Capstone Practicum Report (20%)

Psychological Distress Among College Students at Kepler University Program, Rwanda

By

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Submitted in Partial Fulfillment of the Requirements for the

Master of Science in Global Health Delivery

University of Global Health Equity

Capstone Practicum

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Date: April 2018

DECLARATION

I, Willy Chrysostome Ingabire, hereby declare that the practicum capstone thesis has been written by me without any external unauthorized help, that it has been neither presented to any institution for evaluation nor previously published in its entirety or in parts. Any parts, words, or ideas in the thesis, however limited, that are quoted from or based on other sources, have been acknowledged as such without exception.

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DEDICATION

To my parents, siblings, nephews, and nieces, this thesis is dedicated!

ACKNOWLEDGEMENT

To God Almighty, I am thankful for a gift of life and strengths to complete this project.

To my parents, siblings, nephews, and nieces, thank you for your endless support. The love and opportunity you have granted me has accompanied me through this journey. Thank you.

To my exceptional supervisor Stephanie Smith, your optimism, advice, correction, and guidance inspired my personal and professional manners. I am grateful.

To the University of Global Health Equity, I have transformed from a passive advocate to a skilled Global Health Leader, thanks to your world-class lecturers, curriculum, and discipline. Thank you.

To my fellow classmates, thank you for helping me get through the late nights of pre-post class assignments, Tuesday evenings, week and weekend intensives. I will always remember that.

To Kepler students, especially the study participants, your contribution to my research is highly valuable. God bless you all!

ABSTRACT

Background

The high academic and professional expectations from university programs often put students under pressure and may lead to psychological distress. This project aims to measure the level of psychological distress among college students at Kepler University program, Kigali, in order to provide the administration with recommendations for effective interventions to improve students' psychological health.

Methods

A cross-sectional study design used the General Health Questionnaire GHQ-12 to measure the level of psychological distress among college students at Kepler. The ethical approval was obtained from the Institutional Review Board IRB of the School. Descriptive statistics were calculated using Excel and associations between variables were analyzed in Stata 13.

Results

Out of 125 students to whom questionnaires were administered, 108 responded and returned the questionnaire, giving a response rate of 85%. The overall percentage of students with psychological distress was 42% (n=44), while 58% (n=62) of respondents had no psychological distress.

The proportion of students at risk of developing psychological distress is high. Enjoying day-to-day activities, feeling under stress, and feeling unhappy and feeling depressed were the three most problematic symptoms reported. Unemployed students had a higher risk of developing psychological distress than their employed peers.

Conclusion

The school management and counselor in collaboration with the careers department should establish a structured career advisory program to support students have a smooth transition from academic to professional placement and reduce the psychological distress.

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CHAPTER ONE: INTRODUCTION

Background

The high academic and professional expectations from university programs often put students under pressure and may lead to psychological and emotional distress (Sherina et al., 2003; Zaid et al., 2007). Psychological distress can affect students' academic performance, and consequently can affect their professional performance later on in their careers (Weitzman, 2004; Kessler, Foster, Saunders, & Stang, 1995; Ettner, Frank, & Kessler, 2017).

Kepler University in Kigali offers academic programs that cater to the needs of the emerging economy of the country. It partners with Southern New Hampshire University and holds students to high academic and professional standards.

In a survey conducted by the school counselor of Kepler University, 70% of students reported experiencing poor concentration on academic activities; sleep disturbances, and other psychological symptoms (Mukamwezi, personal communication, 2017). However, no formal evaluation has been conducted to specifically describe the magnitude of the psychological distress experienced by students at Kepler University program.

This project aims to assess the psychological distress and depressive symptoms among college students at Kepler University, Kigali, in order to provide administration recommendations to address the students' needs.

Problem Statement

Little is known about the psychological distress, including depressive and anxiety symptoms, among Kepler University students in Rwanda.

Objectives of the study

This study aims to measure the level of psychological distress among college students at Kepler University, Kigali by June 2018.

