for a new intake during the holiday, if one can call it that anywhere.

Batora_Male

These findings, somehow seem to suggest a work-life imbalance, as lecturers do their marking at home, and they also have to work during holiday time.

6.5 Teachers' College Lecturers' Lived Coping Experiences

The experiences of the lecturers are organised under three broad themes derived from the COPE-DV. These are discussed in detail in the following sections.

6.5.1 Problem-Focused Coping

The two most pronounced coping strategies reflected in the lecturers' verbalizations were *restraint coping* and *active coping*.

Restraint coping was the most preferred strategy by the lecturers. According to Carver and Scheier (1989), restraint coping is the tendency by an individual to hold back and avoid acting prematurely until an opportune time. In this study, this strategy was more common among the female lecturers than it was among the males. The following excerpts mirror the common thread expressed by the lecturers:

I simply remove myself from any potential ugly situations because it is not in me to confront and shout at people. I do not show my anger at colleagues. I generally prefer to forget about things, especially when I can see that I am right.

Sharai_Female

At times, I just ignore the person and concentrate on my work. When the situation is serious, I usually wait until I have calmed down and then I approach the person

in their private space to discuss the problem. ... I have seen that that this helps to ease tension a lot.

Silindile_Female

You see, I really do not like to be seen around conflicts, and always withdraw to avoid having to shout or express my anger openly. I find it works to just quietly go into my office and do my work, rather than engage these new lecturers whose work ethos is not like mine.

Nqobile_Male

The personality data on Silindile and Nqobile indicates that they have a balance of all the five traits and they both use restraint coping as one of the strategies to deal with conflict. The foregoing excerpts would seem to support data from the quantitative phase of the study which indicate that conscientiousness has a weak positive correlation with restraint coping. The cultural transactional theory of stress and coping expounds that collectivists emphasize co-existence, communal consensus and social stability, and therefore view any interference with these values as highly threatening and stressful. Collectivists, thus hold a worldview which is communal and relational, context-sensitive and oriented towards an understanding of the human person (Baldwin, 1986; Schiele 1996; Sue & Sue 1999). This worldview is a reflection of the majority of lecturers, who are seemingly unwilling to be embroiled in conflict situations, and see withdrawal as a safe way of deflating any potential conflict.

Lecturers opted for *active coping* aimed at ameliorating the effects of the stressors in their work environments. Active coping is the process of dealing directly with the

stressor to reduce its negative effects (Carver, Scheier, & Weintraub, 1989). This strategy was more pronounced among the male lecturers, as shown in the following statements:

There are times when some people get into your nerves deliberately. I am usually a direct person, and I always believe that avoiding conflict is simply delaying and nursing a problem. Bottling in your problem can kill you if you are not careful. Therefore, I confront the source of the problem to seek a solution.

Thembinkosi_Male

I am a different individual. If there is conflict between my supervisors, even the Principal, and me, I normally confront the individual and we talk face-to-face. Yes. I find it more interesting[helpful] when I talk face-to-face with the individual because I will understand the individual more. In addition, I will really tell the individual my feelings. I think that is a way of solving conflict.

Sicwebu_Male

Lecturers exhibited baldness normally associated with individualistic Western cultures in which individuals seek and emphasize independence, are assertive and express their opinions openly. According to Chun et al. (2006), in individualistic cultures the environmental system focuses on personal autonomy and independence. The inference drawn is that some lecturers have been enculturated, and are therefore not shy to confront their superiors in order to resolve any work conflicts.

Some lecturers also indicated that at times they sought *instrumental social support* as a coping strategy. This involves getting counsel, help, or information to enable the individual deal effectively with the stressor (Carver, et al., 1989).

Yes, there are times when I find sharing a problem with close colleagues very useful. You can actually distress if you tell someone your problem.

Thembinkosi_Male

I pray. I pray and then confide to my husband usually I tell my ... sorry to say that... my husband, that is the only person I tell. He is my best friend.

Rufaro_Female

It was noteworthy that female lecturers preferred to seek support from their partners outside of the work organization, while the males did so within the organization through colleagues. Furthermore, it was evident that most lecturers did not use planning and suppression of competing activities as preferred coping strategies.

6.5.2 Emotion-Focused Coping

The emotion-focused thematic area revealed that lecturers opted for religious coping and seeking emotional support. People use religion as a basis for either emotional support or positive interpretation and growth, or as a part of active coping (Carver & Scheier, 1989). The study found that female lecturers used more religious coping than males. Some female lecturers revealed that they used religion for *positive interpretation and growth* as shown by the following excerpt:

Yes, I am a religious person. There are times when someone will do something, which is difficult to understand, so in such situations I resort to praying. It helps a lot as prayer gives you perspective on how to deal with awkward situations.

Maidei_Female

As a recourse to improving the worrisome and unhealthy organizational climate in the teachers' colleges, lecturers turned to religion as an active coping strategy, as expressed in the following excerpt:

Moreover, sometimes there is need to pray about it. In addition, say Oh Lord help us in this institution so that we can improve our practices. So I pray.

Chamutsa_Male

Some other lecturers simply used religion as a form of emotional support or as a form of escapism from the source of the problem, as can be seen in the following excerpt:

Okay, I am a religious person. When the worst comes to the worst, I really pray. I really pray.

Makandifunga_Female

The interview data were noteworthy to the extent that males presented themselves as not being very religious at all. The excerpt below shows the skepticism' of a male lecturer.

God doesn't answer immediately, praying it takes ... (laughs). Praying yes but the responses of God come after a long time. Can you imagine you pray today because of a stressful situation? I don't think you will get the answer immediately from God.

Jati_Male

Seeking emotional social support aimed at galvanizing compassion and acceptance which involves a sense of resignation and recognition of the permanence of the stressor, were the other commonly used strategies (Carver, et al., 1989). Females reported seeking emotional social support, particularly from close family and their partners, as shown in the excerpts below.

At times when I get home, I tell my kids about the problem. They are usually supportive and soothe me, but besides that, doing my marking also sometimes helps me to forget.

Simangele_Female

I do not often seek support from colleagues. I would like to think of myself as a private person. Usually, I confide in my husband, and other very close family members.

Silindile_Female

Seeking emotional social support from family is understandable among women, while for African men there appears to be an ethos that openly seeking emotional support is a sign of weakness. It was interesting to note that females who reported using

acceptance frequently were almost at a point of helplessness and resignation, as shown in the excerpts below.

You know people are sometimes very difficult, especially in a large organization like ours, so at times I just accept the situations.

Sithobile_Female

Sometimes, I just accept what I am given or what ... whether it is fair or not, I just accept.

Rufaro_Female

Humour was a less frequently used emotion-focused coping strategy. The few lecturers who used humour reported that it helped them to relieve stressful conflict situations at work.

Yes, there are so many situations, and I have just joked about them.

Sithobile_Female

The best medicine at times is just to make a joke about it.

Sharai_Female

These vocalizations confirm that females mainly resorted to religious coping and seeking emotional support. Religious coping was used by females for differing purposes, which encompassed *emotional support, positive interpretation and growth*, or as *active coping*. On the other hand, male lecturers were seemingly not as religious as the females. They were somehow skeptical with regard to the utility of religious coping in the face of immediate stressful situations. Females mainly resorted to *seeking emotional social*

support and acceptance by enlisting this kind of support from immediate family. Finally, it was interesting to note that humour was generally not a preferred coping strategy.

6.5.3 Potentially Maladaptive Emotion-Focused Coping

The majority of lecturers reported using mental disengagement which is mainly directed at the diversion of attention away from the stressor (Carver, et al., 1989), and focus on and venting of emotions. The excerpts below reveal some of the behaviours that illustrated mental disengagement.

Depending on the situation and characters involved, I sometimes ignore the situation and find something to do to make me forget the problem. Usually, I drive into town for some small shopping, then come back feeling a bit better.

Bangani_Female

When I want to de-stress myself, I have learnt the skill of switching off, yes. It is a skill you can take off stress. You switch off. In other words, I just forget about it and to me it does not exist. If you are talking to me or you want to insult me and so on and I feel is it worth it. If I say no, it is not worth it, I can allow you to talk for an hour, but in actual fact you are talking to yourself I will be thinking of other things. So you see, sometimes switching off helps. Once you switch off, you forget about the whole thing, you put it aside.

Majaha_Male

The excerpts reveal that ignoring the problem and going out to shop are used as distraction from the stressful situations. It can be seen that this form of maladaptive

coping creates an added expense for the individual, but does not solve the problem in any way. On the other hand, the *switching-off* strategy was worthwhile to note in that the individual did not move away from the stressful situation, but chose to remain and disengage mentally from the source of stress. Again, the stressor is not removed in such a situation because the individual simply ignores it.

Males and females reported the venting of emotions as a useful strategy which they used to actively deal with the source of stress.

As a normal human being, there are times when my anger boils and I give a person a piece of my mind.

Silindile_Female

In most case when someone has said something to me and I do not go along with it, I respond there and there. I look at how the person has approached me. If he is shouting, I automatically find myself shouting, even if I do not want [to]. And at times the person may come and will come and will be trying to put it in a polite way, but if I discover that the person is accusing me for what I am not responsible for, I find myself shouting again.

Thembinkosi_Male

Finally, the study revealed that the lecturers did not use behavioral disengagement. Alcohol and drug use, however, had a variety of verbalizations. For the latter dimension of coping, it was important to note that some of the lecturers seemed not to believe that by using alcohol their job stressors would be resolved. The excerpts below show the varied explanations that were given.

I do not use alcohol, I but I believe alcohol is just a form of escapism; it does not make the problem go away.

Sharai_Female

I do not believe alcohol would make someone who is stressful, you know, happy. I am not sure. I do not know whether it is used as something that can do away with stress. I am not sure because you just get drunk. That is all. The problem remains. The problem remains. It can be worse when you are drunk or worse when you are now sober. I am not sure. I am not sure you know whether maybe some people find solace in alcohol.

Sicwebu_Male

However, those who resorted to alcohol justified this by saying:

I prefer having my usual beer. You cannot go wrong with a beer.

Nqobile_Male

Given that the lecturers derived from a collectivistic culture, the expression of anger through shouting is not a behaviour that is normally expected. In individualistic cultures, as has been noted beforehand, assertive behaviour is often an expected norm, but not in collectivistic cultures. This finding seems to negate the argument that has presented western psychology as being “acontextual” and lacking practicality (Somerfield & McCrae, 2000; Folkman & Moskowitz, 2004); in favor of a view that supports the universality of stress experience from all cultures.

6.6 Conclusion

This study has shown that lived stress, burnout and coping experiences generally confirmed extant theory and research in a number of ways.

Lecturers reported experiencing varied sources of job stress. The study examined two thematic areas, job demands and job resources. In the former thematic area, lecturers experienced an immense workload which was made more stressful by under-staffing, large classes, type of student teacher, and adherence to deadlines, as sources of stress. Lecturers also expressed that they exercised minimal control, which they attributed to meetings, disruptions by students, and extra duties they are given. The job resources theme had three interrelated levels, namely; organizational, interpersonal and social relations, and finally organization of work and tasks. At the organizational level, stress is mainly a result of inadequate equipment and teaching resources. In addition, the lecturers expressed that they were disgruntled by the unfair reward system. At the interpersonal and social relations level, the study revealed that lecturers had collegial relationships with colleagues, but they felt that their superiors were abrasive, and did not recognize and appreciate their efforts. Finally, at the organization of work and tasks level, the lecturers reported that they had no control over their jobs, and the autocratic leadership styles that defined their colleges stifled autonomy in decision-making. This study partly confirms the Jepson and Forrest (2006) study, which demonstrated that individual differences explain why no two individuals will experience the same levels of work-related stress, despite facing similar job-specific demands.

Burnout experiences of the lecturer sample focused on two dimensions; disengagement and exhaustion. On the disengagement dimension, lecturers reported a lack of job motivation because of doing mechanical and routine work. They also complained about poor salaries and having to endure long and frequent meetings. Finally, they reported that they disengaged from their work because of the large classes that they taught. With regard to exhaustion, excessive workload, unscheduled work activities, the pressure of deadlines, and an imbalance between the lecturers' work-life and home-life were causes of burnout.

Restraint coping and active coping were the most commonly preferred problem-focused coping strategies. A few lecturers also indicated that they sometimes sought instrumental social support, while the majority expressed that they did not use planning and suppression of competing activities. Religious coping and seeking emotional support were the most preferred coping mechanisms. Lecturers opted for religious coping mainly for emotional support, positive interpretation and growth, or as active coping, whereas humour was generally not a preferred strategy. Mental disengagement and venting of emotions were mostly preferred. The findings also indicate that behavioral disengagement was infrequently used. On the other hand, lecturers expressed varied views regarding the use of alcohol and drugs.

In the following chapter, I draw together the conclusions emanating from the findings of both the qualitative and quantitative results and discussions.

CHAPTER 7

CONCLUSIONS AND IMPLICATIONS

7.1 Introduction

The previous two chapters focused on presenting data, and discussing the consequent findings. In this chapter, I bring the curtain down by iterating that the primary purpose of this thesis was to investigate how personality predicted lecturer stress, burnout and coping, using a previously unstudied sample of Zimbabwean teachers' college lecturers from an agrarian collectivistic culture. Second, the thesis sought to explain the lived job stress, burnout and coping experiences of these college lecturers. The investigation, done in two phases, used five measures. The Occupational Stress Survey, Oldenberg Burnout Inventory, Coping Orientations to Problems Experienced (Dispositional Version) and the Big Five Personality Test, generated quantitative data. Qualitative data were generated through in-depth interviews. The quantitative phase sample comprised 211 lecturers, while the qualitative phase sample comprised thirty lecturers. The focus of this chapter is to thread together the findings, and discuss them in relation to previous research. The thesis was guided by the following overarching question:

To what extent do personality traits based on the five-factor model predict job-stress, burnout and coping experiences of teachers' college lecturers in Zimbabwe?

The study presents mixed, but nonetheless important findings that demonstrate the relationship between personality and the three dependent variables.

7.2 Summary of Conclusions about Research Questions

Participants in this study expressed diverse views through pen and paper responses to the questionnaires, and the in-depth verbal interviews. The three research sites were unique in terms of geographic location and tradition. The preliminary research site analysis revealed that challenges of classroom space were a major difference where one college did not have lecture theatres. This confounding variable is reflected in the verbalizations of some lecturers. However, by and large, the findings of the current study describe patterns of behaviour consistent of lecturers in all three colleges. I discuss the findings under three sections, namely, lecturer job stress, lecturer burnout, and lecturer coping.

7.2.1 Lecturer Job Stress

The study found that extraversion was the main predictor variable that had a significant relation with two job stress dimensions; demands, and control.

Extraverts are sociable and vibrant individuals who incline more towards the outside world of other people and things, and generally have a positive outlook on life (McCrae & John, 1992). Extraverted lecturers reported low levels of stress. An emerging conclusion is that teachers' college lecturers who are high in extraversion experience less stress associated with job demands, and report less stress regarding control of their jobs. This conclusion apparently contradicts the UCU study (Court & Kinman, 2008), which reveals that for academic staff, high demands such as, the relentless increase in paperwork, declining staff-student ratio, and unreasonable expectations from heads of department were more prevalent. Confirmatory evidence, however, suggests a similarity

between the Zimbabwean lecturer sample and the UCU academic staff who reported higher levels of job control in the Kinman and Wray (2014) study.

The current study suggests that highly extraverted Zimbabwean teachers' college lecturers find the demands associated with lecturing such as marking, project supervision and dealing with large classes to be less stressful. The lecturers also have control over how they work, and are therefore unlikely to express dissatisfaction with their jobs. It is important to recognize that job demands are defined as energy-sapping in the JD-R model (Van den Broeck, 2010), and include aspects such as, high workload, role ambiguity and role conflict (Bakker & Demerouti, 2007). The demographics reveal that most lecturers (n = 156, 73.9%) had more than six years in the job, and therefore were potentially exposed to prolonged stress, which normally would predispose them to become overburdened with their work, and lead to work disengagement. However, this study seems to suggest the contrary. Despite expressing verbal concerns that their work impeded their work-life balance in the interviews, the lecturers' job demands appear not to exert unmanageable and high stress levels, which according to the JD-R model would normally lead to reduced effort and output on the job, and inevitably cause burnout. This finding seems to be contradictory and incomprehensible. At face value it could be concluded that the lecturers are intrinsically motivated, and find the job of lecturing to provide opportunities for growth, learning and development. However, a more cogent explanation is that the lecturers by virtue of the collectivistic nature soldier on silently and are perhaps resigned to the fact that there have no other job prospects in the current Zimbabwean economic climate and have to hold on to their jobs despite the deleterious effects this may have on their health and ability to engage with their family and

community. Furthermore, the behaviour of the lecturer sample in the current study contradicts the Masuku and Muchemwa (2015) study, which found that Zimbabwean university lecturers were under pressure to meet deadlines due to increased workload, exacerbated by unclear job roles and lack of support.

The findings of this study also confirm other studies which found that stress among teachers resulted from excessive workloads (Court & Kinman, 2008; Bowen, 2016), and dealing with large groups of students with varied academic abilities (Shernoff et al., 2011). However, in terms of control, teachers' college lecturers also verbalized that they exercised minimal control, which they attributed to *meetings*, *disruptions by students*, and *extra duties*. This finding reveals the stressful nature of college lecturers' experiences with regard to workload and control. This confirms that quantitative job demands, as outlined in the JD-R model, include time pressure and work overload (De Braine & Roodt, 2011).

The study also found that there was a general *sense of disgruntlement* with the unfair reward system in comparison with lecturers in universities, whom it was felt had similar qualifications to teachers' college lecturers. Table 4 (Quantitative Phase Participant Profile) supports the fact that 47.4 per cent of the lecturers had senior degrees (Masters' level). On the other hand, many of the lecturers who were interviewed seemed to indicate that they had *inadequate teaching resources*, which included laptops and consumables for those who also taught practical subjects. Related qualitative studies (Court & Kinman, 2008; Shernoff et al., 2011; Bowen, 2016) confirmed that a significant source of stress was the acute lack of teaching resources.

The work environment of the lecturers is clearly not conducive, is frustrating and may result in dysfunctional behaviours, such as inadequate research for lectures, and lack of commitment to other core lecturing duties. In the long term, such an environment compromises the quality of teacher education in Zimbabwe. Chireshe and Shumba (2011), in an earlier study reported that demotivated lecturers negatively affected the quality of teacher training in Zimbabwe.

The JD-R model suggests that prolonged exposure to stress leads to overburdened employees who may reduce the effort they spend on the job, resulting in reduced output and burnout (Van den Broeck, et al., 2010; Rattrie & Kittler, 2014). The results of this study seem to indicate an incomprehensible motivational pathway, where job demands turn into job resources, leading to increased work engagement. This apparently contradictory situation is evident in the current study, showing that some principals were unsupportive and focused mainly on finding fault without offering encouragement to their subordinates. This perhaps ambivalent finding was somewhat congruent with the Kerr et al. (2011) study which found that whilst some Irish teachers received high levels of peer support, they still had difficult relations with other teachers. The Kerr study demonstrates that relationships are situation-specific. Masuku and Muchemwa (2015) also revealed that while lecturers in their study worked in a Christian environment, they reported poor relationships characterized by bullying behaviour from managers, thereby confirming that difficult relations with administrators often lead to stress and burnout.

With regard to level of interpersonal and social relations, Court and Kinman (2008) UCU members had collegial relationships with colleagues. The findings of the current study also confirm the Court and Kinman (2008) study, which revealed that UCU

members received adequate peer support from colleagues, who not only showed them respect, but also actively listened to their work-related problems, in addition to assisting them in some aspects of their work. This finding is contradictory to another study (Bowen, 2016), which revealed that South African TESOL teachers had disagreeable relationships with colleagues. Lecturers in the current study reported that their superiors, such as principals, were abrasive and unsupportive of their work efforts. Similarly, Shernoff (2011) found that most teachers identified a lack of support and feedback around job performance from supervisors to be a significant source of stress. This finding further confirms similar findings (Masuku & Muchemwa, 2015; Bowen, 2016) which showed that both teachers and lecturers felt leaders ignored their opinions, and also did not value such opinions. Lecturers in the current study were also unhappy with the new appointment procedures to posts of special responsibility. They felt that junior lecturers were appointed to posts of responsibility at their expense.

