

# African Journal of Education and Practice (AJEP)

**Adoption of e-assessment technologies to enhance the  
happiness of academics. Insights from higher learning  
institutions in Tanzania**

Dr. Judith Namabira, Dr Adalbertus Kamanzi and Agnes

Chawene

**Adoption of e-assessment technologies to enhance the happiness of academics. Insights from higher learning institutions in Tanzania**

<sup>1\*</sup>Dr. Judith Namabira

Lecturer, Development of Finance and Management Studies

Institute of Rural Development Planning (IRDP), Dodoma

\*Corresponding Author's E-mail: [jnamabira@irdp.ac.tz](mailto:jnamabira@irdp.ac.tz) and

[jnamabira@gmail.com](mailto:jnamabira@gmail.com)

<sup>2</sup>Dr Adalbertus Kamanzi

Senior Lecturer: Department of Social Sciences

University of Namibia (UNAM)

<sup>3</sup>Agnes Chawene

Lecturer: Development of Environmental Planning

Institute of Rural Development Planning (IRDP), Dodoma

### Abstract

In an anecdote, a university professor, who has done research on happiness for the rest of her life, invited students to talk about happiness. She gave each one a balloon, asked them to fill them with air, write their names on them, and release them in the air. In a short moment, the whole hall was full of balloons. She then asked each one to get their balloon with their name on. After a struggle of a couple of hours, none got their balloon back. And then she asked them to get each one any balloon, read the name on it, and search for the owner, and give the balloon back to the owner. In less than five minutes, each one had got their balloon. After the exercise the professor concluded: “These balloons are like happiness. We will never find it if everyone is looking for their own. But if we care about

The study aims at assessing the happiness of the academics in the higher learning institutions of Tanzania during these times of massification. Data from a total number of 116 academic Whatsapp group members in Tanzania was collected through Google Forms. With the use of the “anchoring vignette” in order to understand the major functions of the academics, the respondents assessed their levels of happiness on a five-ladder Likert scale. The descriptive statistics were used to describe the degree of happiness and the Independent Samples T-Test and the Kruskal-Wallis H Test to test the null hypotheses that gender, positions and working experience of the academics have no influence on the happiness of academics in their functions. The study reveals that the academics are generally happy, but less happy in the activities of marking assessments and exams. The study also revealed that neither gender nor academic positions and working experience significantly impacted on the academics’ unhappiness. The universities are urged to do more research on the suitable e-assessments for their students and make use of the available e-assessments technologies in order to reduce the marking pressure for the academics. The higher learning institutions are recommended to institutionalize annual happiness indices and annual education e-technologies’ use indices in order to regularly monitor happiness and education e-technologies’ use, respectively. The government of Tanzania, through the Ministry in charge of higher education and other educational stakeholders need to promote mechanisms and frameworks to promote research and the use of e-assessments. The paper contributes more knowledge about the reasons to adopt e-technologies in education, on the one hand, and it also enhances knowledge on the e-methods in data collection, on the other hand.

**Keywords:** *Happiness, Higher learning institutions, E-assessments, anchoring vignette*

## 1. INTRODUCTION

Other people's happiness, we will find ours too." This anecdote is symptomatic of the sense of collective action in the search for happiness in academia. This study is about an assessment of the happiness of the academics in higher learning institutions during the times of education massification. The happiness of the academics is assumed to be impacted upon by the massification, particularly due to the pressure the academics get when executing their activities. The use of technologies, however, is able to alleviate this massification challenge. The paper proceeds with Section 2 that presents the conceptual issues regarding happiness and some empirical studies on happiness and the academics. Section 3 presents the problem statement, Section 4 the methodological underpinnings, Section 5 the results, Section 6 the discussion of the results, and Section 7 the conclusion and recommendations.