Setting and Beneficiaries

This study was conducted among students at Kepler University located in Kimironko sector, Gasabo district of Kigali city. Kepler leverages technology and tries to reinvent higher education by combining online projects from Southern New Hampshire University with in person modules offered by Rwandan staff. Students get US accredited bachelor's degrees without leaving the country. Kepler recruits the best performers from high schools around East Africa and sets high expectations for students to be able to successfully complete the program. The results from this study will benefit students, educators, parents, psychologists, counselors, and policy makers in education and mental health by describing psychological distress among Kepler students and providing recommendations for addressing distress in that population.

Organization of the dissertation

This report is divided into 6 chapters as described here. The first chapter is the introduction and gives a brief background of the study, objectives, and a justification of the project. The second chapter provides a full review of what is currently known about the psychological distress among college students as described in the literature, and the knowledge gap that this study tries to address.

The third chapter describes the primary features of Kepler University, the organization where this study took place and include all specific information relevant to the project such as the study participants.. The fourth chapter is a presentation of the important results and key indicators. The fifth chapter discusses the meaning of the findings and how they relate to the results of previous studies of similar designs and topics. This chapter also explains the significance of the results. The sixth chapter summarizes the study and makes recommendations based on the project.

CHAPTER TWO: LITERATURE REVIEW

Mental health

Health is more than just not being sick. The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity" (WHO, 2005). The WHO's definition of health clearly states that mental health is a critical component of health and that its absence would make health incomplete. Mental health is "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2005). This means that anything less than what is described in the definition of mental health may increase the risk of developing mental health disorders and that a person may need help from a mental health professional.

Mental Disorders

According to the Diagnostic and Statistical Manual of Mental disorders DSM-5, "a mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning" (American Psychiatric Association, 2013).

There is evidence of a relationship between mental disorders and impairment of social, occupation, and other everyday activities (American Psychiatric Association, 2013). For example, due to sleep disruptions, lack of energy, etc., people with mental disorders may produce less than their peers at work (Els, Kunyk, Hoffman, & Wargon, 2012). However, mental disorders should not be associated with normal reactions to bad events such loss of a family member (American Psychiatric Association, 2013). There are different subtypes of mental disorders (American Psychiatric Association, 2013). Depressive and anxiety disorders are the most common of psychiatric conditions (Kenneth S. Kendler et al., 1994). People with depression commonly experience depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (WHO, 2012) while people with anxiety suffer from excessive fear of harm or danger (American Psychiatric Association, 2013). In some cases, it is hard to differentiate depressive from anxiety symptoms (Tiller, 2012). According to the WHO, the number of people with depression and/or anxiety increased by nearly 50% between 1990 and 2013; and a large number of them do not get treatment even though treatment for depression exists (WHO, 2016). The prevalence of depressive and anxiety disorders is high (4.4% and 3.6 respectively) as compared with other leading causes of disability worldwide (Rivelli & Shirey, 2017; WHO, 2017).

Signs and symptoms

Patients experience depressive symptoms differently. However, there are general depressive symptoms, which include sadness, emptiness, irritability; and changes in physical and cognitive capacity of an individual (American Psychiatric Association, 2013).

Somatic symptoms of depression are chest pain, headaches, back pain, muscle aches and joint pain, digestive problems, fatigue, sleep disturbance, and change in appetite (American Psychiatric Association, 2013). In addition to the latter somatic symptoms of depression, patients with anxiety experience palpitation, sweating, shaking, feeling shortness of breath, and fear (American Psychiatric Association, 2013). These infer that depressive symptoms can be found among anxiety patients and vice versa. Although they resemble, these two conditions are different and therefore should be diagnosed by mental health professionals (Tiller, 2012).

Prevalence

According to WHO report, 4.4% of the world's population is estimated to suffer from depression (WHO, 2017). The DSM reported the prevalence of depression in the United States was three times higher among young adults between 18-29 years old. Depression is more severe among old people, in that the risk of suicide is high as compared to younger people, and women are 3 times more likely to experience depression than men of the same age (American Psychiatric Association, 2013).