Despite exposure to numerous stress factors, this study seems to suggest that the lecturers are motivated by the demands they encounter at work. A plausible explanation is that the lecturers come from a collectivistic culture. The cultural transactional theory of stress and coping stresses that collectivistic cultures focus on community duties and subordination to in-groups. Collectivists are thus more likely to defer to and work within the group, a strategy which reduces the deleterious effects of stress, which cause burnout (exhaustion). Extraversion appeared to be dominant in this particular collectivistic lecturer sample, and may account for this seemingly inexplicable behaviour.

The study also reveals that lecturers felt that the new system of placement into positions of responsibility, skewed against those who were more senior. The findings of

this study are that there are some *negative undercurrents associated with the new appointment structure* to posts of special responsibility (Head of Subject, Lecturer in Charge and Head of Department) approved by the Head of Ministry, the Permanent Secretary, in 2018. Furthermore, the lecturers felt that their current jobs did not offer much career progression. Despite the foregoing negatives in their work environment lecturers, non-the-less, demonstrated a high level of job commitment.

At an organization of work and tasks level, the current study presents apparently mixed perceptions. A study of Irish teachers (Darmody & Smyth, 2011) revealed that teachers who perceived more job control experienced considerably higher levels of job satisfaction, compared to teachers with little control. Given that the lecturers reported minimal control over their job activities and lesser participation in decision-making, the findings of this study therefore imply that teachers' college lecturers experience low job satisfaction.

Cavanaugh, Boswell, Roehling, and Boudreau (2000) suggest that job stress has challenge and hindrance stressors. Challenge stressors include excessive work, deadlines and increased job tasks. Challenge stressors define a motivational pathway for individuals, and are growth opportunities, which lead to rewards. It is evident that the lecturers' reported workload did not define the expected motivational pathway, as indicated in the JD-R model. On the other hand, hindrance stressors, which include bureaucracy and unclear job roles, are stressful job demands that achieve the exact opposite and are constraints or roadblocks against growth and attainment of rewards (Cavanaugh, et al., 2000). This study confirms the existence of role ambiguity, as some lecturers reported performing tasks outside their job descriptions, or additional tasks in

order to cover up for other lecturers. This substantiates a similar finding in the Masuku and Muchemwa (2015) study which revealed that the university lecturers were also inundated with competing demands, which made them unable to plan their working days.

In conclusion, although extraversion is a weak predictor of demands and control, the importance of the relationship between this trait and job stress dimensions among teachers' college lecturers in Zimbabwe is none-the-less highlighted. Therefore, the study shows that personality traits explain the job stress experiences of the lecturers. Thus, in the light of the unfavorable organization climates facing lecturers, qualities which define extraversion, such as an individual's affability, sociability and exuberance (Costa & McCrae, 1995), are also in line with the behaviours shown by the lecturers who derive from a collectivistic culture (Chun et al., 2006). This thesis, therefore, presents some evidence to support that personality traits are universal. In summary, while this study emphasizes the relationship between personality traits and job stress, the structural and organizational factors that contribute to job distress in the form of job demands is made evident. The findings of this study do not suggest that individuals need to cultivate a more extraverted personality, but in the light of the verbal interview data the transformation of the Zimbabwean teachers' college system is made the more urgent. If the job demands which lecturers have indicated as hindrances, such as large classes, work overload, poor student quality and abrasive managers, are not addressed by government, lecturers will continue to experience undue limitation on their motivation and development in the workplace (Cavanaugh, et al., 2000).

7.2.2 Lecturer Burnout

Neuroticism, extraversion and conscientiousness significantly explained only one burnout dimension, exhaustion. However, the in-depth interview helped to verbalize the actual lived experiences of the lecturer sample based on the two burnout dimensions; disengagement and exhaustion.

7.2.2.1 Lecturer Disengagement

The lecturers pronounced that they received poor salaries, which were a mismatch with the job demands that were required of them. The poor salaries, coupled with the lack of better prospects outside their current occupations, made many of the lecturers experience a feeling of *helplessness and resignation*. These findings are congruent with the Kerr et al. (2011) study of Irish school teachers who felt demoralized and bitter because they were undervalued. Long, frequent, and unnecessary meetings caused disengagement in the lecturer sample. This converges with an earlier finding which seemed to suggest that the leadership in the teachers' colleges had autocratic tendencies, which in part explains the frequent and long meetings.

Finally, the negative effects of massification were evident. The lecturers expressed sentiments that teaching large classes was strenuous and unmanageable. However, this finding emerging from the qualitative phase may on the surface appear to contradict an earlier quantitative finding that lecturers experienced hindrances which resulted in role ambiguity, but they were still motivated to carry out their duties. However, it is evident that the in-depth interview brought to the fore lived experiences of

the lecturers without the pre-conceived categories imposed by the instruments/questionnaires used in the quantitative phase.

7.2.2.2 Lecturer Exhaustion

This study reveals that lecturers experience unhealthy levels of exhaustion, which may have potential for causing physiological problems for some of the lecturers. Lecturers reported exhaustion caused by the pressure of deadlines and unscheduled work activities, which combine to create an unhealthy work-life balance. A related study by Bowen (2016), also confirmed that teachers felt that their jobs were time-consuming and interfered with their private lives. In stress literature, ‘work-life balance’ and ‘work-life conflict’ are often used interchangeably (Bell, Rajendran & Theiler, 2012). In the current study, the term work-life balance is preferred. In the light of the increasing research and interest among scholars (e.g. Hayman, 2005; Pocock, 2005; Moore, 2007), evidence indicates that organizations which foster work-life balance among their employees benefit on account that there is increased employee well-being, which results in lower stress and burnout levels as well (Parkes & Langford, 2008). Teachers’ colleges can also benefit from a realization that lecturers who frequently take home their work are creating an unhealthy work-life balance. This may result in poor quality work from the lecturers, fatigued by an excessive workload.

In a meta-analysis, Alarcon and colleagues (2009) found that a consistent association existed between personality and burnout. The study showed that, among other job stress predictors, workload is an important predictor of burnout. This finding is also confirmed in the current study. Job demands define an energy-depleting health

impairment pathway (Van den Broeck, 2010), encompassing high workload, ambiguity of roles, and conflict of roles (Bakker & Demerouti, 2007), which may result in negative outcomes, including turnover intention (Qiao & Wilmar, 2011), and burnout (Schaufeli & Bakker, 2004). As earlier noted, the majority of the lecturers had served more than six years, and were likely to be exposed to excessive stress. In the JD-R model, prolonged exposure to stress leads to overburdened employees. This leads to burnout, with employees experiencing either exhaustion or feelings of disengagement, resulting in decreased work outcomes. Such employees are likely to exert less effort to save energy and avoid fatigue (Van den Broeck, et al., 2010). However, the current study seems to suggest the contrary.

First, the results indicate an incomprehensible motivational pathway, whereby the lecturers' job demands, such as increased marking loads, more students for research supervision and increased teaching practice field supervision, seemed to function as job resources leading to increased work engagement by the lecturers. This is inexplicable given that with the massification of the Zimbabwean higher education sector, where there are increased numbers of students and increased workloads to deal with, lecturers should be generally exposed to high levels of exhaustion, but this sample of lecturers seemed to experience low levels of exhaustion. This finding confirms an earlier observation made for Question 1b in relation to the JD-R model. This scenario could perhaps be impelled by the fact that the lecturers have acquiesced to their work environment and developed some immunity to the demands placed upon them. This resignation may be strongly influenced by a realization that there are no other job options readily available to them given the constricted labour market in Zimbabwe.

Second, individuals with high neuroticism scores are generally pessimistic and view their surroundings as ominous, which predispose them to burnout (Langelaan et al., 2006). The findings of this study regarding neuroticism confirm the Stoeva, Chiu and Greenhaus (2002) study, which reported that neurotic individuals had high job stress levels. The study by Stoeva and colleagues was done in Hong Kong which has a collectivistic culture (Hofstede, 2001), which is similar to that of the Zimbabwean lecturer sample in the current study. In individualistic Western cultures, where individuals generally prefer to isolate themselves from group contact (Nwoye, 2015), the potential for burnout would be more increased because individuals generally have a smaller social support network (Chun et al., 2006). In the work environment, self-isolation leads to severe and unresolved conflicts, which increase the chance of frustration, hostility and diminished social support (Sulea et al., 2012). In collectivistic cultures, the focus is on one's social obligations and responsibilities to one's in-groups. The cultural transactional theory of stress and coping suggests that in collectivistic cultures, individuals generally work in groups, as there is a sense of duty towards the collective and in-groups (Chitindingu & Mkhize, 2016; Chun et al., 2006). Therefore, individuals in such cultures are more likely to demonstrate a dialogical, rather than a monological account of the human person (Mkhize, 2004). Individuals are compelled to defer to and work within the group, and on account of this, they are able to minimise the negative effects of stress, which cause burnout (exhaustion).

Third, extraversion showed a significant but negative relationship with job stress. This implies that teachers' college lecturers who are high in extraversion are likely to experience less stress associated with job demands, and report less stress regarding

control of their jobs. This relationship confirms the potential for experiencing low levels of burnout on the exhaustion dimension. A meta-analysis of human service providers conducted by Lee and Ashforth (1996) showed that job demands were predictive of burnout. The burnout reported by these human service providers emanated from a host of job demands, which included excessive workload and unclear job designations. On the contrary, the current study reveals that lecturers did not experience these negative job demands, as they reported low levels of exhaustion. This finding further confirms that the accommodating nature of extraverts enables them to react more positively to situations, and makes them experience lower levels of stress (McCrae & John, 1992; Diener & Lucas, 1999).

Fourth, individuals high in conscientiousness demonstrate proper organization, careful planning, and excellent time management. This enables them to complete more tasks timeously and expediently, thereby reducing work conflict (McCrae & John, 1992; Judge & Higgins, 1999; Barrick & Mount, 2001). Furthermore, conscientious people are more likely to perform tasks thoroughly and correctly (Kaur, 2013). In the context of the work environment, these personality attributes help explain why such teachers' college lecturers experience low levels of exhaustion. Thus, lecturers who exhibit conscientiousness are more likely to focus on their work than on extraneous activities, which may disrupt their carefully planned work routines.

In conclusion, although extraversion, neuroticism and conscientiousness have a low correlation with exhaustion, this is sufficient evidence to support the usefulness of personality traits in explaining lecturers' job burnout experiences. It

is also significant to note that extraversion appears to be the dominant trait reflected by the lecturers, as was demonstrated in Question 1b.

7.2.3 Personality and Coping

Conscientiousness explains a significant variation in three coping strategies namely, planning, restraint coping and the use of instrumental social support. Three explanations emerge for this pattern.

First, individuals who use planning deliberately map a strategy of engaging a problem (Carver, et al., 1989). On account of not being impulsive, conscientious individuals generally reduce interpersonal problems (Carver & Connor-Smith, 2010). Planning was used as a coping strategy by lecturers in the current study, thereby affirming some research studies which proved that conscientious individuals experience less stress (e.g. Lee-Baggley et al., 2005).

Second, restraint coping was another predominantly used strategy. Restraint is the exercise of self-control and maturity which prevents impulsivity when in a stressful situation (Carver, et al., 1989). It would appear that restraint coping is concordant with collectivistic cultures. According to the cultural transactional theory of stress and coping (See Panel V with regard to health and wellbeing), coping is evaluated in terms of social and relational consequences, such as the need to maintain the group together and enhance interdependence. Therefore, a cogent explanation is that the lecturer sample derives from a collectivistic culture. They will thus exercise restraint to create group harmony rather than focus only on the reduction of stress which is the main focus in of persons in individualistic cultures.

Third, lecturers used instrumental social support as one of the dominant strategies of coping. Lecturers who plan their work, such as lecturing, marking and project supervision, are less likely to be embroiled with supervisors or colleagues over unmet deadlines. Biographical data (Table 4) further support that the majority of lecturers have matured in their jobs through prolonged experience, and were therefore most likely to avoid volatile and confrontational work situations. The maturity of the lecturers also implies that they preferred to acquire information before making decisions. This consequently minimizes the risk of interpersonal conflict among the lecturers in the workplace.

Conscientiousness also explains a significant per cent variation in positive reinterpretation and growth. This coping strategy aims at circumventing the stressor by focusing more on controlling feelings of anxiety resulting from the stressor (Carver, et al., 1989). Because people who are conscientious are organised, meticulous, thorough, and operate with planned intentionality (Srivastava, 2013), lecturers who use positive reinterpretation and growth have more control of their distress emotions. And, by using planning, restraint coping together with instrumental social support, they avoid potential stress in the job environment.

The conclusion drawn is that lecturers with higher conscientiousness scores use more problem-focused coping strategies such as active coping, planning, restraint, and instrumental social support, to deal with stressful situations. These findings converge with the extant literature, which has demonstrated that conscientiousness is associated with three interrelated characteristics: success seeking, reliability, and organization (e.g. McCrae & John, 1992; Judge, Higgins, Thoresen & Barrick, 1999). These characteristics

impel conscientious people to perform well in their jobs because they are unemotional, calm, and not difficult to interact with (Barrick, Mount & Judge, 2001). Lecturers who are high in conscientiousness are likely to accomplish more in the time available, which may reduce unwanted time pressures, thereby reducing conflict. These characteristics seem to indicate the use of primary coping by the lecturer sample. It is important to note that primary coping is associated with individualistic cultures, where the emphasis is on individuality and personal control of life, generally linked with problem-focused coping (Chun, Moos & Cronkite, 2006). The lecturer sample showed these same characteristics, despite their culture being described as collectivistic.

The results also show that highly neurotic lecturers opt more for active coping and planning combined with positive reinterpretation and growth. This explanation apparently contradicts the commonly held standpoint by personality researchers (e.g. Endler, & Parker, 1990; Costa, & McCrae, 1992) that neurotic individuals perceive threats rather than challenges when confronted by stressful situations, and because of this, they tend to seek emotional support.

Furthermore, the results suggest that highly neurotic lecturers are more likely to opt to use behavioural disengagement when confronted by stressful job situations and conflict. Behavioural disengagement is characterized by a sense of resignation when an individual is confronted by stress (Carver, et al., 1989), and therefore predisposes neurotic individuals to experience higher levels of stress.

This study confirms other studies which have shown that neuroticism predicts job stress (Piedmont, 1993), and predisposes individuals to increased conflict (Stoeva et al. 2002). Other studies (e.g. Shimizutani et al., 2008) have supported the positive

association between neuroticism and workload. Faced with an increased workload, neurotic lecturers are unlikely to identify avoidable work factors, such as the failure to adhere to marking and project supervision schedules. In conclusion, it can be seen that conscientiousness, neuroticism and openness to experience have weak correlations with various coping dimensions. Nonetheless, their utility in explaining the coping strategies used by this lecturer sample is important.

Two plausible conclusions emerged. First, the current study seems to suggest that individual differences, based on personality traits, offer a logical explanation of coping behaviour at an individual, rather than at a cultural level. There is a possibility that some of the lecturers have adopted western values. Acculturation theory suggests that individuals who undergo transition transform their personalities, and consequently their stress and coping experiences (Berry, 1997, in Kuo, 2011). The influence of globalization may well account for the apparent contradictions, which are explained in this study by what appear to be individualistic tendencies in a predominantly collectivistic culture. Second, this study indicates that college lecturers employ a variety of strategies to mitigate the negative impact of job stress and burnout. This supporting evidence therefore shows the usefulness of personality traits, especially in collectivistic cultures.

7.3 Unique Contribution of the Study

The present study has some aspects which can be regarded as contributing to both existing, and new knowledge. The combination of quantitative and qualitative research methods provided a very useful framework with which the variables under study were illuminated. The sequential approach adopted was efficacious in two ways.

First. I used four questionnaires namely, the Occupational Stress Survey, Oldenburg Burnout Inventory, Coping Orientations to Problems Experienced- Dispositional Version, and the Big Five Personality Test-International Personality Item Pool. These measures have not been previously used in this particular combination within a single study, using a sample of teachers' college lecturers. The current study illuminates a fresh perspective into a cultural background, hitherto unexplored by stress researchers. The study therefore adds to the extant personality, stress, burnout and coping literature.

Second, the methodology used was a departure from similar stress studies carried out with various populations by many researchers from collectivistic cultures (e.g. Chireshe & Shumba, 2011; Abdelsalam, 2013; Mkumbo, 2014; Masuku & Muchemwa, 2015) who have restricted themselves to descriptive statistics. The statistical analyses, using MLR and CA, helped to identify dominant personality traits with a relationship with each dependent variable, and explain the shared relationship between these identified traits and various dimensions in the dependent variables.

The in-depth interview also added breadth and depth to the 'voice' and 'perspective' of the lecturers. Thematic analysis offered invaluable multiple insights into the lecturers' actual lived experiences at each research site with regard to job stress, burnout, and coping. While the quantitative phase helped to determine and 'quantitize' the relationship between the variables, this did not explain why the relationship existed in the manner it did. In addition to 'voice', the interview 'colored' the quantitative findings by illuminating the factors which contributed to a comprehensive and nuanced explanation of the lecturers' stress experiences. The continuing trend towards mixed methods research and its advantage in psychological research is confirmed in this thesis.

Integrating the two phases of the study was a new, enlightening and fulfilling experience that enabled a logical explanation of the stress environment in the teachers' colleges. Therefore, an invaluable contribution made by this study was its breadth and depth. Personality was assessed along five dimensions, while job stress, burnout and coping had nine, two, and fifteen dimensions respectively. This study thus illuminates a new pathway for future stress research in collectivistic cultures in Zimbabwe, and beyond.

This study adds to other studies which have examined personality traits. It was further buoyed by a study (i.e. Piedmont et al., 2002) which tested a Shona Zimbabwean sample to examine whether traits were cross-cultural. Despite problems associated with translation owing to language differences, this study recommended that an extension of research on the five-factor model in agrarian cultures was imperative, and would help illuminate how culture determines personality traits. However, as there is no evidence of prior studies with a Zimbabwean teachers' college lecturer sample, the current study provides useful information for future research in collectivistic cultures. This study showed that there was a relationship, albeit weak, between personality and dependent variables, indicating potential for further related research. What emerges is that future research should develop measures with local language-appropriate translations of the five-factor model, in order to test its universality. This study therefore challenges African psychologists to expand the realm of their research in this direction.

Finally, the use of multiple measures, in a local Zimbabwean context to study lecturers in teachers' colleges, pioneers new research directions, and also kindles the debate on the suitability of Western derived measures in cultures defined as collectivistic.

Each of these measures has shown a demonstrable and practical dimensionality in this study with a sample of lecturers from an African background. Thus, as the pursuit of an African psychology continues, it becomes imperative to recognize that we have firm theoretical ground to build upon from which new theories develop. This is further confirmed by Mkhize (2003, p.237) when he issues a caveat that, “The call for the indigenization of psychology does not mean that western philosophical and psychological traditions have to be abandoned.” Therefore, this study is unique in that it recognizes the practical utility of such instruments, but also postulates that a new psychology be explored to widen our understanding of the human condition.

7.4 Theoretical and Practical Implications of the Current Study

The study used a ‘tripod’ theoretical framework. The invaluable contribution of each theory has been demonstrated. With regard to the five-factor model, and with particular reference to this study, there is evidence that a theoretical gap based on cultural and linguistic differences exists in how personality is defined. This affords an opportunity for the development of a different illustration of what constitute traits in a particular context. For example, neuroticism is not a trait that is generally associated with collectivistic cultures which operate within a group, and with a custom of deferring to authority most of the time.

Therefore, the underlying principle that cultural differences impact the whole stress and coping process, offers a plausible explanation of the cultural difference that influences how we appraise and respond to stress. In this light, the job demands-resources model has significant theoretical relevance evidenced in this study. The health impairing

and motivational pathways outlined in the model have been proved not to be a straightjacket; rather there is interplay between personality variables and the job environment. It is concluded that the tripod approach, I adopted as a theoretical framework, while not enabling a new theory to emerge, does show that individual differences and work environment appear to influence stress and coping.