## 2. HAPPINESS AND ACADEMICS

The philosophical consideration of happiness, based on Greek reflections, has considered happiness in hedonic and eudaimonic terms. While a hedonic state is a transitory state of pleasure, a eudaimonic state is one associated with ongoing wellbeing, engagement, and contentment (BDI 2012). Hedonic is derived from Greek, "hēdonikos", which is from a noun "hēdonē", meaning "pleasure." Thus, hedonic happiness is about pleasure, amusement. Hedonic happiness is the pleasantness experiences in affects (feelings, emotions, moods) (Veenhoven 2009). Eudaimonic, on the other hand, is derived from a Greek term "eudaimonia", which has the two terms of "eu", meaning "good" and "daimon", meaning "god" or "spirit" or "demon". Happiness has to do with good and spiritual. For Aristotle, this kind of happiness consists in a contemplative (philosophical) life. Eudaimonic happiness is about an individual's perception of his/her aspirations being met (*Idem*). Eudaimonia is based on the concept of "good life", which is more than just the absence of persistent negative emotions to incorporate high life satisfaction and/or enduring positive moods together with qualities such as contributing to society, social integration, wide range of social groups, accepting others, self-acceptance, mastery over their environment, positive relationships with others, autonomy, personal growth, and purpose in life (Keyes et al. 2002). Thus, so far it can be argued that happiness has internal factors, such as virtue and contemplation or philosophizing.

In more practical terms, the concept of happiness is captured broadly as "quality of life" or "well-being", whereby the denoted meaning is that life is good (Veenhoven 2009). What is good about life is the "combination of feeling good and functioning well; the experience of positive emotions such as happiness and contentment as well as the development of one's potential, having some control over one's life, having a sense of purpose, and experiencing

positive relationships” (Ruggeri et al. 2020). What is good about life is the livability of the environment, life-ability of the person, utility of life, and the satisfaction with life (Veenhoven 2009). When a person has high wellbeing, it is because the person “experiences life satisfaction and frequent joy, and only infrequently experiences unpleasant emotions such as sadness or anger. Contrariwise, a person is said to have low subjective wellbeing if she or he is dissatisfied with life, experiences little joy and affection and frequently feels negative emotions such as anger or anxiety” (Diener et al. 1997). Some authors have pointed out some factors that are responsible for happiness: living in an economically prosperous country where freedom and democracy are respected; political stability; being a part of a majority rather than a minority; being toward the top of the social ladder; being married and having good relationships with family and friends; being mentally and physically healthy; being active and open minded; feeling in control of one’s life; having aspirations in social and moral matters rather than money-making and being politically conservative; and one’s achievements and experiences at work and the quality of their working life (Veenhoven 1991; Dockery, 2003).

The definitions of happiness can be categorized into the affective, cognitive, and attitudinal definitions (Veenhoven 2009). From the affective point of view, happiness is about an overall evaluation of the quality of the individual’s own emotional experience of pleasant and unpleasant experiences in the recent past. This affective understanding of happiness is rooted in Jeremy Bentham’s definition of happiness as “the sum of pleasures and pains,” the raw affective experience that underlies the overall evaluation of life (Bentham 1789). Happiness is also understood as a deliberate evaluation process, and hence, a cognitive phenomenon. In this category of definition, happiness is as a result of an assessment of one’s condition compared to a certain standard, an active achievement of life set goals. With respect to attitudinal definitions, happiness is about the degree of positivity of outlook about life, whereby an individual has a certain stable level of satisfaction, which is maintained throughout life. Personality traits are decisive in happiness (Steel et al. 2008). Accordingly, happiness is related to neurological and hormonal tendencies (Knutson et al. 2005). Extraversion and neuroticism are direct predictors of happiness; while extraversion is the trait disposition to be energetic, sociable and friendly, neuroticism is the trait disposition to experience negative affects, including anger, anxiety, self-consciousness, irritability, emotional instability, and depression (Cheng & Furnham, 2002). There is a rough rule of thumb that half a person’s happiness level is determined genetically, 10 per cent affected by external circumstances, and 40 per cent by beliefs and behaviours that can be changed (Lyubomirsky, 2008; Seligman & Csikszentmihalyi, 2020). Thus, while the affective side of happiness consists in a sense of well-being, finding life enriching or rewarding or feeling satisfied or fulfilled by it, the cognitive aspect of happiness consists in

a positive evaluation of life, a judgment that measures up favourably against standards or expectations, and the attitudinal happiness is about the degree of positivity of outlook about life.