According to WHO report, 264 million people were suffering from anxiety disorders worldwide in the year 2015, the prevalence increased by 14% from 2005 to 2015 (WHO, 2017).

Generalized anxiety disorders (GAD) rates between 5-6%, which makes it the most common psychiatric condition in the United States (Tiller, 2012). There is evidence that psychological distress among college students in some areas of the world is on the rise (American College Health Association, 2011). Ten percent of American college students reported having suicidal ideation (American College Health Association, 2011) while 86% had serious psychological distress (Gallagher, 2005). The prevalence estimates of depression in general population in Rwanda is between 15% and 25% (Mukeshimana & Mchunu, 2017), but little data exist which record the prevalence of depression and/or anxiety among college students in Rwanda.

Risk factors

There are environmental and genetic factors that contribute to depression and anxiety disorders (Kendler et al., 2007). Studies have found most genetic risk factors are common in both GAD and Major Depression (MD), for example, female is a risk factor to both GAD and MD (Kendler et al., 2007; Nes, 2007).

Environmental risk factors include losing parents at an early age, divorce, sexual abuse, low social support, trauma, stressful life events, etc. (Kenneth S. Kendler, Gardner, & Prescott, 2002). Young adults between 19 and 24 years old, particularly college students, are more vulnerable to depression than people from other age groups (Tandoc et al., 2015; Kaneson & Sherina, 2003). Important school stressors including sleepless nights and high academic expectations are believed to fuel depression and/or anxiety among college students (Kadison, 2004). Substance abuse is another important risk factor for college students (Brener, Hassan, & Barrios, 1999). Abusing drugs at the young age (18-25), can cause depressive and/or anxiety symptoms because drugs are depressant to the central nervous system. However, drug abuse and

mental disorders are interrelated in a ways that one can lead to another. For example, a person with mental disorders such as depression and/or anxiety can lead to abuse drugs as a way to calm their mental problems (Tupker, 2004).

Impact

Depression and anxiety disorders have impacts in different part of life, including financial impacts on the patient and his/her family. The price of healthcare services is high for depression and/or anxiety disorders (Simon, Ormel, VonKorff, & Barlow, 1995). Depression and anxiety is a chronic disease and takes long time to treat, it has impact not only on patients' health cost (Levenson JL, Hamer RM, 1990) but also on the quality of health (Rapaport, Clary, Fayyad, & Endicott, 2005). Study has shown the quality of health of patients with depressive and anxiety disorder was three times lower than the minimum standard of the community (Rapaport, Clary, Fayyad, & Endicott, 2005).

The impact on college students includes poor academic success (Weitzman, 2004; Kessler, Foster, Saunders, & Stang, 1995), personal and professional relationships (Ettner, Frank, & Kessler, 2017), and economic progress of the country long term (Eisenberg, Gollust, Golberstein, & Hefner, 2007). Another study showed that even among youth with disabilities, those with mental health problems were more likely to score low and repeat the course (Merikangas, 2010). All the above evidence shows that depression and/or anxiety is not only a mental health problem but also a concern for health in general.

Treatment

Psychological distress has negative effects on mental, physical, and social life of the patient and thus requires treatments (University of Minnesota, 2015). There are effective approaches in treating psychological distress, including biopsychosocial and cognitive behavioral therapy (CBT) hence, early awareness and recognition is important (University of Minnesota, 2015).

The General Health Questionnaire-12 (GHQ-12)

The General Health Questionnaire (GHQ-12) is a 12 item screening tool for general psychological disorders and an appropriate measure for psychiatric wellbeing (Goldberg & Williams, 1988). The tool can be used for screening for psychological distress in both clinical and non-clinical settings (Goldberg et al., 1997). The questionnaire evaluates the level of psychological disorders for the past few weeks, thus assessing the symptoms of psychological distress rather than the long-term psychological conditions (Sánchez López & Dresch, 2008).