Higher education and educational practice can draw important lessons from this study. For example, the importance of individual differences in the work context is emphasized. The study demonstrates how personality influences our experiences of job stress, burnout and coping. Lecturers with different levels of personality traits may appraise and respond to similar stress sources differently. While it is imperative and necessary that the Zimbabwe government continues on its path of massification, the impact this has on the lecturers in teachers' colleges cannot be however ignored. The lecturers have to withstand the worst of an increased workload, resulting from increased numbers of poor quality students and working with inadequate job resources. This is a serious possible source of stress and burnout which the government will need to seriously examine and address in order to create a more conducive environment for the lecturers in teachers' colleges.

Lecturers who fail to cope with their job stress are unlikely to be efficient and offer quality services to their clients, the students. In view of this, the line management from directors, principals and the local leadership at college level, such as heads of department and lecturers in charge, need to refocus their attention on key, identifiable work factors that need addressing, to enhance the working environment of the lecturers. Issues such as team-building exercises, and leadership and management training courses,

could be systematically dealt with to enhance the understanding that individual differences in the work place, if well managed, improve job performance. The lecturers also clearly verbalized monetary incentives as important job resources which would increase their level of motivation. The need to address the salaries of lecturers in teachers' colleges who earn far less their university counterparts is an issue that central government has to consider. While monetary rewards are not overlooked as critical issues raised in this study, other non-monetary incentives are also important. These may include recognition of effort by individual lecturers and teams, through various means, such as commendation letters or service awards at graduation ceremonies. However, perhaps the single most important dimension which has to be considered is the creation of supportive and responsive leadership and environments in teachers' colleges which minimizes the negative impact of job stress.

7.5 Limitations and Criticisms

Participants in this study were lecturers, and the quantitative phase relied on self-reported data. I assumed the sample of lecturer participants would give information with minimum or no bias. I made this assumption because the participants were a generally well-educated group who would understand the value of giving honest responses in an academic study of this nature. However, some research has proved that some participants may not be adept at self-assessment, and therefore provide inaccurate and non-representative responses (Kazemian & Farrington, 2005).

Added to the foregoing limitation was that Zimbabwean teachers' college lecturers, from an agrarian collectivistic culture, completed four measures developed with

a focus on Western individualistic cultures. The culture difference could have made the lecturers fail to comprehend the English nuances in some of the measures, which may have inhibited them from giving accurate responses. Furthermore, it has been proven that self-report measures do not preclude response style and prejudices by the participants (Van de Vijver & Leung, 2001; Piedmont et al., 2002). While the lecturers generally use English in the course of their teaching, notable lingual and cultural differences between the developers of the measures and the lecturer sample exist, and these could have influenced the lecturers' interpretations of the question items. Consequently, some concepts measured by the personality measure may not have had meaning in ChiShona and IsiNdebele, the two local languages spoken by the lecturers. It is recommended that future studies design, and use culture-relevant measures to map the personalities of participants from collectivistic cultures. The growth of Afrikology is encouraged whereby African psychologists develop culture-specific measures suiting the African context. Van de Vijver and Leung (2001) make a clarion call by arguing that, while there is a need for cross-cultural psychology, without which psychological theory would be restricted to its own cultural precincts, "blind exportation of western instruments to other cultures without any concern for the appropriateness of the measures is also unlikely to lead to major theoretical advancements" (para.2).

The current study could be criticized for lack of model/data fit. I used the coefficient of determination (r^2) to evaluate the fitness of the data models. Statistically, a good model is one in which data has a value of r^2 close to 1 (Bowerman & O'Connell, 1990; Draper & Smith, 1998). In this study, the r^2 for the three models was very weak for job stress (.101), burnout (.098), and coping (.072). The r^2 in each model was closer to

zero, which implied that the dependent variables were open to influence by other predictive variables beside the personality traits. However, it is important to note that while well fitting models are not always promising, and may reveal a lack of predictive validity (Nachtigall et al. 2003), poor fit does not necessarily imply weak effect or mooted links between exogenous and endogenous variables (Fink, 2015). In the current study, endogenous refers to stable traits and exogenous refers to external variables such as job stress, burnout and coping, which vary over time and situations. Even though personality traits predicted some dimensions in job stress, burnout, and coping, a plausible explanation for the lack of model/data fit may have been caused by the measures, which negatively affected the model/data fit.

The OSS used in this study had an overall internal reliability of $\alpha = .68$, but the Court and Kinman (2008) study indicated a much higher alpha of $\alpha = .85$. The highest alpha reported in my study was Demands $\alpha = .70$. The NEO-PI-R had an overall internal reliability of $\alpha = .75$ compared to the Vogt (2007) study which had an overall alpha of $\alpha = .91$. This partly explains why out of the nine job stress dimensions, extraversion explained only demands and control. There is a need to revise the measures. Furthermore, new studies can enhance the data quality by giving the participants the measures in two different time frames in order to check on test-retest reliability.

While the sample of 211 lecturers was considered large and therefore acceptable (Zaidi et al., 2013), it was non-random. Convenience sampling of volunteers from three colleges, further segmented using purposive sampling, using the maximal variation principle at the interview stage of the study, was not representative of the population of teachers' colleges in Zimbabwe. Therefore, this severely limited the generalizability of

the findings of this study to other settings. Further studies using probability sampling may generate representative samples from which the findings can be generalized.

8. REFERENCES

- Abel, M. (2002). Humour, stress, and coping strategies. *Humour: International Journal of Humour Research*, 15, 365-381. <http://dx.doi.org/10.1515/humr.15.4.365>
- Abdelsalam, A. A. (2013). *The personal characteristics of university lecturers in Libyan universities*. [Doctoral Thesis, Nottingham Trent University].
- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationship between personality variables and burnout. A meta-analysis. *Work & Stress*, 23(3), 244-263.
- Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). *Trends in global higher education: Tracking an academic revolution*. UNESCO 2009 World Conference on Higher Education, UNESCO.
- Babbie, E., & Mouton, J. (2005). *The practice of social research*. Oxford University.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4-28.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <http://dx.doi.org/10.1108/02683940710733115>
- Bakker, A. B., Demerouti, E. & Euwema, M. C. (2005), Job resources buffer the impact of job demands on burnout, *Journal of Occupational Health Psychology*, 10(2), 170-180.
- Bakker, A. B., Demerouti, A. & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behaviour*, 1, 389–411.
- Bakker, A., Demerouti, E., & Schaufeli, W. (2003). Dual processes at work in a call centre: An application of the job demands–resources model. *European Journal of Work and Organizational Psychology*, 12(4), 393-417
- Bakker, A. B., Hakanen, J.J., Demerouti, E. & Xanthopoulou, D. (2007), Job resources boost work engagement, particularly when job demands are high, *Journal of Educational Psychology*, 99(2), 274-284
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: an emerging concept in occupational health psychology. *Work Stress*, 22, 187–200.

- Bakker, A. B., Van Der Zee, J., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology, 146*(1), 31-50.
<http://dx.doi.org/10.3200/SOCP.146>
- Bakker, A. B., Van Emmerik, H. & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety Stress and Coping, 21*(3), 309-324.
- Barbaranelli, C., Caprara, G. V., Vechione, M., & Fraley, C. R. (2007). Voter's personality traits in presidential elections. *Personality and Individual Differences, 42*, 1199-1208.
- Bardi, A., & Guerra, V. M. (2011). Cultural values predict coping using culture as an individual difference variable in multicultural samples. *Journal of Cross-Cultural Psychology, 42*(6), 908-927. <http://dx.doi.org/10.1177/002202211038119>
- Barkhuizen, N., & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions. *SA Journal of Psychology, 28*, 321–336.
- Barrick, M. R., Mount, M. K. & Gupta, R. (2003). Meta-analysis of the relationship between the five-factor model of personality and Holland's occupational types. *Personnel Psychology, 56*, 45-74.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment, 9*, 9-30.
- Basit, T. N. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research, 45*(2), 143-154.
- Bell, A. S., Rajendran, D., & Theiler, S. (2012). Job stress, wellbeing, work-life balance and work-life conflict among Australian academics. *E-Journal of Applied Psychology, 8*(1).
- Bianchi, R. (2018). Burnout is more strongly linked to neuroticism than to work-contextualized factors. *Psychiatry Res. 270*, 901–905.
<http://dx.doi.org/1010.1016/j.psychres.2018.11.015>
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research, 26*(13), 1802-1811.
- Blaud, R., Kenyon, A., & Lekhi, R. (2007). *Stress at work: A report prepared for the Work Foundations' principal partners*. The Work Foundation.

- Bloom, D., Canning, D., & Chan, K. (2005). *Higher education and development in Africa*. Washington, DC: World Bank.
<http://siteresources.worldbank.org/EDUCATION/Resources/278200->
- Bhebhe, G. (2012). *The study of stakeholder participation in strategic planning processes at three colleges of education in Zimbabwe: Towards the development of a participatory process in strategic planning*. [Doctoral Thesis, University of Fort Hare].
- Boote, D., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15.
- Bowen, A. (2016). Sources of Stress: Perceptions of South African TESOL teachers. *Universal Journal of Educational Research* 4(5), 1205-1213.
- Bowerman, B. L., & O'Connell, R. T. (1990). *Linear statistical models: An applied approach*. Brooks/Cole.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Buchanan, T., Johnson, J.A., & Goldberg, L. R. (2005). Implementing a five-factor personality inventory for use on the internet. *European Journal of Psychological Assessment*, 21(2), 116-128.
- Buitendach, J. H., Bobat, S. Muzvidziwa, R. F., & Kanengoni, H. (2016). Work engagement and its relationship with various dimensions of work-related well-being in the public transport industry. *Psychology and Developing Societies*, 28(1), 50-72.
- Burombo, E. C. (2014). *Statistical Modeling of Return on Capital Employed of Individual Units*. [MSc Thesis, University of South Africa, Pretoria].
- Carlson, J. A. (2010). Avoiding traps in member checking. *The Qualitative Report*, 15(5), 1102-1113. Retrieved from <https://nsuworks.nova.edu/tqr/vol15/iss5/4> [Accessed: 23 August, 2018]
- Casanave, C. P. & Li, Y. (2015). Novices' struggles with conceptual and theoretical framing in writing dissertations and papers for publication. *Publications*, 3, 104-119.
- Carver, C. S. (2013). COPE Inventory. measurement instrument database for the social science. Retrieved from www.midss.i

- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, 61(6), 79-704.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-283.
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1022.750&rep=rep1&type=pdf>
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*, 85, 65–74.
- Chalfont, L., & Bennett, P. (1999). Personality and coping: their influence on affect and behaviour following myocardial infarction. *Coronary Health Care*, 3(3), 110-116.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE Publications.
- Charles, C. M., & Mertler, C. A. (2002). *Introduction to educational research* (4th ed.). Allyn and Bacon.
- Charter, A. (2003). A breakdown of reliability coefficients by test type and reliability method, and the clinical implications of low reliability. *The Journal of General Psychology*, 130, 290-304.
- Charter, R. A., & Feldt, L. S. (2002). The importance of reliability as it relates to true score confidence intervals. *Measurement and Evaluation in Counseling and Development*, 35(2), 104–113.
- Chireshe, R., & Shumba, A. (2011). Teaching as a profession in Zimbabwe. Are teachers facing a motivation crisis? *Journal of Social Science*, 28(2), 113-118.
- Chitindingu, E., & Mkhize, N. (2016). Listening to black african psychologists' experiences of social and academic inclusion: Incorporating indigenous knowledge systems into the curriculum. *Alternation Special Edition*, 18, 72 – 98.
- Chitate, H. (2016). Science, Technology, Engineering and Mathematics (STEM): A case study of Zimbabwe's educational approach to industrialisation. *World Journal of Education*, 6(5), 27-35. <http://dx.doi.org/10.5430/wje.v6n5p27>
- Clark, R., & Adler, E. S. (2011). *An invitation to social research: How it's done*: Stamford: Cengage Learning.

- Chun, C.A., Moos, R.H., & Cronkite, R.C. (2006). Culture: a fundamental context for the stress and coping paradigm, in P. T. P. Wong & L. C. J. Wong (Eds.), *Handbook of Multicultural Perspectives on Stress and Coping*. New York NY: Springer, pp. 29–53.
- Church, A. T. (2000). Culture and personality: Toward an integrated cultural trait psychology. *Journal of Personality*, 68, 651-703.
- Cleare, L. (2013). Personality as a predictor of job satisfaction: Study of the relationship between personality and job satisfaction amongst workers in the Bahamas. *Journal of Management Research*, 5(3), 200-229.
- Cochran, M., & Patton, M. Q. (2002). *A Guide to using qualitative research methodology*. Medecins Sans Frontiers.
- Coetzee, S. E. & Rothmann, S. (2005). Occupational stress, organizational commitment and ill-health of employees at a higher education institution in South Africa. *Journal of Industrial Psychology*, 31 (1), 47-54.
- Cohen, L., Manion, L. & Morrison, K. (2006). *Research Methods in Education* Routledge-Falmer.
- Collins, K. M. T., Onwuegbuzie, A. J., & Sutton, I. L. (2006). A model incorporating the rationale and purpose for conducting mixed methods research in special education and beyond. *Learning Disabilities: A Contemporary Journal*, 4, 67-100.
- Congolesi, V. E., Taylor, P. E., & Rice, P. F. (1983). *Basic Statistics: A real world approach* (3rd ed). West Publishing Company.
- Connell, C. M., & Gibson, G. D. (1997). Racial, ethnic, and cultural differences in dementia caregiving: Review and analysis. *Gerontologist*, 37, 355-364.
- Connor-Smith, J. K. & Flachbart, C. (2007). Relations between personality and coping: A meta-analysis. *Journal of Personality and Social Psychology*, 93, 1080–1107.
- Consiglio, C., Borgogni, L., Alessandri, G., & Schaufeli, W. B. (2013). Does self-efficacy matter for burnout and sickness absenteeism? The mediating role of demands and resources at the individual and team levels. *Work & Stress*, 27(1), 22-42.
- Cooper, C. A., Carpenter, D., Reiner, A., & McCord, D. M. (2014). Personality and job satisfaction: Evidence from a sample of street-level bureaucrats. *International Journal of Public Administration*, 37, 155-162.
<http://dx.doi.org/10.1080/01900692.2013.798810>

- Corbin, J., & Strauss, A. (2008) *Basics of qualitative research. techniques and procedures for developing grounded theory*. Sage Publications.
- Costa, P. T., Terracciano, A., & McCrae, R. R. (2001) Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81(2), 322-331.
- Costa, J. R., & McCrae, P. T. (1996). Towards a new generation of personality theories: Theoretical contexts for the five-factor model. In J.B. Wiggins (Ed). *The Five-Factor model of personality: Theoretical perspectives*, 51-87.
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4, 5-13.
- Costa, P. T. & McCrae, R. R. (1992), Revised NEO Personality Inventory (NEO-PI-R) and NEO, Five Factor Inventory (NEO-FFI) Professional Manual, PAR, Odessa, FL.
- Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of personality assessment*, 64(1), 21-50.
- Costa, P. T., Somerfield, M. R., & McCrae, R. R. (1996). *Personality and coping: A reconceptualization*. John Wiley & Sons.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Sage Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. (4th ed.). Sage.
- Creswell, J. W., Plano-Clark, V. L., Guttman, M., & Hanson, W. (2003). Advanced mixed methods research designs. In: A. Tashakkori & C. Teddlie (Eds.), *Handbook on mixed methods in the behavioural and social sciences*, pp. 209-240. Sage Publications.
- Creswell, J. W., & Plano-Clark, V. L. (2007). *Designing and conducting mixed methods research*. Sage.
- Cross, S. E., & Markus, H. R. (1999). The cultural constitution of personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd. ed., pp. 378-396). Guilford.

- Cruz, S., Fabio, Q.B., da Silva, F.Q.B., & Capretz, L.F. (2015). Forty years of research on personality in software engineering: A mapping study. *Computers in Human Behaviour*, 46, 94–113.
- Darmody, M., & Smyth, E. (2011). *Job satisfaction and occupational stress among primary school teachers and school principals in Ireland*. Dublin: Ireland. ESRI/The Teaching Council.
<http://www.teachingcouncil.ie/fileupload/Research/Commissioned%20Research/Teac>. [Accessed: 6 August 2018].
- De Braine, R., & Roodt, G. (2011). The Job Demands- Resources model as predictor of work identity and work engagement: A comparative analysis. *SA Journal of Industrial Psychology*, 37(2), 2-11.
- Dekeza, C. & Kufakunesu, M. (2017). Implementation of STEM curriculum in rural secondary schools in Zimbabwe: Limits and Possibilities. *Journal of Emerging Trends in Educational Research and Policy Studies*, 8(1), 11-15.
- Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*, 37(2), 01-09.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job-Demand-Resources Model of burnout. *Journal of Applied Psychology*, 86, 499-512.
- Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2002). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 18(3), 296–307.
- Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 19, 12-23.
- Demerouti, E., Mostert, K. & Bakker, A. B. (2010) Burnout and work engagement: A thorough investigation of the independency of both construct. *Journal of Occupational Health Psychology*, 15(3), 209–222.
- Denscombe, M. (2008). Communities of practice. *Journal of Mixed Methods Research*, 2, 270-28.
- Diener, E., & Lucas, R. E. (1999). Personality and subjective well-being, In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology*. Russell Sage Foundation.

- Digman, J.M. (1990). Personality structure: Emergence of the five-factor model, *Annual Review of Psychology*, 41, 417-440.
- Donoghue, K.J. (2004). *Measuring Coping: Evaluating the Psychometric Properties of the COPE*. Edith Cowan University.
- Douglas, H.E., Bore, M. & Munro, D. (2016) Coping with university education : The relationships of time management behaviour and work engagement with the five factor model aspects. *Learning and Individual Differences*, (45). 268-274
- Dorman, J. (2003). Testing a Model for Teacher Burnout. *Australian Journal of Educational & Developmental Psychology*. 3, 35-47.
- Doyle, S. (2007). Member checking with older women: A framework for negotiating meaning. *Health Care for Women International*, 8(10), 888-908.
- Dozva, M., & Dyanda, C. (2012). Early Childhood Development training in Zimbabwe's tertiary institutions: A reflective analysis. *Asian Journal of Management Sciences and Education*, 1(3), 57-65.
- Draper, N.R., & Smith, H. (1998). *Applied Regression Analysis* (3rd ed.). John Wiley and Sons.
- Dunahoo, C., Hobfoll, S. E., Monnier, J., Hulsizer, M. R., & Johnson, R. (1998). There's more than rugged individualism in coping: Part 1: Even the lone ranger had Tonto. *Anxiety, Stress, and Coping*, 11, 137–165.
- Dunham, J. (1992). *Stress in teaching* (2nd ed.). Routledge.
<http://dx.doi.org/10.4324/9780203314500>
- Emanuel, E. J., Wendler, D., Killen, J., & Grady, C. (2004). What makes clinical research in developing countries ethical? The benchmarks of ethical research. *The Journal of Infectious Disease*, 189, 930–7.
<http://mehr.tums.ac.ir/Upload/Journal/1b5a38d7-7d1a-40e9-8309-f01af54a53f5.pdf>
- Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: a critical evaluation. *Journal of Personality and Social Psychology*, 58 (5), 844-854.
- Feilzer. M. Y. (2009). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research* XX(X) 1–11.

- Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4, 6–16.
- Fink, J. R. (2015). *Structural equation models examining the relationship between the Big Five personality factors and the MUSIC model of academic motivation components*. [PhD Thesis, Virginia Polytechnic Institute and State University].
- Flick, U. (2006). *An introduction to qualitative research*. Sage Publications.
- Foley, C. (2013). *Investigation of stress and burnout in Irish second-level teachers: A mixed-methods approach*. [PhD Thesis, University College Cork].
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745–774.
- Fox, J. & Weisberg, S. (2010). *Time-Series Regression and generalized least squares in R. An appendix to an R companion to applied regression*.
- Kinman, G. & Wray, S. (2014). *Work-related wellbeing in UK Higher Education* 014. University and College Union.
- Kuo, B. C. H. (2011). Cultural variations in work stress and coping in an era of globalization. Cambridge Handbook of Culture, *Organizations, & Work*, 418-441. <https://scholar.uwindsor.ca/psychologypub/36>
- Gallego, A., & Oberski, D. (2012). Personality and political participation: The mediation hypothesis. *Political behavior*, 34(3), 425-451.
- Gao, M., & Liu, Q. (2013). Personality traits of effective teachers represented in the narratives of American and Chinese preservice teachers: A cross-cultural comparison. *International Journal of Humanities and Social Science*, 3(2), 84-95.
- Garst, B., Scheider, I. & Baker, D. (2001). Outdoor Adventure Programme Participation Impacts on Adolescent Self-Perception. *The Journal of Experiential Education*, 24(1), 41-49.
- Geisler, F. C. M., & Weber, H. (2010). Harm that does not hurt: Humour in coping with self-threat. *Motivation and Emotion*, 34, 446-456. <http://dx.doi.org/10.1007/s11031-010-9185-6>
- Gilbert, A. D. (2000). The idea of a university beyond 2000. *Policy*, 16, 31–36.
- Glaser, B. (1978). *Theoretical sensitivity*. Sociology Press.

- Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.
- Graff, J.C. (n.d.). *Mixed Methods Research: Chapter 3*. Jones & Bartlett.
- Goh, Y. W. (2003). *The etiology of occupational stress and coping*. [Doctoral dissertation, University of Queensland, Brisbane].
- Goldberg, L. R. (1990). An alternative "description of personality: The big five factor structure. *Journal of Personality and Social Psychology*. 59 (6), 1216-1229.
- Goldberg, L. R., John, A., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, R. C., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40, 84–96. www.elsevier.com/locate/jrp.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504 - 528.
- Govender, S. A. (2008). *The Relationship between Personality and Coping amongst Members of the South African Police Service*. [Masters Dissertation, University of Johannesburg].
- Greene, J. C., & Caracelli. (2003). Making paradigmatic sense of mixed methods practice. In Tashakkori, A., & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research*. Sage Publications.
- Greene, J. C. (2007). *Mixed Methods in Social Inquiry*. John Wiley & Sons.
- Griffith, J., Steptoe, A., & Cropley, M. (1999). An investigation of coping strategies associated with job stress in teachers. *British Journal of Educational Psychology* 69, 517–531. <https://s3.amazonaws.com/academia.edu...>
- Hall, R. (2012). Mixed methods: In search of a paradigm. [http://www. auamii. com/proceedings_Phuket_2012/Hall. Pdf](http://www.auamii.com/proceedings_Phuket_2012/Hall.Pdf).
- Hair, J. F., Black, W.C., Babin, B. J. & Anderson, R.E. (2010). *Instructor's Manual for Multivariate Data Analysis: A Global Perspective* (7th ed.). Pearson.
- Harrell, M. C., & Bradley, M. A. (2009). *Data collection methods. Semi-structured interviews and focus groups*. Santa Monica: Rand National Defence Research Institute.

- Hauke, J., & Kossowski, T. (2011). Comparison of values of Pearson's and Spearman's correlation coefficients on the same sets of data. *Quaestiones Geographicae*, 30(2), 87-93.
- Hayman, J. (2005). Psychometric assessment of an instrument designed to measure work life balance. *Research and Practice in Human Resource Management*, 13(1), 85-91.
- Health and Safety Executive, (2006). *Investigation of the links between psychological ill health, stress and safety*. Crown.
- Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, W. C. (1995). Progress in resolving problems: a problem-focused style of coping. *Journal of Counselling Psychology*. 42, 279–293. <http://dx.doi.org/10.1037/0022-0167.42.3.279>
- Heppner, P. P. (2008). Expanding the conceptualization and measurement of applied problem solving and coping: From stages to dimensions to the almost forgotten cultural context. *American Psychologist*, 68, 805–816.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviours, institutions, and organizations across nations* (2nd ed.). Sage.
- Hornsby, D. J. & Osman, R. (2014). Massification in higher education: Large classes and student learning. *High Education*, 67, 711-719.
- Hudek-Knežević, J., Maglica, B. K. & Krapic, N. (2011). Personality, organizational stress, and attitudes toward work as prospective predictors of professional burnout in hospital nurses. *Croat Medical Journal*, 52, 538-549, <http://dx.doi.org/10.3325/cmj.2011.52.538>
- Hussien, Y. (2010). *Modeling the factors affecting cereal crop yields in the Amhara National Regional State of Ethiopia*. [MSc Thesis, University of KwaZulu-Natal. Pietermaritzburg].
- Ivankova, N. V., Creswell, J. W., & Plano Clark, V. L. (2007). *Foundations and approaches to mixed methods research. First steps in research*. Van Schaik, 253-282.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, 18(1), 3-20.
- Ivankova, N. I., & Stick, S. L. (2002, April). Students' persistence in the distributed doctoral program in educational administration: A mixed methods study. 13th Paper presented at the International Conference on College Teaching and Learning, Jacksonville, FL.

- Jackson, L. & Rothman, S. (2006). Occupational stress, organizational commitment, and ill-health of educators in the North West Province. *South African Journal of Education*, 26(1), 75–79.
- Jelinek, J., & Morf, M. E. (1995). Accounting for variance shared by measures of personality and stress-related variables: A canonical correlation analysis. *Psychological Reports*, 76(3), 959-962.
- Jepson, E., & Forrest, S. (2006). Individual contributory factors in teacher stress: The role of achievement striving and occupational commitment. *British Journal of Educational Psychology*, 76, 183–197.
- John, O. P., & Srivastava, S. (1999). The Big Five Taxonomy: History, measurement and perspectives. In L.A., John & O.P. John (Eds) *Handbook of Personality* (2nd ed.). Guilford Press.
- Johnson, S. M. (2013). Impact of stress and burnout intervention in high-risk secondary schools (Doctoral Thesis, Stellenbosch University).
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative and mixed methods* (4th ed.). Sage.
- Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative and mixed approaches*. Sage Publications.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P. J. & Millet, C. (2005). The experience of work-related stress across applications, *Journal of Management*, 20, 178 – 187.
- Johnson, B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A paradigm whose time has come. *Educational Research*, 33(7), 14-26.
- Jorgensen, L. I., Nel, J. A. & Roux, D. J. (2013). Qualities of work-related well-being in selected South African occupations. *Journal of Psychology in Africa*, 23(3), 447-452.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52(3), 621-652.
- Kangai, C. & Bukaliya, R. (2011). Teacher development through open and distance learning: The case for Zimbabwe. *International Journal on New Trends in Education and their Implications*, 2(4), 124-141.

- Kataoka, M., Ozawa, K., Tomotake, M., Tanioka, T., & Beth King, B. (2014). Occupational stress and its related factors among university teachers in Japan, *Health*, 6(5), 299-305.
- Karatepe, O. M. (2012). Job resources, work engagement, and hotel employee outcomes: A time-lagged analysis. *Economic Research*, 25(3), 644-665.
- Kaur, J. (2013). Work family balance: its correlation with satisfaction with life and personality dimensions amongst college teachers. *International Journal of Marketing, Financial Services & Management Research*, 2, 2277-3622.
- Kazemian, L., & Farrington, D. P. (2005). Comparing the validity of prospective, retrospective, and official onset for different offending categories. *Journal of Quantitative Criminology*, 21(2), 127-147.
- Keltner, D., & Bonnano, G. A. (1997). A study of laughter and dissociation: Distinct correlates of laughter and smiling during bereavement. *Journal of Personality and Social Psychology*, 73, 687-702.
- Kerr, R. A., Breen, J., Delaney, M., Kelly, C., & Miller, K. (2011). A qualitative study of workplace stress and coping in secondary teachers in Ireland, *Irish Journal of Applied Social Studies*: 11(1). 27-38. <http://arrow.dit.ie/ijass/vol11/iss1/3>
- Kinman, G. (2014). Doing more with less? Work and wellbeing in academics. *Somatechnics*, 4(2), 219-235.
- Kitayama, S., Markus, H. R., & Lieberman, C. (1995). The collective construction of self esteem. In *Everyday conceptions of emotion* (pp. 523-550). Springer.
- Kline, R. B. (2005). *Principles and practices of structural equation modeling*. The Guilford Press.
- Knapp, F. & Heidingsfelder, M. (2001). Dropout analysis: Effects of the survey design. In U.D. Reips & M, Bosnjak (Eds.), *Dimensions of internet science* (pp. 221-230). Pabst Science Publishers.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229-243.
- Korunka, C., Kubicek, B., Schaufeli, W. B., & Hoonakker, P. (2009). Work engagement and burnout: Testing the robustness of the job demands-resources model. *The Journal of Positive Psychology*, 4(3), 243-255.

- Kosenko, K. A., & Rintamaki, L. S. (2010). Forms, functions, and foibles of humor used in AIDS service organizations. *The Journal of the Association of Nurses in AIDS Care*, 21, 25-35. <http://dx.doi.org/10.1016/j.jana.2009.08.001>
- Kuiper, N. A. (2012). Humour and Resiliency: Towards a process model of coping and growth. *Europe's Journal of Psychology*, 8(3), 475–491. <http://dx.doi.org/10.5964/ejop.v8i3.464>
- Kuo, B. C. H. (2011). Collectivism and coping: Current theories, evidence, and measurements of collective coping. *International Journal of Psychology*, 48 (3), 374-388. <https://scholar.uwindsor.ca/psychologypub/10>
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-36.
- Laher, S. (2008). Structural equivalence and the NEO-PI-R: implications for the applicability of the five-factor model of personality in an African context: theoretical research. *SA Journal of Industrial Psychology*, 34(1), 76-80.
- Lam, A. G., & Zane, N. W. (2004). Ethnic differences in coping with interpersonal stressors: A test of self-construals as cultural mediators. *Journal of Cross-Cultural Psychology*, 35, 446–459.
- Langelan, S., Bakker, A. B., van Doornen, L. P., & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality & Individual Differences*, 40, 521–532.
- Lazarus R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Leandro, P.G., & Castillo, M.D. (2010). Coping with stress and its relationship with personality dimensions, anxiety, and depression. *Procedia-Social and Behavioural Sciences*, 5, 1562-1573.
- Lee, R. T, & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*. 8:123–33.
- Lee-Baggley, D., Preece, M., & DeLongis, A. (2005). Coping With Interpersonal Stress: Role of Big Five Traits. *Journal of Personality*, 73(5), 1141-1180.
- Lee, F.K., Johnston, J. A., & Dougherty, T. W. (2000). Using the Five-Factor Model of Personality to Enhance Career Development and Organizational Functioning in the Workplace. *Journal of Career Assessment*. 8(4), 419 – 42.

- Llorens, S., Bakker, A.B., Schaufeli, W. & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of Stress Management*, 13(3), 378-391.
- Maree, K. (Ed). (2007). *First Steps in Research*. van Schaik.
- Maringe, F., & Sing, N. (2014). Teaching large classes in an increasingly internationalizing higher education environment: pedagogical, quality and equity issues. *High Education*, 67,761-782.
- Maslach, C., Schaufeli, W.B. & Leiter, M.P. (2001). Job Burnout. *Annual Review of Psychology*, 52, 397–422.
- Mason, J. (2002). *Qualitative researching* (2nd ed.). Sage.
- Mason, R.O., Lind, D.A., & Marchal, W.G. (1983). *Statistics. An Introduction*. Harcourt Brace Jovanovich.
- Mapfumo, J.S., Chitsiko, N. & Chireshe, R. (2012). Teaching Practice generated stressors and coping mechanisms among student teachers in Zimbabwe *South African Journal of Education*, 32:155-166
- Masuku, S., & Muchemwa, S. (2015). Occupational Stress among University Lecturers: A Case of Zimbabwe. *US-China Education Review A*, 5(4), 258-266.
- McCrae, R. R. (2011). Personality theories for the 21st century. *Teaching of Psychology*, 38, 209-214. <http://dx.doi.org/10.1177/0098628311411785>
- McCrae, R.R., & John, O.P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60(2), 175-215.
- McCrae. R. R., & Costa, P. T., Jr. (1989). The structure of interpersonal traits: Wiggins's circumplex and the five-factor model. *Journal of Personality and Social Psychology*, 56, 586-595
- McCrae, R.R., & Costa, P.T. Jr., (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81–90.
- McGregor, A., Magee, C.A., Caputi, P., & Iverson, D. (2016). A job demands-resources approach to presenteeism. *Career Development International*, 21(4), 402-418.
- McMillan, J.H., & Schumacher, S. (1994). *Research in education: A conceptual introduction* (4th ed.). Longman.

- McMillan, J. H., & Schumacher, S. (2006). Evidence-based inquiry. *Research in education*, 6.
- McMillan, J.H., & Schumacher, S. (2014). *Research in education: Evidence-based inquiry*: Pearson Higher Ed.
- Merriam, S.B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Mertler, C.A., & Vannatta, R.A. (2002). *Advanced and Multivariate Statistical Methods: Practical Application and Interpretation* (2nd ed). Pyrczak Publishing.
- Miles, M.B., & Huberman, A.M. (1994a). *Qualitative data analysis: A sourcebook* (2nd ed.). Sage Publications.
- Miles, M. B., & Huberman, M. (1994b). *An expanded sourcebook: Qualitative data analysis* (2nd ed.). Sage.
- Mitchell, T. L., Griffin, K., Stewart, S. H., & Loba, P. (2004). We Will Never Ever Forget...: The Swissair Flight 111 Disaster and its Impact on Volunteers and Communities. *Journal of Health Psychology*, 9(2), 245-262.
- Mkhize, N. (2004). *Psychology: An African Perspective*. In Hook, D., N. Mkhize, P. Kiguwa & A. Collins (eds.): *Critical Psychology*. University of Cape Town Press.
- Mkhize, N.J. (2003). Culture and the self in moral and ethical decision-making: A dialogical approach. (PhD Dissertation, University of Kwazulu-Natal, South Africa).
- Mkhize, N. (n.d.). Theoretical and conceptual framework in a PhD.
- Mkumbo, K. (2014). Prevalence of and Factors Associated with Work Stress in Academia in Tanzania. *International Journal of Higher Education*, 3(1), 1-11.
- Mohamedbhai, G. (2014). Massification in higher education institutions in Africa: Causes, consequences and responses. *International Journal of African Higher Education*, 1(1).
- Mondak, J.J., Hibbing, M.V., Canache, D., Seligson, M.A., & Anderson, M.R. (2010). Personality and civic engagement: An integrative framework for the study of trait effects on political behavior. *American Political Science Review*, 85-110.
- Mount, M.K., Barrick, M.R. & Stewart, G.L. (1998). Personality predictors of performance in jobs involving interactions with others. *Human Performance*, 11, 145-166.

- Mursalin, T. E. (n.d.). *Economic Determinants and Price Index Behavior in Dhaka Stock Exchange: An Empirical Analysis*.
- Mxenge, S. V., Dywill, M., & Basaza, S. (2014). Job engagement and employees' intention to quit among administrative personnel at the University of Fort Hare in South Africa. *International Journal of Research in Social Sciences*, 4(5), 129-14.
- Naidoo, R. (2016). The relationship between personality traits, psychological capital and job performance among sales employees within an information, communication and technology sector. (Masters Dissertation, University of South Africa).
- Nnabuife, E., Onyeizugbe, C. & Onwuka, E.M. (2012). Stress management and occupational performance among female lecturers in Nigeria. *African Journal of Social Sciences*, 2(3), 166-174.
- Nunan, D. (1999). *Research methods in language learning*. (Eighth printing). Cambridge University Press.
- Nunnally, C. (1978). *Psychometric theory*. (2nd ed.) McGraw-Hill.
- Olivier, M.A.J. (2005). How do academics handle their job-related stress? *SAJHE* 19 (2), 345-358.
- Onu, M.O., Madukwe, M.C., & Agwu, A.E. (2005). Factors affecting Job Satisfaction of front-line extension workers in Engunu State agricultural development program, *Nigeria, Agro-Sci.* 4, 19-22.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. *The Qualitative Report*, 12(2), 281-316. Retrieved from <http://nsuworks.nova.edu/tqr/vol12/iss2/9>
- Onwuegbuzie, A.J. & Leech, N.L. (2005). A Typology of Errors and Myths Perpetuated in Educational Research Textbooks *Current Issues in Education* [On-line], 8(7). <http://cie.ed.asu.edu/volume8/number7/>
- Panaccio, A., & Vandenberghe, C. (2012). Five-factor model of personality and organizational commitment: The mediating role of positive and negative affective states. *Journal of Vocational Behaviour*, 80(3), 647-658.
- Parkes, L. P., & Langford, P. H. (2008). Work-life balance or work-life alignment? A test of the importance of work-life balance for employee engagement and intention to stay in organizations. *Journal of Management & Organization*, 14(3), 267-284.

- Parzefall, M.R. & Hakanen, J. (2010). Psychological contract and its motivational and health-enhancing properties. *Journal of Managerial Psychology*, 25(1), 4-21.
- Penley, J. A., & Tomaka, J. (2002). Associations among the Big Five, emotional responses, and coping with acute stress. *Personality and Individual Differences*, 32(7), 1215-1228.
- Penney, L.M., David, E., & Witt, L.A. (2011). A review of personality and performance: Identifying boundaries, contingencies, and future research directions. *Human Resource Management Review*, 21, 297–310.
- Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M.E.P. (2007). Strengths of character, orientations to happiness and life satisfaction. *The Journal of Positive Psychology*, 2, 149-156. <http://dx.doi.org/10.1080/17439760701228938>
- Phellas, C.N., Bloch, A., & Seale, C. (2011). Structured Methods: Interviews, Questionnaires and Observation. Research Methods_interviews__47370_seale_chapter11_pdf .
- Piedmont, R.H. (1993). A longitudinal analysis of burnout in the health care setting: the role of personal dispositions. *Journal of Personality Assessment*, 61, 457–73.
- Piedmont, R.L., Bain, E., McCrae, R.R. & Costa, P.T. (2002). The applicability of the Five Factor Model in a sub-Saharan culture: The NEO-PI-R in Shona. In R.R. McCrae & J. Allik (Eds.). *The Five-Factor Model of personality across cultures*. New York: Kluwer Academic. pp. 155–175.
- Plotts, T. (2011). A multiple regression analysis of factors concerning superintendent longevity and continuity relative to student achievement. *Dissertations*. Paper 484. <http://scholarship.shu.edu/dissertations/484>
- Pocock, B. (2005). Work-life ‘balance’ in Australia: Limited progress, dim prospects. *Asia Pacific Journal of Human Resources*, 43(2), 198-209.
- Ponterotto, J.G. & Ruckdeschel, D.E. (2007). An overview of coefficient alpha and a reliability matrix for estimating adequacy of internal consistency with psychological research measures. *Perceptual and Motor Skills*, 105, 997-1014.
- Potter, J. & Wetherell, M. (1987) *Discourse and social psychology: beyond attitudes and behaviour*. Sage.
- Poulsen, A.A., Meredith, P., Khan, A., Henderso, J., Castrisos, V., & Khan, S.R. (2014). Burnout and work engagement in occupational therapists. *British Journal of Occupational Therapy*, 77(3), 156–164.

- Putnam, H. (1977). Realism and reason. In Proceedings and Addresses of the American Philosophical Association. *American Philosophical Association*, 50(6), 483-498.
- Qiao, H. & Wilmar, B.S. (2011), Job insecurity and remuneration in Chinese family owned business workers, *Career Development International*, 16(1), 6- 19.
- Radman, A.S.A, Ahmed, A.R., Ahmed, A.M., & Rampal, K.G. (2011). Stress and Coping Strategies of Students in a Medical Faculty in Malaysia. *Malaysian Journal of Medical Science*, 18, 57-64.
- Rattrie, L.T.B., & Kittler, M.G. (2014). The Job Demands-Resources model and the international work context: A systematic review. *Journal of Global Mobility*, 1-31.
- Rossmann, G.B., & Wilson, B.L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review*, 9(5), 627-643.
- Rothmann, S., Jorgensen, L.I., & Marais, C. (2011). Coping and work engagement in selected South African organizations. *SA Journal of Industrial Psychology*, 37(1), 1-11. <http://dx.doi.org/10.4102/sajip.v37i1.962>
- Rothmann, S., & Coetzer, E. (2003) The Big Five Personality Dimensions and Job Performance. *SA Journal of Industrial Psychology*, 29 (1), 68-74.
- Rothmann, I., & Cooper, C. L. (2008). *Organizational and Work Psychology*. Hodder Education.
- Rowe, A., & Regehr, C. (2010). Whatever gets you through today: An examination of cynical humor among emergency service professionals. *Journal of Loss and Trauma*, 15, 448-464. <http://dx.doi.org/10.1080/15325024.2010.507661>
- Ryan, T.P. (2008). *Modern Regression Methods*, (2nd ed.). John Wiley & Sons.
- Salami, S.O. (2011). Job stress and burnout among lecturers: Personality and social support as moderators. *Asian Social Science*, 7(5).110-121.
- Samson, A.C., & Gross, J.J. (2012). Humour as emotion regulation: The differential consequences of negative versus positive humour. *Cognition & emotion*, 26(2), 375-384. <http://dx.doi.org/10.1080/02699931.2011.585069>
- Schaufeli, W.B., & Bakker, A.B. (2004), Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study, *Journal of Organizational Behaviour*, 25(3), 293-315.