There has been growing interest in work-related happiness, often called happiness at work. Happiness has positive effects on workers, organizations, and the whole of society (Seligman & Csikszentmihalyi, 2020). Workers who see meaning in their work are more committed, engaged and productive (Steger, 2017). Research on happiness indicates an association between happiness of employees and their productivity (Joo & Lee, 2017). The increased levels of the employees' happiness positively affect their productivity, and hence organizational profitability (Awada & Ismail, 2019). Happy employees achieve goals at higher rates; they are less absent minded, show increased job satisfaction, and they are more efficient and motivated compared to those who are less happy (Alipour et al. 2012). An academic, as a worker or employee, tends to be associated with autonomy and freedom, intellectual stimulation, teaching and research, and ideas around making a difference, and a sense of calling (Rosewell & Ashwin, 2018). Much as a sense of calling seems to be dominant in the lives of early career academics, there is variation in terms of the extent to which they identify with either being a researcher, a teacher, a researcher and teacher, a professional, or a manager. With such roles of researcher, teacher, professional, or manager being put on spot, other elements of academic work, such as freedom, intellectual stimulation and ideas around making a difference, tend to be taken for granted, and even not demanded of accountability (Idem).

In the higher education context that defines the complexity of academic work in terms of teaching, conducting research, and offering professional services, the happiness of the academics is critical for achieving the success of higher learning institutions (Tight 2016; Ofori & Bell, 2020). It is for this reason that studies have taken different perspectives in analyzing the happiness of the academics. Some studies have been concerned with the establishment of the levels of happiness. For example, using the Changing Academic Profession (CAP) Survey of 2007, the happiness levels of the Japanese academics were established to be at 63%, the Mexicans' 87%, South Koreans' 77%, Canadians' 74%, and Norwegians' 69% (Aichinger, et al. 2015). With the same concern of determining the levels of happiness, a study in Pakistan revealed that a vast majority of university employees (85%) were happy in their work (Bilal & Kinza, 2020). In a study that investigated the job satisfaction and general life satisfaction of the academics in Canada, it was found that the academics had high job satisfaction levels and that there was a strong correlation between the general life satisfaction level and the job satisfaction (Schell & Loeb, 1986). In India the college teachers were found to be happy: no teachers were found to be in the low happiness categories (Das & Halde, 2020). Some studies have had an orientation to work

with the happiness index. There has been a quest to go beyond the university ranking processes by the use of income and academic impact to ranking universities by the happiness index in order to consider quality life issues has been expressed (Woolston, 2015). In this line of the happiness index, some studies have proposed a method to create a happiness index that could act as a benchmark for efforts to promote more happiness (Omar et al. 2018). Some studies have linked the impact of the happiness of the academics to the people they serve. The academics do not only teach but are also influential in the lives of their students far beyond the classroom; academics are also role models. Their state of happiness, therefore, may impact not only on the performance of the higher learning institutions they work for, but also on the general well-being of the lives of the people they interact with; happy teachers become role models of happiness (Mertoğlu, 2018). If the academics are not happy, they can transmit their happiness to students whose performance can dwindle, as being happy plays an important role in academic achievement for the students (Cheng & Furnham, 2002). It is for this matter that it is necessary that the happiness of the academics is assessed regularly, and if it is perceived as lacking, then, interventions to alter a culture of an organization is necessary (Diener et al. 1997).

### **3.0 PROBLEM STATEMENT**

In Africa, like elsewhere, the education sector is faced with the massification phenomenon in higher education institutions. Massification is about the enrolment of students in excess of their capacities as a result of the struggle to address education equity (Mohamedbhai, 2014). Globally, enrolment has risen from 13.8 % in 1990 to 29 % in 2010; in Sub Saharan Africa, there has been more than a doubling of gross enrolment ratios from 3 % in 1990 to 7 % in 2010 ((Vargese, 2013). A similar trend of increase in enrolment is visible in Tanzania whereby the number of students admitted into bachelor's degree programs increased progressively from 44,715 in 2012/13, 52,538 in 2013/14, to 59,887 in 2014/15, then 65,105 in 2015/16 and 69,539 in 2016/17; there was, however, a decline in 2017/18 that saw the enrolment at 63,737 students (TCU, 2018). While the large classes are a challenge in promoting student learning, quality education, and consequently a challenge to the socioeconomic development, they are also an additional workload to the academics, a factor that impacts on the happiness of the academics. The paper, therefore, assesses the happiness of the academics in the higher learning institutions within the context of massification in view of making recommendations that can facilitate in the enhancement of happiness of academics. The paper holds that happiness reflects how well the academics feel generally in their profession, a sense of wellbeing as a result of the evaluation of the goals of being academics, a degree to which the academics judge the overall quality of their life as a whole favorably with respect to their core activities of teaching and research.