The GHQ-12 is considered to be an effective screening tool for common mental disorders, particularly depression and anxiety, in general and primary care populations (Goldberg & Williams, 1988). The score ranges from 0 to 36; with lower score means having good psychological health and higher score indicates severe psychological distress (Sánchez López & Dresch, 2008). Different scoring methods and cut-offs were used in different parts of the world: A study in in rural North-India used Likert-scoring method (0-3) with cut-off point of 12 while a study in the UK used standard scoring method (0-0-1-1) with a cut-off point of 3/4 (Guthrie et al., 1998; Kaistha et al., 2013).

The GHQ-12 is a useful screening tool for psychological disorders in general populations (Gao et al., 2004). This tool has been adapted to the Rwandan cultural context and been used in the primary healthcare setting (Smith et al., 2017). However, to the best of the researcher's knowledge, it has not been used in a non-clinical setting to assess the psychological distress among college students.

Evidence from the United States and other parts of the world show that mental health is a problem not only among the general population but also in college students (American College Health Association, 2011; Gallagher, 2005; Mukeshimana & Mchunu, 2017). However, little is known about the magnitude of depression and/or anxiety among college students in Rwanda thus, the reason for this study.

CHAPTER THREE: METHODS

Setting

Kepler is a non-profit program that enables students to earn a U.S-accredited bachelor's degree while living and working in Rwanda. It partners with Southern New Hampshire University to provide undergraduate degrees through the College for America (CFA). The curriculum combines competency-based online projects and in-person seminars and modules, focuses on providing students with the needed skills, traits, and attitudes to be productive in the workplace. Currently, the program has 456 students from five cohorts, with an age range from 17 to 36. Among them, 217 are males and 239 are females. The Rwandese students are grouped into four socio-economic categories as follow: 20 students in the first category (poorest), 131 in the second category, 199 in the third category, and 34 in the fourth category (wealthiest). Students at Kepler University program can opt to live in or outside of the dormitory. To finance their studies, students are eligible for a loan to cover tuition fees, accommodation, health insurance, a living stipend, and a laptop computer.

Design

This cross sectional study design was used to administer a survey to measure the psychological distress level and demographics among a convenience sample of students at Kepler University.

Sample

All registered non-freshmen students at Kepler University program were recruited for this study. Students who were employed outside of Kepler and freshmen were excluded from this study.

Data collection tools

A questionnaire was developed for this study (Appendix I). The questionnaire had 2 parts. Part 1 collected the basic demographics of the respondents including age, gender, major of study, financing, employment status, and the living location. No names were collected. Part 2 surveyed the students anonymously using the General Health Questionnaire (GHQ-12). The GHQ-12 has been shown to be an effective screening tool for depression and anxiety-related symptoms in both general and non-clinical settings (Goldberg et al., 1997). Each question has answer options in the form of Likert scale from 0 to 3. Each question had 4 responses, which were scored as 0, 1, 2 and 3.

The total GHQ-12 score ranges from 0 (minimum psychological distress) to the maximum 36 (severe psychological distress) for the whole questionnaire (Sánchez López & Dresch, 2008).

Higher scores can indicate a greater likelihood of developing mental disorders such as depression and anxiety.

Although there is no gold standard cutoff for the GHQ-12 and this tool is not used to diagnose a specific disorder, literature (Goldberg, Oldehinkel, & Ormel, 1998) (Zulkefly & Baharudin, 2010) shows that the mean score of respondents has been used in other populations as a dichotomous cut off point to describe higher or lower psychological distress, and this study used the same methodology to determine the score at which participants were considered to "screen in" for psychological distress.

The English version of the GHQ-12 was self-administered since English was the students' first language of instructions.

Data collector(s)

The principle investigator solely collected the data for this study.