- Schaufeli, W.B. & Taris, T.W. In G.F. Bauer and O. Hämmig, (2014). Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach. Springer, pp. 43-68.
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, 14(3), 204-220.
- Schaufeli, W.B., Taris, T.W., & van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology*, 57, 173–203.
- Schaufeli, W.B., & Taris, T.W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress*, 19, 256–262.
- Schaufeli, W.B., Salanova, M., Gonz´alez-Rom´a, V. & Bakker, A.B. (2002) The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92.
- Scherer, R.F., Hwang, C.E., Yan, W., & Li, J. (2000). The dimensionality of coping among Chinese health care workers. *The Journal of Social Psychology*, 140, 317-327.
- Schiffirin, H.H., & Nelson, S.K. (2010). Stressed and happy: Investigating the relationship between happiness and perceived stress. *Journal of Happiness Studies*, 11, 22–39. <http://dx.doi.org/10.1007/s10902-008-9104-7>
- Schneider, B., Macey, W. H., Barbera, K. M., & Martin, N. (2009). Driving customer satisfaction and financial success through employee engagement. *People & Strategy*, 32(2), 22–27.
- Schultz, D.P. & Schultz, S.E. (2009) *Theories of Personality* (9th ed). Wadsworth.
- Schulze, S., & Steyn, T. (2007). Stressors in the professional lives of South African secondary school learners. *South African Journal of Education*, 27(4), 691-708.
- Shaffer, L.B. (2007). Examining Regression Analysis Beyond the Mean of the Distribution using Quantile Regression. (MSc Thesis, University of Tennessee. Knoxville).
- Shernoff, E.S., Mehta, T.G., Atkins, M.S., Torf, R., & Spencer, J. (2011). A qualitative study of the sources and impact of stress among urban teachers. *School Mental Health*, 3(2), 59-69.

- Shimizutani, M., Odagiri, Y., Ohya, Y., Shimomitsu, T., Kristensen, T.S., Maruta, T., & Imori, M. (2008). Relationship of nurse burnout with personality characteristics and coping behaviours. *Industrial Health*, 46, 326-335.
- Shweder, R. A., & Sullivan, M. A. (1993). Cultural psychology: Who needs it? *Annual Review of Psychology*, 44, 497-523.
- Shweder, R. A. (1991). *Thinking through cultures: Expeditions in cultural psychology*. Harvard University Press.
- Silverman, D. (2011). *Interpreting qualitative data* (4th ed.). Sage Publications Ltd.
- Sitwala, I. (2014). Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Science*, 38(2), 185-195.
- Smith, P.B., & Bond, M.H. (1993). *Social psychology across cultures: Analysis and perspectives*. Hertfordshire, England: Harvester Wheat Sheaf.
- Somekh, B., & Lewin, C. (2011). *Theory and methods in social research*, (2nd ed.). Small Business Network.
- Somerfield, M.R. & McCrae, R.R. (2000). Stress and coping research: methodological challenges, theoretical advances, and clinical applications. *American Psychologist* 55: 620–625.
- Spence-Laschinger, H.K., Leiter, M., Day, A., & Gilin, D. (2009). Workplace empowerment, incivility, and burnout: Impact on staff nurse recruitment and retention outcomes. *Journal of nursing management*, 17(3), 302-311.
- Srivastava, S. (2013). *Measuring the Big Five Personality Factors*. <http://psdlab.uoregon.edu/bigfive.html>.
- Steyn, G.M. & Kamper, G.D. (2006). Understanding occupational stress among educators: an overview. *African Education Review*, 3(1+2), 113-133.
- Stoeva, A.Z., Chiu, R.K. & Greenhaus, J.H. (2002). Negative affectivity, role stress, and work-family conflict. *Journal of Vocational Behaviour*, 60, 1-16.
- Sulea, C., Filipescu, R., Horga, A., Orȃn, C., & Fischmann, G. (2012). Interpersonal mistreatment at work and burnout among teachers. *Cognition, Brain, Behaviour. An Interdisciplinary Journal*, 16(4), 553-570.
- Sukanlaya, S., Wah, G.Y. & Tian, O. (2006). Are country and cultural values interchangeable? A case example using occupational stress and coping. *International Journal of Cross Cultural Management*, 6(2), 205-219.

- Sur, H., Mumcu, G., Soylemez, D., Atli, Y., & Idrim, C. (2004). Factors affecting Dental Job satisfaction, Evaluation and the Health Prof. *The Haworth Press*. 27, 152-164.
- Taylor, R. (1990). Interpretation of the Correlation Coefficient: A Basic Review. *Journal of Medical Diagnostic Sonography*, 6(1), 35-39.
- Teddlie, C. & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioural sciences*. Sage.
- Teddlie, C. & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioural sciences. In Tashakkori, A., & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioural Research*. Sage Publications.
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), 77-100.
- Teferra, D., & Altbachl, P. G. (2004). African higher education: Challenges for the 21st century. *Higher education*, 47(1), 21-50.
- Thorndike, R. M. (1997). *Measurement and evaluation in psychology and education* (6th ed.). Prentice-Hall.
- Triandis, H.C. (2001). Individualism–collectivism and personality. *Journal of Personality*, 69, 908–942.
- Tutuncu, O., & Kozak, M. (2006). An investigation of factors affecting job satisfaction, *International Journal of Hospitality and Tourism Administration*. 8(1), 1-19.
- Tytherleigh, M.Y., Webb, C., Cooper, C.L., & Ricketts, C. (2005). Occupational stress in UK higher education institutions: a comparative study of all staff categories. *Higher Education Research and Development*, 24(1), 41-61.
- Vander Elst, T., Cavents, C., Daneels, K., Johannik, K., Baillien, E., Van den Broeck, A., & Godderis, L. (2016). Job demands–resources predicting burnout and work engagement among Belgian home health care nurses: A cross-sectional study. *Nursing Outlook*, 64(6), 542-556.
- Van de Vijver, F., & Leung, K. (2001). Personality in cultural context: Methodological issues. *Journal of Personality*, 69(6), 1007-1031.
- Van den Broeck, A., Van Ruysseveldt, J., Vanbelle, E., & De Witte, H. (2013). The job demands–resources model: Overview and suggestions for future research. In

- Advances in positive organizational psychology*. 83-105. Emerald Group Publishing Limited.
- Van den Broeck, A. (2010). Work Motivation: A Perspective from the Job Demands-Resources Model and the Self-Determination Theory (Doctoral Thesis, Catholic University Leuven).
- Van den Broeck, A., De Cuyper, N., De Witte, H. & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges. *European Journal of Work and Organizational Psychology*, 19(6), 735-759.
- Van Zyl, Y., & Buitendach, J.H. (2004), March. Occupational stress, job satisfaction and organizational commitment of educators on senior level in the Sedibeng West district -Vanderbijlpark. Poster presented at the 2nd South African Work Wellness conference, Potchefstroom, South Africa.
- Villada, C., Hidalgo, V., Almela, M., & Salvador, A. (2016). Individual Differences in the Psychobiological Response to Psychosocial Stress (Trier Social Stress Test): The Relevance of Trait Anxiety and Coping Styles. *Stress and Health* 32: 90–99.
- Vogt, L.T. (2007). The relationship between the Five-Factor Model and Individualism/Collectivism among South African students. (MA Dissertation. University of Witwatersrand, South Africa).
- Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality and Individual Differences*, 29(2), 367-378.
- Vollrath, M., Torgersen, S., & Alnæs, R. (1995). Personality as long-term predictor of coping. *Personality and individual differences*, 18(1), 117-125.
- Vollrath, M., Banholzer, E., Caviezel, C., Fischli, C., & Jungo, D. (1994). Coping as a mediator or moderator of personality in mental health. *Personality psychology in Europe*, 5, 262-273.
- vom Brocke, J., Simons, A., Niehaves, B., Riemer, K., Plattfaut, R., & Cleven, A. (2009). Reconstructing the Giant: On the Importance of Rigour in Documenting the Literature Search Process. Paper presented at the 17th European Conference on Information Systems (ECIS 2009), Verona, Italy, pp. 2206-2217.
- Wah, G.Y., Sukanlaya, S. & Tian, O. (2010) The Revised Transactional Model (RTM) of occupational stress and coping: an improved process approach. *Australian and New Zealand Journal of Organizational Psychology*, 3, 13-20.
- Wasunna, C., Tegli, J., & Ndebele, P. (2014). Informed consent in an African context. *Research ethics in Africa: A resource for ethics committees*, 57-62.

- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the Five-Factor model. *Journal of Personality*, 64(4), 737 – 774.
- Weber, J.C. & Lamb, D.R. (1970). *Statistics and Research in Physical Education*. CV Mosby.
- Wei, L. & Lin, H. (2017). Not a One-Size-Fits-All Methodology: A Survey of Mixed Methods. *Journal of Advances in Education Research*, 2(2), 97-102.
- Weldali, L. M. S. A., & Lubis, Z. (2016). Personality traits and counterproductive work behaviour: Moderator effect of perceived organizational support. *Imperial Journal of Interdisciplinary Research*, 2(5), 521-530.
- Weinschenk, A.C., & Panagopoulos, C. (2014). Personality, Negativity and Political Participation. *Journal of Social and Political Psychology*, 2(1), 164-182.
- Wickramaaratchi, D.R. & Perera, G.D.N. (2016). Impact of Big Five Personality on Work Family Balance among Academics of Selected Public Universities in Western Province, Sri Lanka. *Human Resource Management Journal*, 4(1), 53-71.
- Wisdom, J.P., Cavaleri, M.A., Onwuegbuzie, A.J. & Green, C.A. (2012). Methodological reporting in qualitative, quantitative, and mixed methods health services research articles. *Health Services Research*, 47(2), 721-745.
- Wong, P.T.P., Reker, G.T. & Peacock, E. (2006). The resource-congruence model of coping and the development of the Coping Schemas Inventory. In Wong, P. T. P., & Wong, L. C. J. (Eds.), *Handbook of Multicultural perspectives on stress and coping*. Springer.
- Wright, T. A., & Hobföll, S. E. (2004). Commitment, psychological well-being and job performance: An examination of conservation of resources (COR) theory and job burnout. *Journal of Business and Management*, 9, 389–406.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83, 486–493.
- Xanthopoulou, D., Bakker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, 13, 345–356.
- Zaidi, N.R., Wajid, R.A., Zaidi, F.B., Zaidi, G.B., & Zaidi, M.T. (2013). The big five personality traits and their relationship with work engagement among public

- sector university teachers of Lahore. *African Journal of Business Management*, 7(15), 1344-1353.
- Zamir, S., Hina, Q.A., & Zamir, S. (2014). Relationship between Personality and Occupational Stress among Academic Managers at Higher Education Level. 2224-5766 *Research on Humanities and Social Sciences*, 4(7), 21-28.
- Zellars, K.L., & Perrewe, P.L. (2001). Affective personality and the content of emotional social support: coping in organizations. *Journal of Applied Psychology*, 3, 459-67.
- Zellars, K. L., Hochwarter, W. A., Perrewe, P. L., Hoffman, N., and Ford, E. W. (2004). Experiencing job burnout: the roles of positive and negative traits and states. *J. Appl. Soc. Psychol.* 34, 887–911. <http://dx.doi.org/10.1111/j.1559-1816.2004.tb02576.x>
- Zimmerman, R.D. (2008). Understanding the impact of personality traits on individuals' turnover decisions: A meta–analytic path model. *Personnel Psychology*, 61, 309–348. <http://dx.doi.org/10.1111/j.1744-6570.2008.00115.x>.
- Zohrabi, M. (2013). Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. *Theory and Practice in Language Studies*, 3(2), 254-262. doi:10.4304/tpls.3.2.254-262

9. APPENDICES

Appendix 1

Policy Circular 3 of 2018

From the Office of The Secretary for Higher and Tertiary Education, Science and Technology Development

All official communications should be addressed to
"The Secretary"
Telephone: 795891-5, 796441-9, 730055-9
Fax: 795790
Telegraphic address "EDUCATION"

Reference: L/4/1C
SECRETARY FOR HIGHER AND TERTIARY
EDUCATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT
P.O. Box CY 7732
Causeway

POLICY CIRCULAR 3 OF 2018
11 May, 2018

TO PRINCIPALS OF ALL PRIMARY SCHOOL TEACHER TRAINING COLLEGES

RE: PRIMARY SCHOOL TEACHER TRAINING MODEL: FROM 2-5-2 MODEL TO 3-3-3 MODEL

The subject stated above refers.

The New dispensation has been geared up to ensure that the best practices and principles should be adopted in order to deliver quality teacher education in Zimbabwe.

As a follow up to the colleges' submissions on the preferred model of training, the Ministry's Tertiary Education Programmes (TEP) department further conducted a survey that was aimed at:

- Assessing the achievement of the 2-5-2 Model, problems and challenges
- Determining the performance of the model in terms of student performance
- Assessing the relevance of the 2-5-2 as an emergency model in today's demand for teachers.

The findings revealed that the Primary Teacher Education model should now shift from the current 2-5-2 to the adopted 3-3-3 model. It was further revealed that the 3-3-3 Model is aimed at producing a well discipline, mature, committed and dedicated teacher who is well grounded in both content and theory.

In this regard, this Policy Circular is directing that all Primary Teachers Colleges will use one Teacher Education Model, the 3-3-3 for the Early Childhood Development (ECD) and the General Course, with effect from May 2018.

As usual, your cooperation is greatly appreciated.

A/PERMANENT SECRETARY
cc Hon. Minister, Prof. Dr. A. Murwira
Hon. Minister, Ministry of Primary and Secondary Education- Prof. P. Mavhima
Permanent Secretary-Ministry of Primary and Secondary Education-Dr.S. Masango
Vice Chancellor-(University of Zimbabwe) Prof. L. Nyagura
Dean of Faculty of Education-University of Zimbabwe- Dr. O. Hapanyengwi


MIN. OF HIGHER & TERT. EDU.,
SCIENCE & TECH. DEVELOPMENT
PERMANENT SECRETARY
11 MAY 2018
PSAG 7732, CAUSEWAY
ZIMBABWE

Appendix 2

Training of Secondary Science Teachers

2/20/2018

Gmail - Training of Secondary Science Teachers

Gmail

joshua Polytechnic <jmnkomopoly@gmail.com>

Training of Secondary Science Teachers
2 messages

John Dewah <johndewah@gmail.com>

Sun, Feb 18, 2018 at 6:50 PM

To: benmtambudzi <benmtambudzi@gmail.com>, benson mtambudzi <benmtambudzi@yahoo.com>, Ngoni Moyo <ngonimoyo3@gmail.com>, jmnkomopoly <jmnkomopoly@gmail.com>, mkutswane <mkutswane@gmail.com>, daphne zivanayi <dzivanayi@gmail.com>, Eddie Mwenje <edmwjenje@gmail.com>, Richard Gotor <gotorarichard@gmail.com>, elisha ndanga <elindanga7@gmail.com>, rebecca musadaidzwa <rebeccamusadaidzwa@gmail.com>, James Kapumha <jkapumha@gmail.com>, caleb maguranyanga <cmaguranyanga@yahoo.com>, Imudyiwa <lmudyiwa@yahoo.com>, Levi Nyagura <lnyagura@yahoo.com>, Artwel Mamvuto <amamvuto@gmail.com>, Nerissa Mkandambi <nerissam84@gmail.com>

Principals of Mkoba Teachers College, J M N Nkomo Polytechnic and Mkoba Teachers College should take note that the Ministry has approved the training of Secondary School Science teachers. This is a Government Programme and a Ministry Quick Win within the first 100 days.

In this regard, I note that college principals submitted requirements to Acting Director TEP for consideration. This is quite positive and encouraging, but more needs to be done by way of engaging universities for a scheme of association to enable certification and accreditation of the Diploma.

The University of Zimbabwe is running a similar teacher Education Science programme at Hillside, Belvedere and Mutare Teachers Colleges. Its **your responsibility** to approach UZ as well as these colleges if you hadn't done so. Bindura University of Science Education is also running a similar programme and is ready to participate in a Scheme of Association with any or all of the three primary teachers colleges in the training of Science teachers.

The Ministry has funds to support the three colleges in terms of any additional equipment that may be required.

For avoidance of doubt the training of Secondary School Science Teachers will run parallel to the Primary Teachers Diploma programme. Colleges should plan for number of students per Science subject and number of Science subjects they can manage. The assessment visit by the Ministry revealed that the colleges have capacity to do so and willing to do so.

Adverts for the first intake and minutes of Academic Board meetings with whichever university should be visible and availed to TEP Department weekly. The **FIRST INTAKE WILL COMMENCE TRAINING IN MAY 2018.**

"The illiterate of the 21st Century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."Alan Toffler

Johnsai Tandi Dewah
Acting Principal Director, Academic Affairs
Ministry of Higher and Tertiary Education, Science and Technology Development
New Government Complex, 5th Floor
Cnr Samora Machel Ave and Simon Muzenda St

<https://mail.google.com/mail/u/0/?ui=2&ik=d39abda26e&jsver=9CtiOcfiVYQ.en.&view=pt&search=inbox&th=161aab0c42efe961&siml=161a9d327...> 1/3

Appendix 3

Permission Letter from Ministry of Higher and Tertiary Education, Science and Technology Development

All official communications should be addressed to:
"The Secretary for Higher & Tertiary Education
Telephones: 795891-5, 796441-9, 730055-9
Fax Numbers: 792109, 728730, 703957
E-mail: thesecretary@mhet.ac.zw
Telegraphic address: "EDUCATION"



Reference:

MINISTRY OF HIGHER AND TERTIAR
EDUCATION, SCIENCE AND
TECHNOLOGY DEVELOPMENT
P. BAG CY 7732
CAUSEWAY

23 March 2017

Joshua Mqabuko Nkomo Polytechnic
P. Bag 5832
GWANDA

Dear Mr Patrick Senderayi,

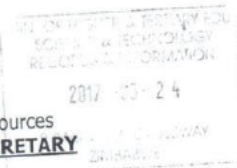
**RE: REQUEST FOR AUTHORITY TO CARRY OUT A RESEARCH ON
"PERSONALITY AS A PREDICTOR OF JOB STRESS AMONG TEACHER
EDUCATION LECTURERS IN ZIMBABWE": MINISTRY OF HIGHER AND
TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT**

Reference is made to your, letter in which you requested for permission to carry out a research on **"Personality as a Predictor of Job Stress among Teacher Education Lecturers in Zimbabwe"**.

Accordingly, please be advised that the Head of Ministry has granted permission for you to carry out the research.

It is hoped that your research will benefit the Ministry and it would be appreciated if you could supply the office of the Permanent Secretary with a final copy of your study, as the findings would be relevant to the Ministry's strategic planning process.

Mr. S. Nhenjira
D/Director – Human Resources
For: PERMANENT SECRETARY



Appendix 4

Occupational Stress Survey 2008 (Original version)

The questionnaire

+++++

University and College Union

Occupational stress survey 2008

Introduction

This questionnaire about your experience of occupational stress is anonymous, and all information will be treated with confidentiality.

If you have any enquiries, please contact UCU senior research officer Stephen Court at scourt@ucu.org.uk

If you have more than one employer, please refer where possible to your principal employer.

Questions 1-35 are from the Health and Safety Executive's Management Standards Indicator Tool.

Please respond to closed questions by putting an 'x' in the appropriate box.

Questions 5 and 21 refer to harassment and bullying. Bullying is not against the law, but is understood as a form of harassment. ACAS definition: 'Bullying may be characterised as offensive, intimidating, malicious or insulting behaviour'. Harassment is legally defined as violating a person's dignity or creating a hostile working environment. It is illegal when on grounds of sex, race, disability, sexual orientation, gender reassignment, religion/belief or age.