Data collection method

A questionnaire was self-administered to a convenience sample of students from November 27th to December 8th. A verbal consent was obtained and participation was voluntary. All undergraduate students who were not freshmen by the time of the data collection were included in the study. The data collector had authorization from the school leadership and informed the instructors about the data collection process beforehand. At the day of data collection, the data collector entered classrooms to get informed consent, explain the purpose of the study and the voluntary participation before handing out the questionnaire to participants meeting inclusion criteria (125 students). The data collector went back to collect the questionnaires during the next class.

Data management

GHQ-12 scores and basic demographics were collected were entered into an Excel spreadsheet for cleaning and analysis.

Data Analysis

Descriptive analysis was performed to present the demographics of respondents and the GHQ-12 scores. The mean score for respondents was calculated to be 11, therefore a score of 11 was decided a cutoff for this study. Score equivalent to 11 or less was considered as low psychological distress, while a score between 12 and 36 determined high psychological distress.

Each independent variable (the demographic data) was compared with the dependent variable (GHQ score) to test association using a Chi-square test performed in Stata v.13.

CHAPTER FOUR: RESULTS

Demographic results

Of the 125 students who were administered the questionnaire, 106 students returned the questionnaire, for a response rate of 85%.

Of the 106 respondents, 47 (53%) were within the age group 19–21 years, and 41 (47%) were between 22 and 39. Male respondents were 46 (43%) while 60 (57%) were female. Eighty nine percent (89% n=94) respondents were studying their Bachelor of Arts with different concentrations, and only 12 (11%) were studying their Associates of Arts in general studies. 65 (61%) of respondents were unemployed, 41 (39%) had employment. Only 32 (30%) students had scholarship while 73 (70%) either had a loan or were private students. 61 (58%) respondents lived in dormitory, 45 (42%) lived outside of dorm (Table 1).

Table 1: Study Participant demographics

		N (%)
Sample (n)		106
Age group (n=**88****)	19-21 years	47 (53%)
	22-39 years	41 (47%)
Gender (n=106)	Male	46 (43%)
	Female	60 (57%)
Major (n=106)	Associates of Arts	12 (11%)
	Bachelor of Arts (communications, Management, Healthcare management)	94 (89%)
Employment status (n=106)	Employed (Internship, Work-study, Part time job)	41 (39%)
	Unemployed	65 (61%)
Support (n=105**)	On Scholarship	32 (30%)
	Other support (Loan private students)	73 (70%)
Residing location (n=106)	Dormitory	61 (58%)
	Outside of dormitory	45 (42%)

***** Some respondents preferred not to answer these items on the questionnaire***

GHQ-12 results

Respondents' Level of Psychological distress

Fifty eight percent (58% n=62) of the respondents scored 11 and below on the GHQ-12, while 44 (42%) others scored 12 and higher (Table 2).

Table 2: GHQ-12 Level of Psychological distress

Sample (N)	106	
Psychological distress level	Low psychological distress (GHQ 0-11)	62 (58%)
	High Psychological distress (GHQ 12 - 36)	44 (42%)

Signs and symptoms

Of the 12 items of the GHQ-12, the three items on which respondents reported more distress included being under stress (35 students (33%) reported feeling “more than usual” or “much more than usual”), enjoying day to day activities (35 students (33%) reported “less so” or “much less so” than usual), and feeling unhappy or depressed (33 students (32%) reported “more than” or “much more than” usual). Items in which students experienced the least were: thinking of self as worthless (71 students (67%) reported not at all); losing sleep over worry (55 students (52%) reported not at all); and losing confidence in yourself (54 students (51%) reported not at all) (Table 3).

Table 3: GHQ-12 Response Frequencies

Item	Response Frequencies** N (%)			
	0	1	2	3
1. Able to concentrate	21 (20%)	52 (49%)	24 (23%)	8 (8%)
2. Lost much sleep	55 (52%)	24 (23%)	19 (18%)	8 (8%)
3. Playing a useful part	41 (39%)	51 (48%)	9 (8%)	4 (4%)
4. Capable of making decisions	44 (42%)	47 (44%)	13 (12%)	1 (1%)
5. Under stress	29 (27%)	40 (38%)	26 (25%)	9 (8%)
6. Could not overcome difficulties	39 (37%)	37 (35)	23 (22%)	7 (7%)
7. Enjoy day-to-day activities	21 (20%)	50 (47%)	27 (25%)	8 (8%)
8. Face up to problems	17 (16%)	72 (68%)	12 (11%)	4 (4%)
9. Feeling unhappy and depressed	34 (32%)	39 (37%)	26 (25%)	7 (7%)
10. Losing confidence	54 (51%)	35 (33%)	7 (7%)	8 (8%)
11. Thinking of self as worthless	71 (67%)	24 (23%)	9 (8%)	2 (2%)
12. Feeling reasonably happy	24 (23%)	67 (63%)	11 (10%)	3 (3%)

*** 0 means "Not at all" for questions 2, 5, 6, 9, 10, and 11; "Better than usual" for question 1; and " More so than usual" for questions 3, 4, 7, 8, and 12.*

*** 1 means "Same as usual " for questions 1, 3, 4, 7, and 8; "No more than usual" for questions 2, 5, 6, 9, 10, and 11; and "About same as usual" for question 12.*

*** 2 means "Less than usual " for question 1; "Less useful than usual" for question 3; "Less so than usual" for questions 4, 7, and 12; "Less able than usual" for question 8; and Rather more than usual for questions 2, 5, 6, 9, 10, and 11.*

*** 3 means "Much less than usual " for questions 1, 7, and 12; "Much more than usual" for questions 2, 5, 6, 9, 10, and 11; "Much less useful" for question 3; "Much less capable" for question 4; and "Much less able" for question 8.*

Factor association

No statistically significant association was found between presence of psychological distress and age (p=0.885), gender (p=0.103); major of study (p=0.517), support (p=0.100), residing location (p=0.786), or employment status (p=0.059) (Table 4).

Table 4: Association between depend and independent variables

Demographics		N (%)	High Psychological distress	Low Psychological distress	P. Value
Sample (n)					106
Age group	19-21	47 (44%)	21	26	0.885
	22-39	44 (42%)	19	25	
Gender	Male	46 (43%)	15	31	0.103
	Female	60 (57%)	29	31	
Major of study	Associates of Arts	12 (11%)	6	6	0.517
	Bachelor of Arts	92 (87%)	37	55	
Employment status	Employed	41 (39%)	12	29	0.059
	Unemployed	65 (61%)	31	34	
Support	On Scholarship	32 (30%)	9	23	0.100
	Other support	73 (69%)	33	40	
Residing location	Outside of dormitory	45 (42%)	18	27	0.786
	Dormitory	61 (58%)	26	35	

CHAPTER FIVE: DISCUSSION

Our study found 42% of the students in Kepler University reported high psychological distress and may be at higher risk of developing depressive or anxiety disorder. The rate is similar to other studies conducted Malaysia on college students where the range was between 41% to 46%, including public and private universities (Sherina et al., 2003; Zaid, Chan, & Ho, 2007). It should be noted that psychological distress is a risk factor for mental and physical problems (Niemi & Vainiomäki, 1999), and thus early detection among college students is recommended to prevent long-term effects on students (Sherina et al., 2003; Guthrie et al., 1998). Also, further research with bigger sample size is recommended to investigate the prevalence of psychological distress in colleges across Rwanda.

Sixty seven percent (67%) of respondents reported that they had never thought of themselves as worthless, which is similar to another study conducted on medical students in Bangladesh (Eva et al., 2015). In a study conducted on college students in Malaysia, 52% said they never lost sleep over worry and 51% never lost confidence (Yusoff, Abdul Rahim, & Yaacob, 2010).