Question 52 asks about your socio-economic background. There is currently very little data on the socio-economic background of staff in FE and HE; it would be very helpful, in the interests of promoting widening participation, to know something about this.

The survey should take 10-15 minutes to complete.

Please respond by Friday 2 May 2008.

		Never	Seldom	Sometimes	Often	Always
1	I am clear what is expected of me at work	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
2	I can decide when to take a break	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
3	Different groups at work demand things from me that are hard to combine	<input type="checkbox"/> 5 <input type="checkbox"/> 2	<input type="checkbox"/> 4 <input type="checkbox"/> 1	<input type="checkbox"/> 3		
4	I know how to go about getting my job done	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
5	I am subject to personal harassment at work (see definition in introduction)	<input type="checkbox"/> 5 <input type="checkbox"/> 2	<input type="checkbox"/> 4 <input type="checkbox"/> 1	<input type="checkbox"/> 3		
6	I have unachievable deadlines	<input type="checkbox"/> 5 <input type="checkbox"/> 2	<input type="checkbox"/> 4 <input type="checkbox"/> 1	<input type="checkbox"/> 3		
7	If work gets difficult, my colleagues will help me	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
8	I am given supportive feedback on the work I do	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
9	I have to work very intensively	<input type="checkbox"/> 5 <input type="checkbox"/> 2	<input type="checkbox"/> 4 <input type="checkbox"/> 1	<input type="checkbox"/> 3		
10	I have a say in my own work speed	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
11	I am clear what my duties and responsibilities are	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
12	I have to neglect some tasks because I have too much to do	<input type="checkbox"/> 5 <input type="checkbox"/> 2	<input type="checkbox"/> 4 <input type="checkbox"/> 1	<input type="checkbox"/> 3		
13	I am clear about the goals and objectives for my department	<input type="checkbox"/> 1 <input type="checkbox"/> 4	<input type="checkbox"/> 2 <input type="checkbox"/> 5	<input type="checkbox"/> 3		
14	There is friction or anger between colleagues	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3		

		<input type="checkbox"/> 2	<input type="checkbox"/> 1		
		Never	Seldom	Sometimes	Often Always
15	I have a choice in deciding how I do my work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	
		<input type="checkbox"/> 4	<input type="checkbox"/> 5		
16	I am unable to take sufficient breaks	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	
		<input type="checkbox"/> 2	<input type="checkbox"/> 1		
17	I understand how my work fits into the overall aim of the organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	
		<input type="checkbox"/> 4	<input type="checkbox"/> 5		
18	I am pressured to work long hours	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	
		<input type="checkbox"/> 2	<input type="checkbox"/> 1		
19	I have a choice in deciding what I do at work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	
		<input type="checkbox"/> 4	<input type="checkbox"/> 5		
20	I have to work very fast	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	
		<input type="checkbox"/> 2	<input type="checkbox"/> 1		
21	I am subject to bullying at work (see definition in introduction)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	
		<input type="checkbox"/> 2	<input type="checkbox"/> 1		
22	I have unrealistic time pressures	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	
		<input type="checkbox"/> 2	<input type="checkbox"/> 1		
23	I can rely on my line manager to help me out with a work problem	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	
		<input type="checkbox"/> 4	<input type="checkbox"/> 5		

24	I get help and support I need from colleagues	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
25	I have some say over the way I work	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
26	I have sufficient opportunities to question managers about change at work	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
27	I receive the respect at work I deserve from my colleagues	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
28	Staff are always consulted about change at work	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
29	I can talk to my line manager about something that has upset or annoyed me about work	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
30	My working time can be flexible	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
31	My colleagues are willing to listen to my work-related problems	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
32	When changes are made at work, I am clear about how they will work out in practice	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
33	I am supported through emotionally demanding work	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
34	Relationships at work are strained	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4
35	My line manager encourages me at work	Strongly disagree <input type="checkbox"/> 1 <input type="checkbox"/> 5	Disagree <input type="checkbox"/> 2	Neutral	Agree <input type="checkbox"/> 3	Strongly agree <input type="checkbox"/> 4

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
36a	I find my job stressful	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<hr/>						
		Very low	Low	Moderate	High	Very high
36b	How would you characterise your general or average level of stress?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
<hr/>						
		Never	Seldom	Sometimes	Often	Always
37	Do you experience levels of stress that you find unacceptable?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
<hr/>						
38	For each of the following factors, please indicate the extent to which they contribute to unacceptable levels of stress or frustration by marking them 0 to 5, with 5 indicating a very high contribution (items which may not be applicable to all UCU members have a n/a response category):					
<hr/>						
	(a) Job insecurity	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(b) Lack of promotion opportunities	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(c) Discrimination	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(d) Bullying (see definition in introduction)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(e) Complaints by other members of staff	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(f) Excessive workloads	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(g) Unreasonable expectations from colleagues, students or your head of department	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(h) Lack of opportunities for training and career development	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(i) Poor work-life balance	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(j) Harassment (see definition in introduction)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(k) Complaints by students	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(l) Lack of time to undertake research	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						
	(m) Lack of resources to undertake research, including problems in obtaining funding	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 <input type="checkbox"/> 5
<hr/>						

(n) Lack of time or opportunities to develop your teaching	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	<input type="checkbox"/> n/a					
(o) Insufficient time to respond to student queries	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	<input type="checkbox"/> n/a					
(p) Teaching large classes	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	<input type="checkbox"/> n/a					
(q) Lack of choice in the subjects you teach or carry out research on	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	<input type="checkbox"/> n/a					
(r) Other, please provide details:	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
(r) Other details:						

39 Please provide brief details of any of the above factors in question 38 which make a significant contribution to stress or frustration:

40	(a) Which sector do you (principally) work in?	Further education	Higher education
		<input type="checkbox"/> 1	<input type="checkbox"/> 2
	(b) What is the name of the FE or	<hr/>	

HE institution where you (principally) work:

41	Your gender	Female <input type="checkbox"/> 1	Male <input type="checkbox"/> 2	Transgender/ Transsexual <input type="checkbox"/> 3
42	Your sexual orientation	Bisexual <input type="checkbox"/> 1	Heterosexual <input type="checkbox"/> 2	Lesbian or gay <input type="checkbox"/> 3
43	If you are lesbian, gay, bisexual or trans, does your employer know?	Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 2	Not sure <input type="checkbox"/> 3
44	Your ethnicity			
	(a) Black or Black British – Caribbean	<input type="checkbox"/> 1		
	(b) Black or Black British – African	<input type="checkbox"/> 1		
	(c) Other Black background	<input type="checkbox"/> 1		
	(d) Asian or Asian British – Indian	<input type="checkbox"/> 1		
	(e) Asian or Asian British – Pakistani	<input type="checkbox"/> 1		
	(f) Asian or Asian British – Bangladeshi	<input type="checkbox"/> 1		

(g) Chinese ☐ ₁

(h) Other Asian background ☐ ₁

(i) Other (including mixed) ☐ ₁

(j) White ☐ ₁

45 Disability

	Yes	No	Not sure
(a) Do you consider yourself disabled?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃

	Yes	No	Not sure
(b) If yes, does your employer know you are disabled?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃

46 Your job

Academic function

(a) Teaching or teaching-only ☐ ₁

(b) Research-only ☐ ₁

(c) Teaching-and-research ☐ ₁

Academic-related/support occupation

(d) Manager ☐ ₁

(e) Administrator ☐ ₁

(f) Computing staff ☐ ₁

(g) Librarian ☐ ₁

(h) Other ☐ ₁

(i) Not applicable ☐ ₁

47 Title of your department:

48 Your mode of employment

(a) Full-time ☐ ₁

(b) Part-time ☐ ₁

(c) Hourly-paid ☐ ₁

(d) Other ☐ ₁

49 Your terms of employment

(a) Open-ended/permanent contract ☐ ₁

(b) Fixed-term contract ☐ ₁

(c) Zero hours contract ☐ ₁

(d) Variable hours contract ☐ ₁

(e) Other ☐ ₁

50 Current job grade or main pay level

(a) job or grade title: _____

(b) spine point: _____

(c) hourly-paid, usual hourly rate: £ _____

(d) other: _____

51 The average number of hours you work per week (on/off site) during term-time (work means any task related to your contract of employment)

(a) 0-10 ☐ ₁

(b) 11-15 ☐ ₁

(c) 16-20 ☐ ₁

(d) 21-25 ☐ ₁

(e) 26-30 ☐ ₁

(f) 31-35 ☐ ₁

(g) 36-40

☐ ₁

(h) 41-45

☐ ₁

(i) 46-50

☐ ₁

(j) 51-55

☐ ₁

(k) 56-60

☐ ₁

(l) Over 60

☐ ₁

52 Socio-economic background

Please indicate the occupation of your father, mother, carer or guardian (whoever was the main income earner) when you were a teenager:

(a) manager or senior official

☐ ₁

(b) professional occupation

☐ ₁

(c) associate professional or technical occupation

☐ ₁

(d) administrative or secretarial occupation

☐ ₁

(e) skilled trades occupation

☐ ₁

(f) personal service occupation

☐ ₁

(g) sales or customer service occupation

☐ ₁

(h) process, plant or machine operative

☐ ₁

(i) elementary occupation

☐ ₁

(j) not known/applicable

☐ ₁

-
- 53 What measures would you like to see taken to improve your working life?

Follow-up

- 54 If you would be happy to take part in follow-up research about employment in UK further or higher education, please provide your email address:

Thank you for completing this questionnaire

Appendix 5

Occupational Stress Survey 2008 (Adapted version)

This questionnaire about your experience of job stress is anonymous, and all information is treated with confidentiality.

Do not write any personal details on the questionnaire.

Please respond to closed questions by putting a tick ☐ in the appropriate box.

The survey should take 30 minutes to complete.

Part A. Personal details (Please tick in the appropriate box)

Age (specify)						Gender	
Below 30	31-40	41-50	51-60	61-65		Male	Female

Marital status				
Single	Married	Divorced	Widowed	Separated

Qualifications					
Basic education			Professional		
'O' Level	'A' Level		CE/DE/Grad CE	First degree (State, e.g. BA, BSc, BEd)	Senior degree (State e.g. MSc, MEd, PhD)

Designation				Experience (State years)		
Lecturer	Senior lecturer	Principal lecturer		2-4 years	4-6 years	+6 years

Post of responsibility			
HOS	LIC	HOD	None

Disability		
Do you consider yourself disabled?	Yes	No
If yes, does your employer know you are disabled?		

Part B: Job stressors

Instruction: Mark **X** the response that describes you best

Job dimension	Never	Seldom	Sometimes	Often	Always
1. I am clear what is expected of me at work (R)	1	2	3	4	5
2. I can decide when to take a break (R)	1	2	3	4	5
3. Different groups at work demand things from me that are hard to combine	1	2	3	4	5
4. I know how to go about getting my job done (R)	1	2	3	4	5
5. I am subject to personal harassment at work	1	2	3	4	5
6. I have unachievable deadlines	1	2	3	4	5
7. If work gets difficult, my colleagues will help me (R)	1	2	3	4	5
8. I am given supportive feedback on the work I do (R)	1	2	3	4	5
9. I have to work very intensively	1	2	3	4	5
10. I have a say in my own work speed (R)	1	2	3	4	5
11. I am clear what my duties and responsibilities are (R)	1	2	3	4	5
12. I have to neglect some tasks because I have too much to do	1	2	3	4	5
13. I am clear about the goals and objectives for my department (R)	1	2	3	4	5
14. There is friction or anger between colleagues	1	2	3	4	5
15. I have a choice in deciding how I do my work (R)	1	2	3	4	5
16. I am unable to take sufficient breaks	1	2	3	4	5
17. I understand how my work fits into the overall aim of the organization (R)	1	2	3	4	5
18. I am pressured to work long hours	1	2	3	4	5
19. I have a choice in deciding what I do at work (R)	1	2	3	4	5
20. I have to work very fast	1	2	3	4	5
21. I am subject to bullying at work	1	2	3	4	5
22. I have unrealistic time pressures	1	2	3	4	5
23. I can rely on my immediate supervisor to help me out with a work problem (R)	1	2	3	4	5
i.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
24. I get help and support I need from colleagues (R)	1	2	3	4	5
25. I have some say over the way I work (R)	1	2	3	4	5
26. I have sufficient opportunities to question supervisors about change at work (R)	1	2	3	4	5
27. I receive the respect at work I deserve from my colleagues (R)	1	2	3	4	5
28. Lecturers are always consulted about change at work	1	2	3	4	5
29. I can talk to my supervisor about something that has upset or annoyed me about work (R)	1	2	3	4	5
30. My working time can be flexible (R)	1	2	3	4	5
31. My colleagues are willing to listen to my work-related problems (R)	1	2	3	4	5

32. When changes are made at work, I am clear about how they will work out in practice (R)	1	2	3	4	5
33. I am supported through emotionally demanding work (R)	1	2	3	4	5
34. Relationships at work are strained	1	2	3	4	5
35. My supervisor encourages me at work (R)	1	2	3	4	5
36. I find my job stressful (R)	1	2	3	4	5
37. How would you characterise your general or average level of stress? (R)	Very low	Low	Moderate	High	Very high
	5	4	3	2	1
38. Do you experience levels of stress that you find unacceptable? (R)	Never	Seldom	Sometimes	Often	Always
	5	4	3	2	1

R = Reverse coded item

39. For each of the following factors, please indicate the extent to which they contribute to unacceptable levels of stress or frustration by marking them 0 to 5, with 5 indicating a very high contribution						
a) Job insecurity	0	1	2	3	4	5
b) Lack of promotion opportunities	0	1	2	3	4	5
c) Bullying	0	1	2	3	4	5
d) Complaints by other members of staff	0	1	2	3	4	5
e) Excessive workloads	0	1	2	3	4	5
f) Unreasonable expectations from colleagues, students or your head of Department	0	1	2	3	4	5
g) Lack of opportunities for training and career development	0	1	2	3	4	5
h) Poor work-life balance	0	1	2	3	4	5
i) Harassment	0	1	2	3	4	5
j) Complaints by students	0	1	2	3	4	5
k) Lack of time to undertake research	0	1	2	3	4	5
l) Lack of resources to undertake research, including problems in obtaining funding	0	1	2	3	4	5
m) Lack of time or opportunities to develop your teaching	0	1	2	3	4	5
n) Insufficient time to respond to student queries	0	1	2	3	4	5
o) Teaching large classes	0	1	2	3	4	5
p) Lack of choice in the subjects you teach or carry out research on	0	1	2	3	4	5

40. The average number of hours you work per week (on/off site) during term-time (work means any task related to your contract of employment)

-10	1-15	6-20	1-25	6-30	1-35	6-40	1-45	6-50	1-55	6-60	61

Appendix 6

Approval to use Occupational Stress Survey

Patrick Senderayi <senderayipatrick637@gmail.com>

Mar 18 (6 days ago)

to gail.kinman

Dear Professor Kinman

I am a Zimbabwean doing doctoral studies at the University of Kwa-Zulu Natal in South Africa.

In my search for literature, I came across the UCU Occupational Stress Survey 2008 and was immensely interested in it for use as part of my study. I write seeking guidance on how I can get permission to use the instrument and how to score it.

The research topic I wish to pursue is entitled: Personality as a predictor of job stress among teacher education lecturers in Zimbabwe.

My supervisor is Prof Mkhize who can be contacted at Mkhize@ukzn.ac.za and on telephone +27 (0)31 260 2006. I would be grateful if you kindly assisted me in this matter.

Kind regards

Gail Kinman

Mar 19 (5 days ago)

to me

No problem. I used the same measure in 2012 and 2014. Let me know if you have any more questions

Gail

Dr. Gail Kinman, CPsychol CSci AFBPS FHEA

Professor of Occupational Health Psychology

Director of the Research Centre for Applied Psychology www.beds.ac.uk/rcap

Department of Psychology

University of Bedfordshire

Park Square

Luton

LU1 3JU

<http://www.beds.ac.uk/departments/psychology/staff/gail-kinman>

The Switched-on Culture Research Group. Read

our

'Always

on

Blog': <https://alwaysonculture.wordpress.com/>

Appendix 7

Oldenburg Burnout Inventory

Instruction: Below you find a series of statement with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting and marking X the number that corresponds with each statement.

	Strongly agree	Agree	Disagree	Strongly disagree
1. I always find new and interesting aspects in my work.	1	2	3	4
2. There are days when I feel tired before I arrive at work. <i>(Exhaustion) R</i>	1	2	3	4
3. It happens more and more often that I talk about my work in a negative way. <i>(Disengagement) R</i>	1	2	3	4
4. After work, I tend to need more time than in the past in order to relax and feel better. <i>(Exhaustion) R</i>	1	2	3	4
5. I can tolerate the pressure of my work very well.	1	2	3	4
6. Lately, I tend to think less at work and do my job mechanically. <i>(Disengagement) R</i>	1	2	3	4
7. I find my work to be a positive challenge.	1	2	3	4
8. During my work, I often feel emotionally drained <i>(Exhaustion) R</i>	1	2	3	4
9. Over time, one can become disconnected from this type of work. <i>(Disengagement) R</i>	1	2	3	4
10. After working, I have enough energy for my leisure activities.	1	2	3	4
11. Sometimes I feel sickened by my work tasks. <i>(Disengagement) R</i>	1	2	3	4
12. After my work I usually feel worn out and weary <i>(Exhaustion) R</i>	1	2	3	4
13. This is the only type of work I can imagine myself doing.	1	2	3	4
14. Usually, I can manage the amount of my work well	1	2	3	4
15. I feel more and more engaged in my work	1	2	3	4
16. When I work, I usually feel energized	1	2	3	4

Source: Demerouti. & Bakker (2007).

Appendix 8

Approval to use OLBI

Demerouti, E. <E.Demerouti@tue.nl>

3:34 PM (16 hours ago)

to me

Dear Patrick,

Thank you for your interest in our burnout instrument. The OLBI is free of charge for academic purposes.

In the attachment, you can find the OLBI in German and the unstandardized translation in English (checked by an American native speaker). As you will see in the mean time we tried to improve the scale in order to have equal number of positive and negative items.

If you decide to apply it eventually, please let me know whether the instrument has the same structure in your sample as in the German and the Dutch ones.

I have also attached two relevant publications as pdf files. I am looking forward to hearing your results. Good luck with your study!

Best regards,
Evangelia

Evangelia Demerouti, PhD
Eindhoven University of Technology
Dept. Industrial Engineering & Innovation Sciences Human Performance Management Group
P.O.Box 513, 5600 MB Eindhoven, The Netherlands Den Dolech 2, 5612 AZ Eindhoven, The Netherlands Internal address: Paviljoen J.05
T +31 40 247 5669 / 2493
e.demerouti@tue.nl

Appendix 9

COPE Dispositional Version

- Respond to each of the following items by marking **X** one number on your answer sheet for each, using the response choices listed just below.
- Please try to respond to each item separately in your mind from each other item.
- Choose your answers thoughtfully, and make your answers as true FOR YOU as you can.
- Please answer every item.
- There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do.
- Indicate what YOU usually do when YOU experience a stressful event.