On the other hand, 34 percent (34%) of respondents in this study reported not enjoying day-to-day activities, 33 percent (33%0 of respondents reported feeling under stress, and 33 percent (33%) reported feeling unhappy and depressed. These are similar to the results screening medical students in Bangladesh (Eva et al., 2015), although that study found a slightly higher proportion reporting enjoying daily activities (41%).

This study did not find any factor significantly associated with psychological distress. However, the proportion of students experiencing psychological distress was higher (29% n=31) among unemployed students as compared to students with employed (11% n=12). Although the cause of higher distress in unemployed students is not known, it is possible that unemployed students may feel increased stress participating in Kepler's competency based curriculum, which requires students to apply the skills they learn at a workplace (Brightwell & Grant, 2013). The increased psychological distress experienced by unemployed students may also be related to financial or other stressors facing those without work. Based on these results, Kepler careers department should collaborate with the school counselors' office to establish and/or improve on career advisory programs to help students obtain satisfactory job placements. Other factors such as age, gender, major of study, residential location, and school support were not significantly associated with psychological distress among college students in this study. This contrasts with a study that found an association between gender and psychological distress among college students at the University of Hargeisa in Somaliland (Hersi et al., 2017). Another consideration, the majority of students lives in the dorms (58% n=61) and study on scholarship (30% n=32) and/or interest-free loan (67% n=71) paid after they graduate and secure a job, which may help to alleviate financial and psychological problems during their studies.

The researcher expected the major of study to be associated with psychological distress, but it was surprising that there was no statistically significant association.

Students at Kepler work on their Associates of Art (AA) during their second year, while they generally work on their Bachelor's of Arts (BA) during the third and fourth year. It is surprising because AA and AB are more challenging than the first foundational year, which focuses on

language and professional development courses. This might be related to a self-paced curriculum, which allows students to take courses on their own time and conditions (Tullis & Benjamin, 2012).

Limitations

This is a cross sectional study with its innate limitations: this study only generates a snapshot of the psychological distress not the entire profile of the problem. Also, recall bias and social desirability bias, which may be incorrect and/or not honest, are limitations for this study. Recall and social desirability biases have effect on internal validity of study. Further, this study used a small sample size, which limits the power and/or the confidence level of the study. Other limitations of this study are related to the analysis which could have been done including controlling for some of the factors associated with distress such as age and/or gender.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

The use of GHQ-12 in this study revealed that 42% of college students at Kepler reported high psychological distress and are potentially at risk of developing a mental disorder such as depression or anxiety. This study did not find any statistically significant association between distress and age, gender, major of study, support, residential location, and employment status. However, the study found that a high proportion of unemployed students reported psychological distress compared with their employed counterparts. The study recommends the school management to set policies to improve students psychological health with a particular attention to unemployed students. Also, the careers department in close collaboration with the school counselor should establish a structured career advisory and/or counseling programs to reduce psychological distress, which might negatively affect academic performance of the students if no appropriate measures are taken. Other research should be conducted to further investigate the true prevalence of psychological distress among college students in Rwanda. Also, there is need of comparative studies to compare the issue of psychological distress between public and private colleges in Rwanda in order to understand the risk factors better and design effective intervention accordingly.

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APPENDICES

Data collection tool

Part 1. Demographic

Question	Check box
What is your age?	
What is your gender?	
Female	
Male	
What is your major of study?	
Associates of Arts	
BA in Healthcare management	
BA in Communications	
BA in Management	
What is your current employment status?	
Work-study	
Internship	
Part time job	
Fulltime job	
Unemployed	
How are your studies supported?	
On Scholarship	
On Loan	
Private student/Self-support	
Where do you currently reside?	
In group house	
In dormitory	
Outside of dorm and group house	

Part 2. General health questions

GENERAL HEALTH QUESTIONNAIRE GHQ 12

Please read this carefully:

We would like to know if you have had any medical complaints, and how your health has been in general, ***over the past few weeks***. Please answer ***ALL*** the questions simply by ***underlining*** the answer, which you think ***most nearly***, applies to you. Remember that we want to know about ***present*** and ***recent complaints***, not those you had in the past (years ago). It is important that you try to answer ***ALL*** the questions.

HAVE YOU RECENTLY:

1 - been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
2 - lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
3 - felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
4 - felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
5 - felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
6 - felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
7 - been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
8 - been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
9 - been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
10 - been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
11 - been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
12 - been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

Published by GL Assessment Limited
9th Floor East, 389 Chiswick High Road, London W4 4AL, UK

This edition published 1992.

GL Assessment is part of the Granada Learning GroupCode 00900023653(1.08)

Data collected and used in this study

Responses - GHQ-12 .xlsx

Capstone practicum final report grading scheme

Area	Max score	Score
The Problem Statement Does the Problem Statement describe specifically what the problem is, which issues the capstone will explore, and why they need to be explored?	4	4
Objectives Is the overall objective of the project SMART and clearly stated, providing a clear indication of the expected contribution of the project to the specific organization/institute where the project is conducted? - If included, do specific/secondary objectives clearly outline the steps through which the overall objective will be achieved?	4	3.5
Background and Justification Does the Background to the Study provide a description of: (i) The significant and topical background issues (historical, current) pertaining to the study; (ii) why the project is being undertaken; and (iii)previous work related to the study? It is expected that the Justification of the project should provide a quick sketch of the proposed solution or study approach and briefly explain how it differs from other works – and within this context, it should make a strong case for why the project is needed, how the results of the study would fill this need and be beneficial; and why it is significant.	4	3.5
Layout of the Thesis Brief description of each of the chapters of the entire thesis	2	2
Literature review To what level and extent has the candidate reviewed, analyzed, and synthesized relevant previous works? Has the candidate: ● reviewed and documented the results of other studies that are closely related to the present study? ● demonstrated that s/he has a comprehensive understanding of the field of study and that he/she is aware of important recent substantive, methodological and theoretical developments in the field of study? ● identified the limitations of past/current research approaches and explained how s/he will build on the strengths of past studies while overcoming their limitations? ● identified potential outcomes of the study and discussed the importance of each?	4 4 4 4	3 3 3 3

Methodology **Project Design and Method** ● Does the candidate identify which study design had been adopted/used (if any), and then describe, discuss and justify the choice, relevance, and implementation of the intervention? **Measures** ● What type of data/Indicators has the project measured? **Implementation** ● Does the data collection method appear to be appropriate? ● Was the data collection tool clearly described? ● intervention appear to be addressing the root cause (if intervention is applicable)? **Data analysis** ● Appropriate analysis method(s), statistical or coding method(s) (if applicable) described with sufficient detail.	 2 2 1 2 1 3	 2 1.1 .8 1.5 0 1.5
Results ● Does the candidate present relevant results, without interpretation? ● Are the results obtained using the analysis methods described previously in the report? ● Does the candidate use appropriate tables/figures if applicable?	 2 1 1	 1.7 1 .7
Discussion ● Does the candidate interpret the results rather than simply restating them? ● Does candidate discuss the factors contributing to the results (success/failure of intervention, if applicable)? ● Does the candidate relate the results to the literature? ● Does the candidate discuss the challenges encountered and steps taken to overcome them? ● Does the candidate discuss the limitations of the project?	 1 1 1 1 1	 .9 .7 .8 .7 .6
Conclusion Does the candidate provide a clear summary of the project, and does the candidate provide recommendations for follow up and future studies?	 5	 3.5
Adherence to the Guidelines for Writing Capstone Project Thesis The candidate strictly adheres to the guidelines provided for preparing the capstone document. Document is prepared with		

appropriate structure, format and layout (size 12 font, double-spaced, 1-inch margins); text is well developed and coherent; language and style are clear and appropriate; sources and citation style are correct; and references are high quality and relevant.	5	3.5
Total	60	46 (76.7%)