Use the following scoring key:

- 1** = I usually don't do this at all (DAT)
2 = I usually do this a little bit (DAB)
3 = I usually do this a medium amount (DMA)
4 = I usually do this a lot (DAL)

Item	DAT	DAB	DMA	DAL
1. I try to grow as a person as a result of the experience.	1	2	3	4
2. I turn to work or other substitute activities to take my mind off things.	1	2	3	4
3. I get upset and let my emotions out.	1	2	3	4
4. I try to get advice from someone about what to do.	1	2	3	4
5. I concentrate my efforts on doing something about it.	1	2	3	4
6. I say to myself "this isn't real."	1	2	3	4
7. I put my trust in God.	1	2	3	4
8. I laugh about the situation.	1	2	3	4
9. I admit to myself that I can't deal with it, and quit trying.	1	2	3	4
10. I restrain myself from doing anything too quickly.	1	2	3	4
11. I discuss my feelings with someone.	1	2	3	4
12. I use alcohol or drugs to make myself feel better.	1	2	3	4
13. I get used to the idea that it happened.	1	2	3	4
14. I talk to someone to find out more about the situation.	1	2	3	4
15. I keep myself from getting distracted by other thoughts or activities.	1	2	3	4
16. I daydream about things other than this.	1	2	3	4
17. I get upset, and am really aware of it.	1	2	3	4
18. I seek God's help.	1	2	3	4
19. I make a plan of action.	1	2	3	4
20. I make jokes about it.	1	2	3	4
21. I accept that this has happened and that it can't be changed.	1	2	3	4
22. I hold off doing anything about it until the situation permits.	1	2	3	4
23. I try to get emotional support from friends or relatives.	1	2	3	4
24. I just give up trying to reach my goal	1	2	3	4
25. I take additional action to try to get rid of the problem.	1	2	3	4
26. I try to lose myself for a while by drinking alcohol or taking drugs.	1	2	3	4
27. I refuse to believe that it has happened	1	2	3	4
28. I let my feelings out.	1	2	3	4
29. I try to see it in a different light, to make it seem more positive.	1	2	3	4
30. I talk to someone who could do something concrete about the problem.	1	2	3	4
31. I sleep more than usual.	1	2	3	4
32. I try to come up with a strategy about what to do.	1	2	3	4

33. I focus on dealing with this problem, and if necessary let other things slide a little.	1	2	3	4
34. I get sympathy and understanding from someone.	1	2	3	4
35. I drink alcohol or take drugs, in order to think about it less.	1	2	3	4
36. I kid around about it.	1	2	3	4
37. I give up the attempt to get what I want.	1	2	3	4
38. I look for something good in what is happening.	1	2	3	4
39. I think about how I might best handle the problem.	1	2	3	4
40. I pretend that it hasn't really happened.	1	2	3	4
41. I make sure not to make matters worse by acting too soon.	1	2	3	4
42. I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
43. I go to movies or watch TV, to think about it less.	1	2	3	4
44. I accept the reality of the fact that it happened.	1	2	3	4
45. I ask people who have had similar experiences what they did.	1	2	3	4
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.	1	2	3	4
47. I take direct action to get around the problem.	1	2	3	4
48. I try to find comfort in my religion.	1	2	3	4
49. I force myself to wait for the right time to do something.	1	2	3	4
50. I make fun of the situation.	1	2	3	4
51. I reduce the amount of effort I'm putting into solving the problem.	1	2	3	4
52. I talk to someone about how I feel.	1	2	3	4
53. I use alcohol or drugs to help me get through it.	1	2	3	4
54. I learn to live with it.	1	2	3	4
55. I put aside other activities in order to concentrate on this.	1	2	3	4
56. I think hard about what steps to take.	1	2	3	4
57. I act as though it hasn't even happened.	1	2	3	4
58. I do what has to be done, one step at a time.	1	2	3	4
59. I learn something from the experience.	1	2	3	4
60. I pray more than usual.	1	2	3	4

Copyright 2013, Carver, , C.S.

Appendix 10

The Big Five Personality Test

Instructions

In the table below, for each statement 1-50 mark **X** how much you agree with on the scale 1-5, where:

1=disagree, 2=slightly disagree, 3=neutral, 4=slightly agree and 5=agree, in the box to the left of it.

I ...	Disagree	Slightly disagree	Neutral	Slightly agree	Agree
1. am the life of the party.	1	2	3	4	5
2. feel little concern for others.	1	2	3	4	5
3. am always prepared.	1	2	3	4	5
4. get stressed out easily.	1	2	3	4	5
5. have a rich vocabulary.	1	2	3	4	5
6. don't talk a lot.	1	2	3	4	5
7. am interested in people.	1	2	3	4	5
8. leave my belongings around.	1	2	3	4	5
9. am relaxed most of the time.	1	2	3	4	5
10. have difficulty understanding abstract ideas.	1	2	3	4	5
11. feel comfortable around people.	1	2	3	4	5
12. insult people.	1	2	3	4	5
13. pay attention to details.	1	2	3	4	5
14. worry about things.	1	2	3	4	5
15. have a vivid imagination.	1	2	3	4	5
16. keep in the background.	1	2	3	4	5
17. sympathize with others' feelings.	1	2	3	4	5
18. make a mess of things.	1	2	3	4	5
19. seldom feel blue.	1	2	3	4	5
20. am not interested in abstract ideas.	1	2	3	4	5
21. start conversations.	1	2	3	4	5
22. am not interested in other people's problems.	1	2	3	4	5
23. get chores done right away.	1	2	3	4	5
24. am easily disturbed.	1	2	3	4	5
25. have excellent ideas.	1	2	3	4	5
26. have little to say.	1	2	3	4	5
27. have a soft heart.	1	2	3	4	5
28. often forget to put things back in their proper place.	1	2	3	4	5
29. get upset easily.	1	2	3	4	5
30. do not have a good imagination.	1	2	3	4	5
31. talk to a lot of different people at parties.	1	2	3	4	5
32. am not really interested in others.	1	2	3	4	5
33. like order.	1	2	3	4	5
34. change my mood a lot.	1	2	3	4	5

35. am quick to understand things.	1	2	3	4	5
36. don't like to draw attention to myself.	1	2	3	4	5
37. take time out for others.	1	2	3	4	5
38. shirk (avoid) my duties.	1	2	3	4	5
39. have frequent mood swings.	1	2	3	4	5
40. use difficult words.	1	2	3	4	5
41. don't mind being the center of attention.	1	2	3	4	5
42. feel others' emotions.	1	2	3	4	5
43. follow a schedule.	1	2	3	4	5
44. get irritated easily.	1	2	3	4	5
45. spend time reflecting on things.	1	2	3	4	5
46. am quiet around strangers.	1	2	3	4	5
47. make people feel at ease.	1	2	3	4	5
48. am exacting in my work.	1	2	3	4	5
49. often feel blue.	1	2	3	4	5
50. am full of ideas.	1	2	3	4	5

E = 20 + (1) ___ - (6) ___ + (11) ___ - (16) ___ + (21) ___ - (26) ___ + (31) ___ - (36) ___ + (41) ___ - (46) ___ = ____

A = 14 - (2) ___ + (7) ___ - (12) ___ + (17) ___ - (22) ___ + (27) ___ - (32) ___ + (37) ___ + (42) ___ + (47) ___ = ____

C = 14 + (3) ___ - (8) ___ + (13) ___ - (18) ___ + (23) ___ - (28) ___ + (33) ___ - (38) ___ + (43) ___ + (48) ___ = ____

N = 38 - (4) ___ + (9) ___ - (14) ___ + (19) ___ - (24) ___ - (29) ___ - (34) ___ - (39) ___ - (44) ___ - (49) ___ = ____

O = 8 + (5) ___ - (10) ___ + (15) ___ - (20) ___ + (25) ___ - (30) ___ + (35) ___ + (40) ___ + (45) ___ + (50) ___ = ____

NB The scores calculated should be between zero and forty

Copyright <http://personality-testing.info/printable/big-five-personality-test.pdf> . Permission not sought

Appendix 11

Interview for Lecturers

Interviewee code	
Date of interview	

- Our interview is divided into three parts. In Part A, we will talk about sources of stress, while in Part B we will discuss whether you have experiences of job burnout and in Part C we look at how you cope with stressors in your work environment.
- I will briefly explain each key concept in each part of the interview so that we have a similar understanding of the concepts.
- Feel free to seek clarification on questions that you do not clearly understand.
- There are no right and wrong answers. All responses are going to be treated in the strictest confidence and will be used solely for the purpose of academic study.

Section A: Stress sources (Explanation)

1. Main question

What would you describe as the main sources of job stress in your college?

Probes:

- ✓ demands
- ✓ control
- ✓ peer support
- ✓ supervisor support
- ✓ relationships
- ✓ roles
- ✓ change

Section B Burnout ((Explanation of disengagement & exhaustion)

2. Main question

Are times and situations when you feel disengaged from some aspects of your job? Elaborate.

Probes

- ✓ new and interesting job aspects
- ✓ feeling of negativity
- ✓ work mechanical
- ✓ lack of challenge
- ✓ disconnected or sickened
- ✓ energy levels

3. Main question

To what extent would you say your job makes you exhausted?

Probes

- ✓ feel tired & worn out
- ✓ need more rest now
- ✓ pressure of work
- ✓ work emotionally draining
- ✓ energy for leisure activities
- ✓ able to manage the current amount of work
- ✓ more and more engaged in work?

Section C: Coping (Explanation)

4. Main question


How do you cope with stressful job situations?

Probes

- ✓ confront the person/situation
- ✓ seek assistance from others
- ✓ do other things
- ✓ pray or use alcohol
- ✓ do nothing about it

Appendix 12

Ethics Approval Certificate



**UNIVERSITY OF
KWAZULU-NATAL**
**INYUVESI
YAKWAZULU-NATALI**

05 July 2017

Mr Patrick Senderayi (214584968)
School of Applied Human Sciences – Psychology
Howard College Campus

Dear Mr Senderayi,

Protocol reference number: HSS/0730/0170
Project title: Personality as a predictor of job stress among teacher education lecturers in Zimbabwe

Approval Notification – Expedited Application

In response to your application received on 06 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully





.....
Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Professor Nhlanhla Mkhize
Cc Academic Leader Research: Dr Jean Steyn
Cc School Administrator: Ms Ayanda Ntuli

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X94001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4667 Facsimile: +27 (0) 31 260 4809 Email: ximbsp@ukzn.ac.za / anymam@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

**1918 - 2018**
100 YEARS OF ACADEMIC EXCELLENCE

Fouring Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

Appendix 13

Informed Consent- Participant

- Thank you for agreeing to participate in this study that will take place at your work site. The study is entitled — **Personality type as a predictor of job stress among teacher education lecturers in Zimbabwe**
- The main objective of this sequential explanatory mixed-method study is to investigate the extent to which personality traits using the five-factor model can be used to predict stress and coping styles used by lecturers of selected teachers' colleges in Zimbabwe.

Participant rights

- As a participant I will be requested to complete a questionnaire seeking to determine lecturer sources of job-specific stress in my college and how I cope with this stress. It also involves taking a personality test which aims at determining my personality trait. .
- The researcher may also conduct an interview lasting approximately one hour. The purpose of the interview is to afford me an opportunity to verbalise my thoughts on sources of stress and burnout experiences I have as an individual. It also seeks to clarify how I cope with job-specific stressors in my college environment.
- The researcher may conduct a follow up interview with me.
- There are no anticipated risks or benefits to me, no greater than that encountered in daily life.
- I understand that my participation is voluntary and can be discontinued at any time during the course of the study. I also understand that there will be no negative consequences of any sort whatsoever that may accrue through my participation.
- I understand that my anonymity will be maintained and the information I provide will be kept confidential. I understand that only the researcher, **Patrick Senderayi**, will have access to a secured file cabinet in which all transcripts, audio recordings, and field notes from the interview(s) in which I participated will be kept.
- I understand that in the event I have questions or require additional information I may contact the researcher: **Patrick Senderayi** via phone: +263775166954 or at senderayipatrick637@gmail.com

I give my consent to participate in a research project conducted by **Patrick Senderayi**, a doctoral student at the University of KwaZulu-Natal.

b. Personal Details

If you have any questions you would like to ask, you are welcome to contact me, the researcher, and/or my supervisor, Prof. N.J. Mkhize by using the following details: +27 (0)31 260 2006 (Email: Mkhize@ukzn.ac.za). You may also contact Ms Phume Ximba of the Humanities and Social Science Research Ethics Committee via phone: +27 (0)31 260 3587 or Email: ximbap@ukzn.ac.za.

Name of Participant: _____

Signature: _____

Date: _____

Name of Researcher _____

Signature: _____

Date: _____

Appendix 14

Informed Consent to Record Interviews (Where it applies)

I give permission for the audio- recording of the interviews to be used as data in this research project.

Name of Participant _____

Signature _____ Date _____

Name of Researcher _____

Signature _____ Date _____

Appendix 15

Quantitative Data Outputs

Figure 6
Normal P-P plot and histogram of the fitted multiple linear regression standardized residuals

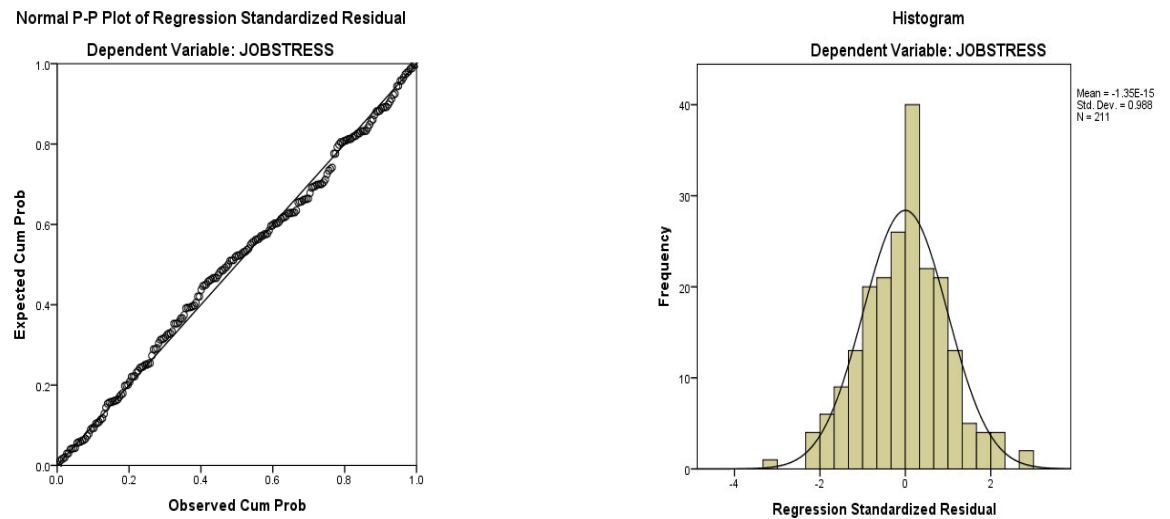


Figure 7

Scatter plot of standardized residuals versus standardized predicted values of the fitted multiple linear regression model

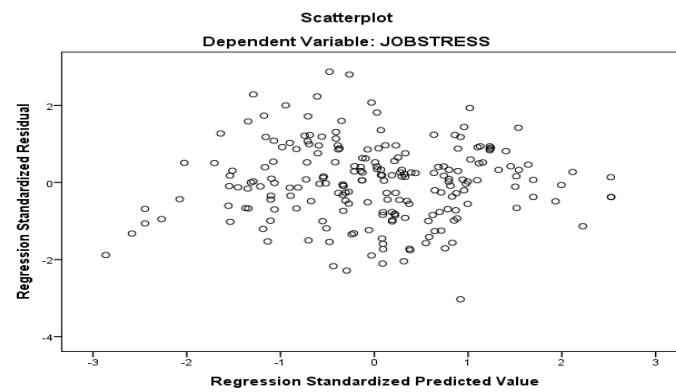


Figure 8
Cook's distance plot for the fitted multiple linear regression model

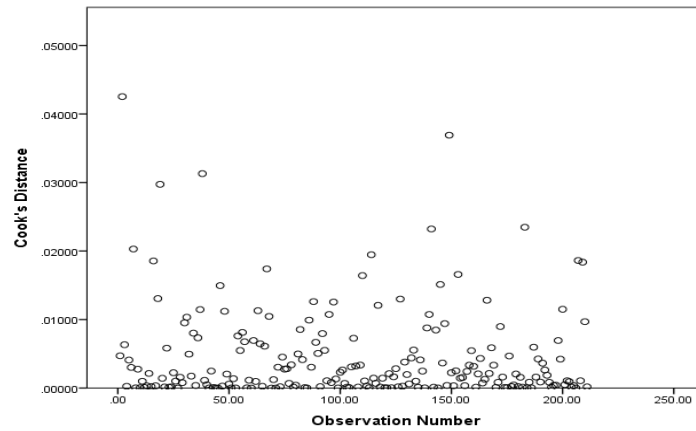


Figure 9
Partial regression plot of extraversion, agreeableness and openness to experience

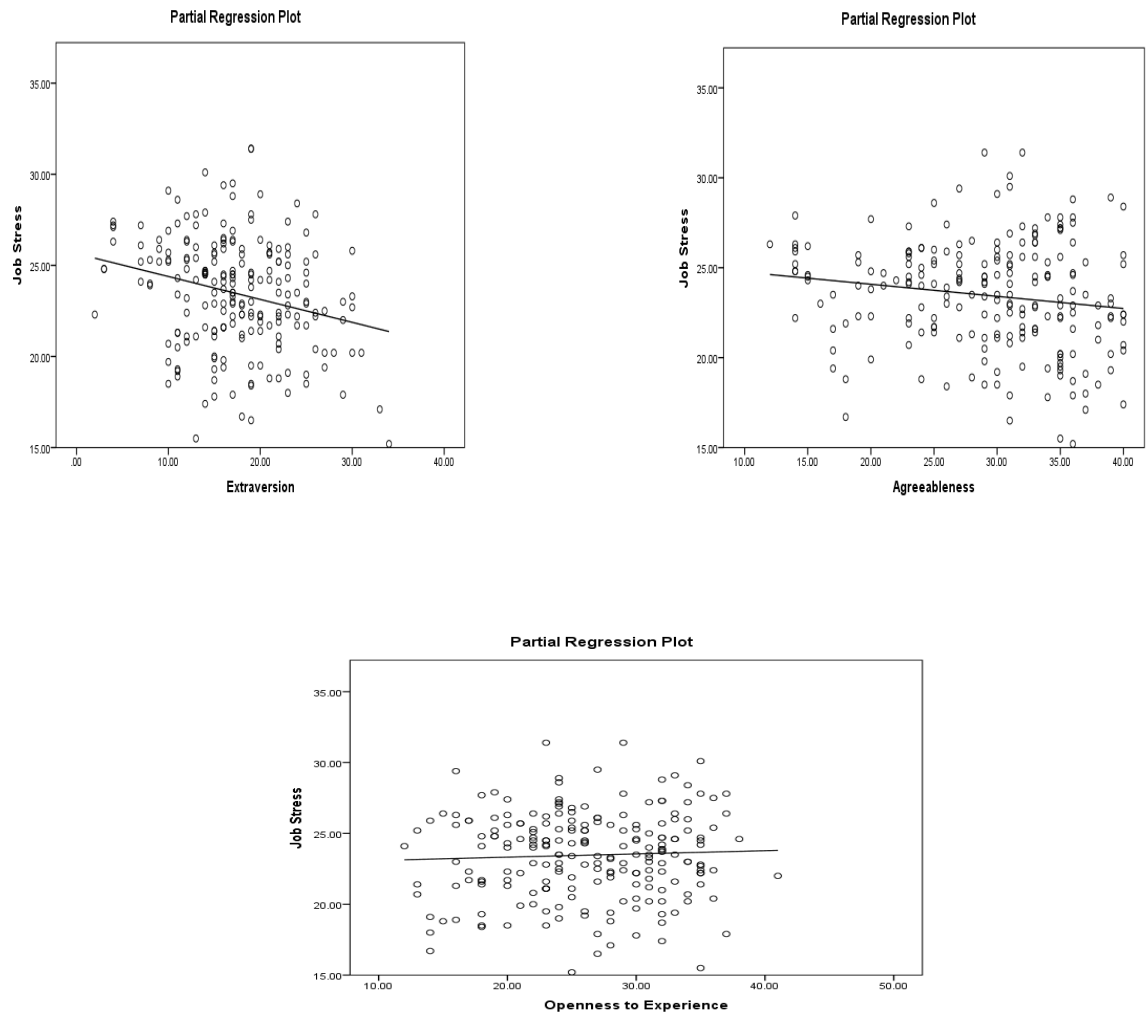


Figure 10
Partial regression plot of conscientiousness and neuroticism

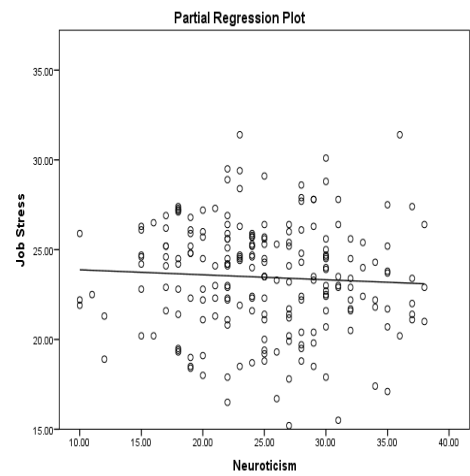
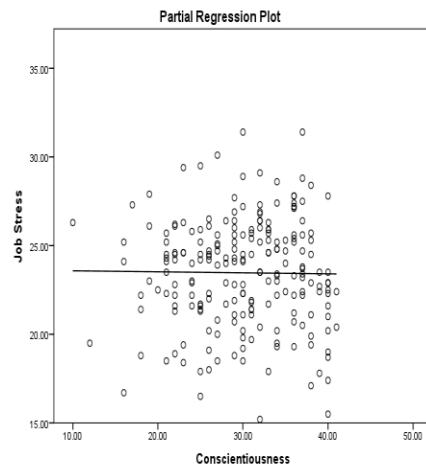


Figure 11

Normal P-P plot and histogram of the fitted multiple linear regression standardized residuals

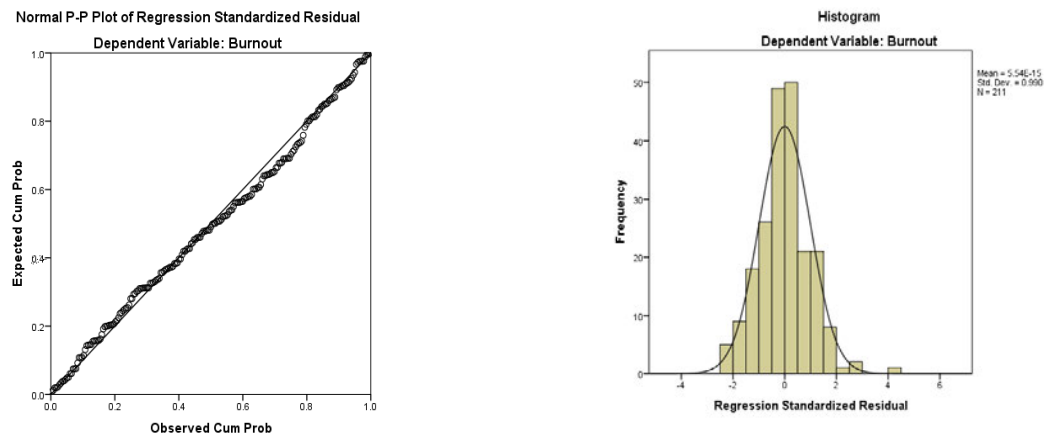


Figure 12

Scatter plot of standardized residuals versus standardized predicted values of the fitted multiple linear regression model

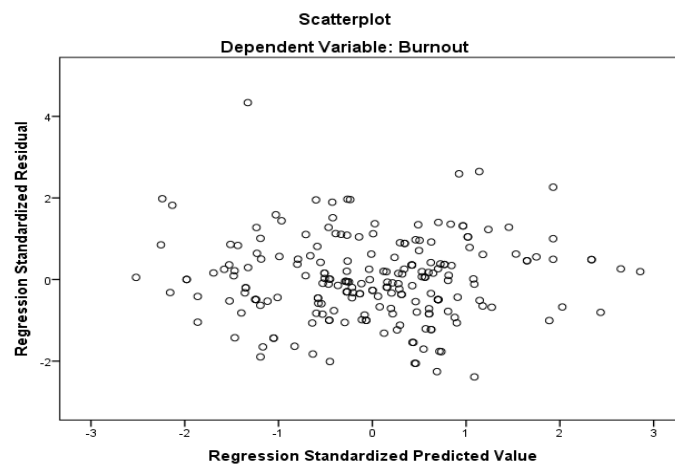


Figure 13

Cook's Distance plot for the fitted multiple linear regression model

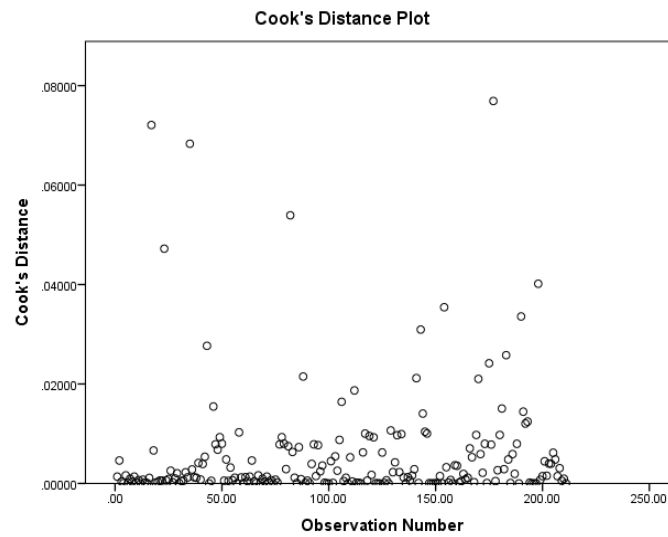


Figure 14

Partial regression plots of extraversion, conscientiousness, neuroticism and agreeableness

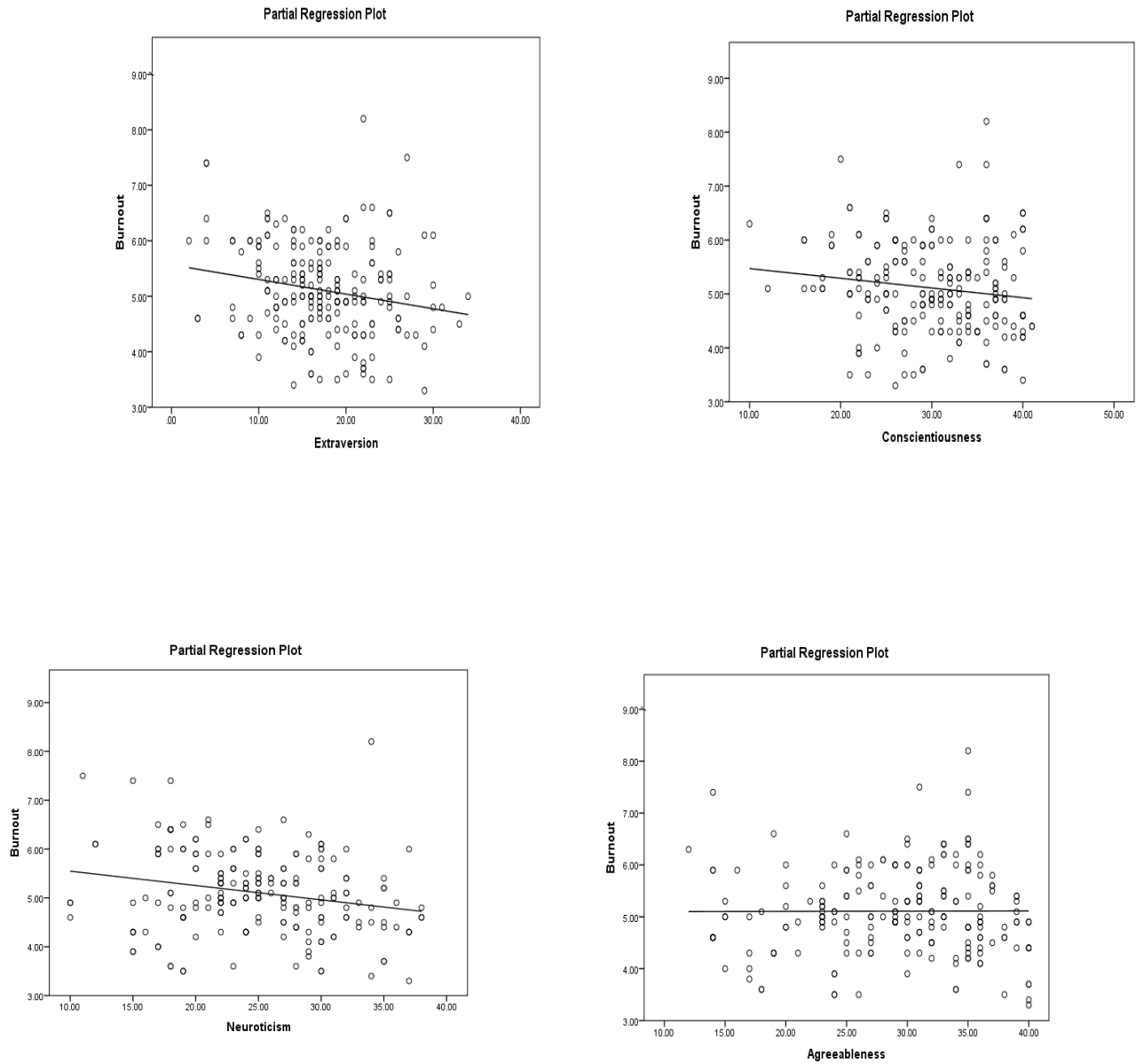


Figure 15
Partial regression plots of openness to experience

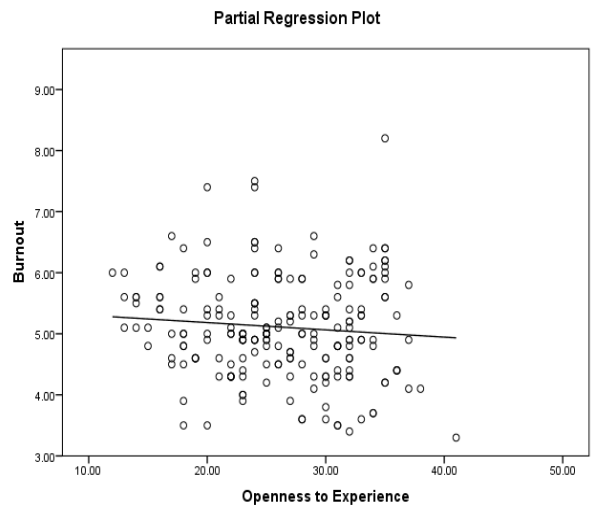


Figure 16
Normal P-P plot and histogram of the fitted multiple linear regression standardized residuals

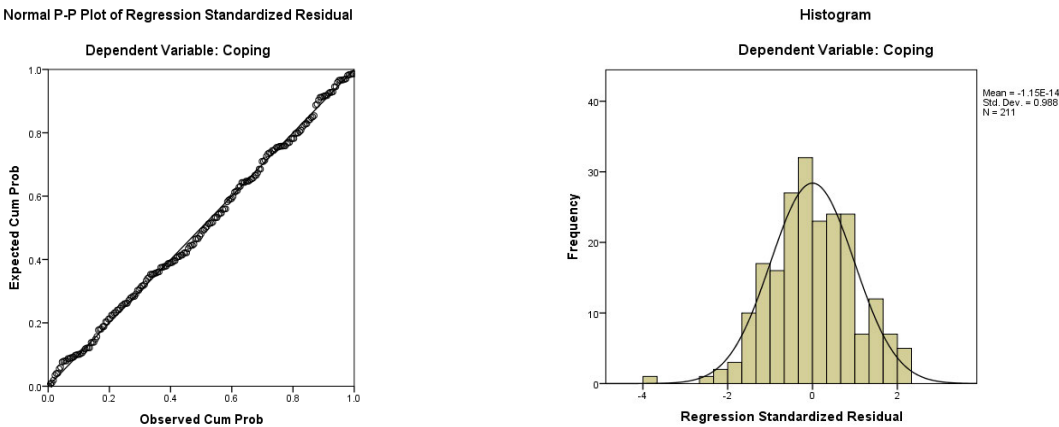


Figure 17

Scatter plot of standardized residuals versus standardized predicted values of the fitted multiple linear regression model.

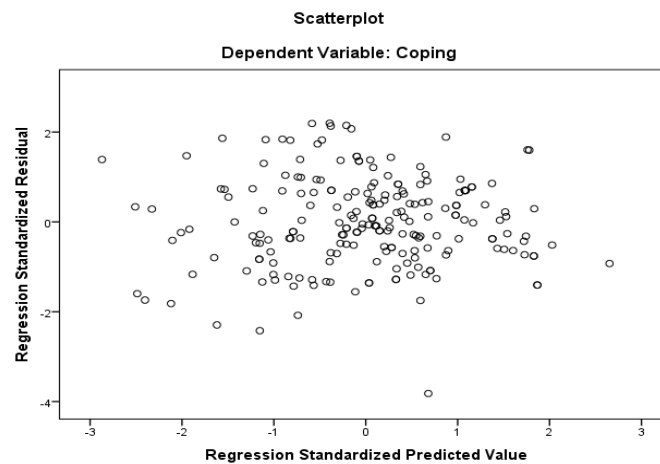


Figure 18

Cook's distance plot for the constructed multiple linear regression model

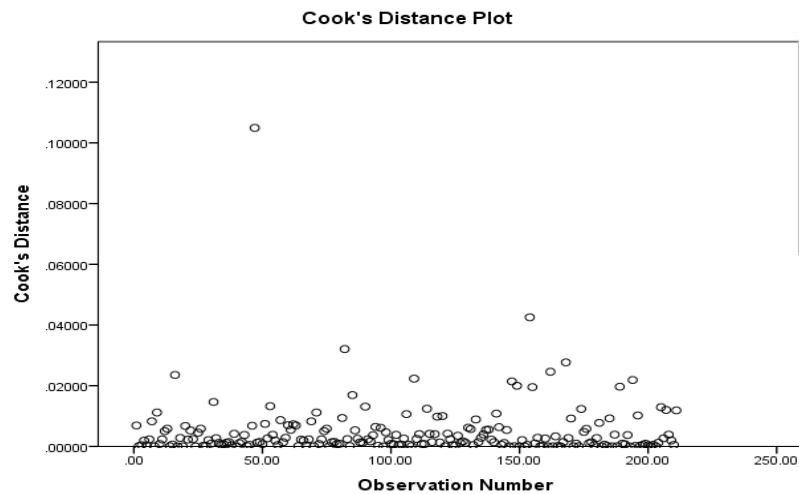


Figure 19
Partial regression plot for conscientiousness, openness to experience and neuroticism

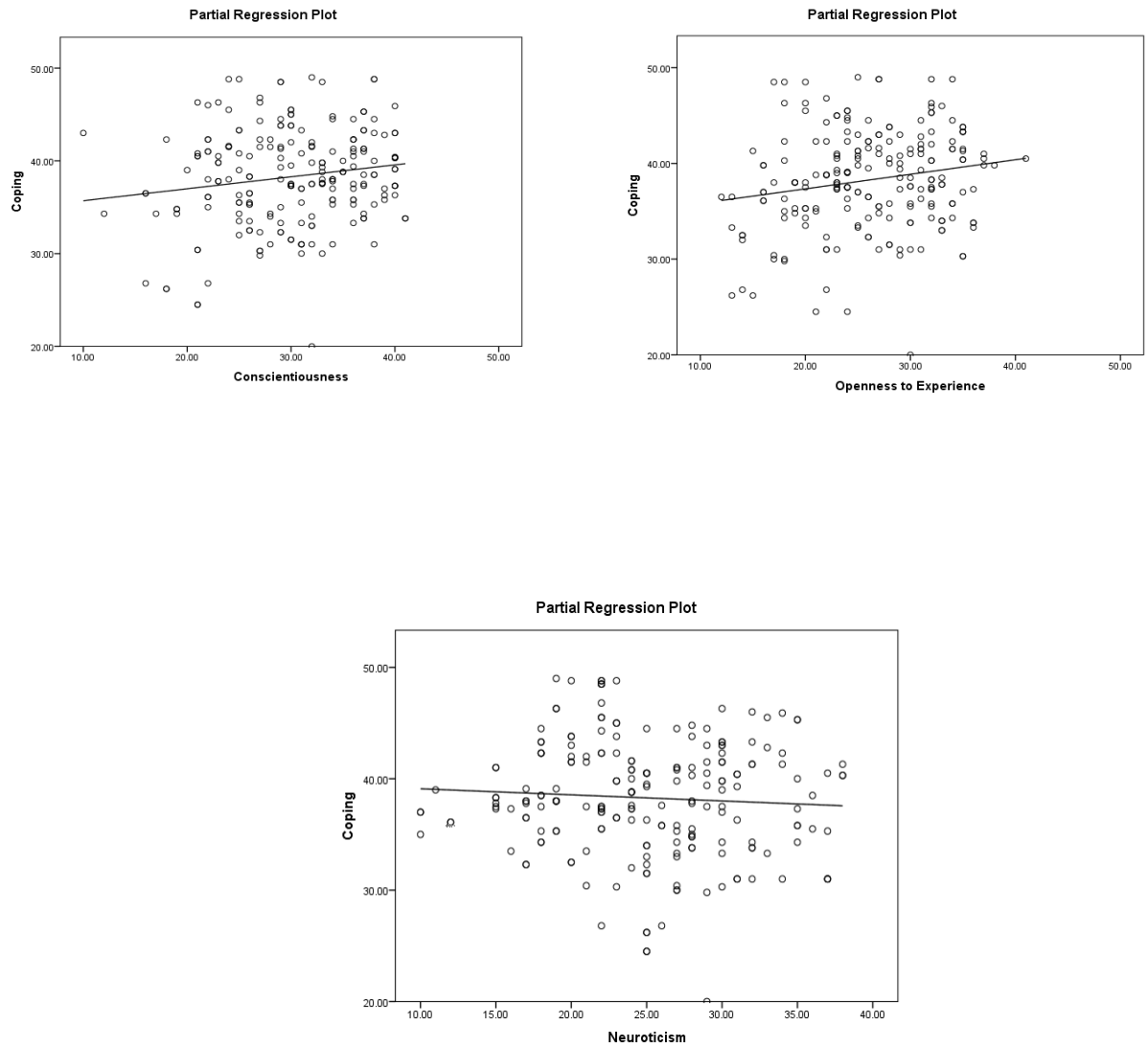


Figure 20
Partial regression plot of extraversion and agreeableness

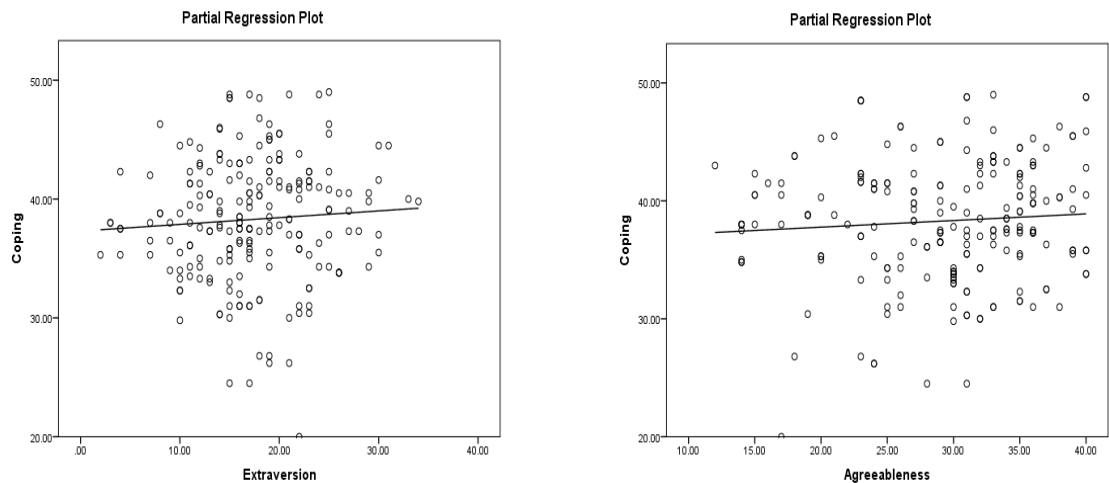


Figure 21
Ponterotto and Ruckdeschel matrix for estimating adequacy of internal consistency coefficients with research measures

TABLE 3 MATRIX FOR ESTIMATING ADEQUACY OF INTERNAL CONSISTENCY COEFFICIENTS WITH RESEARCH MEASURES				
Items Per Subscale	Rating	Sample Size		
		N < 100	N = 100–300	N > 300
≤ 6	Excellent	.75	.80	.85
	Good	.70	.75	.80
	Moderate	.65	.70	.75
	Fair	.60	.65	.70
7–11	Excellent	.80	.85	.90
	Good	.75	.80	.85
	Moderate	.70	.75	.80
	Fair	.65	.70	.75
≥ 12	Excellent	.85	.90	.90
	Good	.80	.85	
	Moderate	.75	.80	.85
	Fair	.70	.75	.80

Note.—An internal consistency coefficient falling below the “Fair” rating for its particular cell would be deemed “Unsatisfactory.”