This study becomes important at this moment in time when the swelling numbers in higher learning institutions are here to stay. Much as the numbers are a challenge, they also hold promise and opportunities for innovation in support of student learning. What is required is to focus on how institutions of higher education can turn the issue of massification into an opportunity: “How can quality education, defined as fostering the adoption of higher order cognitive skills like problem solving and critical thinking, be achieved in a context which is not conducive to student engagement, motivation or performance?” (Hornsby et al. 2014) This study, again, adds to the knowledge on how the massification impacts on the levels of happiness of the academics.

#### 4.0 METHODOLOGICAL UNDERPINNINGS

Data has been collected through an online survey with the aid of Google Forms distributed to the different WhatsApp groups of academics in Tanzania for one week in the month of October 2021. A total number of 116 academics responded to the questionnaire. The questionnaire was based on the three major functions of an academic: teaching, research, and consultancy. Table 1 summarizes the characteristics of the survey respondents.

**Table 1: Respondents’ characteristics**

	<i>Frequency (n=116)</i>	<i>Percent</i>
Female	39	34
Male	77	66
Tutorial assistants	6	5
Assistant Lecturers	57	49
Lecturers	33	28
Researchers	3	3
Senior Lecturers	10	7
Professors	7	6
Ever taught	114	99
Ever done research	108	94
Ever done consultancy	78	68

In order to have a common understanding of the major functions of the academics, each function was introduced by an “anchoring vignette”, that is, a brief description or story of people or situations or activities (King & Wand 2007; Kamanzi 2014). The anchoring vignettes are used to reduce subjectivity by correcting otherwise interpersonally incomparable responses. The frame of reference effect can lead people even in similar circumstances to give different responses to a question, which is simply understood differently (Ravallion & Lokshin, 2005). The respondents came from different demographic and institutional backgrounds, which were potential circumstances to cause



divergent understanding of the same questions. The respondents were men and women from twelve higher learning institutions, whose academic experience ranges from one year to eighteen years; their position ranged from professorship to tutorial assistance. Hence, the anchoring vignette aimed at controlling the issue of different respondents understanding the questions differently due to the different demographic and institutional backgrounds.

The three vignettes that were used are as follows. About the teaching role, the vignette used was: “I am KK, an academic at a university. One of my main tasks is to teach. I teach all the students who I find in my class.” With respect to the research role, the vignette read: “As an academic, I deal with research. I do research, supervise students with their research projects, and participate in research discussions.” Finally, as a consultant the vignette was: “In my academic work, I also offer consultancy services: I render professional services at a fee to individuals and organizations.”

In the examination of the happiness of the academics in their profession, the paper makes use of the descriptive and inferential statistics. The analysis begins with the description and assessment of the degree of happiness of the academics for the activities undertaken in the key areas of teaching and research. As the Likert scale of happiness is continuous from a range of 1 to 5, the range below 2.4 is judged as the state of being unhappy, 2.5 to 3.4 as the state of moderate happiness, and the range above 3.4 as the state of happiness. The analysis proceeds by identifying the factors that affect those activities in which the academics feel less happy. The difference tests are applied to determine whether happiness scores change according to the factors of gender, academic position, and experience. The tests are applied by taking the mean of the happiness levels of the 17 items that were used to test the happiness of the academics. The two main tests used are, namely:

The independent T-Test (independent-samples t-test). It is used to determine whether the mean of the levels of happiness (dependent variable) is the same or not in two independent groups of males and females. The independent t-test determines whether the mean difference between the males and females is statistically significantly different to zero. Specifically, this is to test whether the variables that will be assessed as characterized by less happiness of the academics that is, marking exams and marking assessments, change or not according to the sex of the academics.

The Kruskal-Wallis H test. It is a rank-based test used to determine whether the variables that will be assessed as characterized by less happiness of the academics change or not according to the position of the academics (Assistant Lecturer, Lecturer, Professor, Researcher, Senior lecturer, and Tutorial Assistant) or according to the experience of the

academics (minimal, moderate, high). This is a suitable test when there is an unbalanced distribution of the number of participants in the groups, such as there is with the academic positions and experience.

## 5.0 RESULTS

Table 2 shows scores that are received from the question of how happy the academics are with respect to the different activities they do as teachers and researchers. The scores are ranked from highest to the lowest point.

**Table 2: Academics' activities and happiness (mean response to questions: "How happy are you with ...." on a scale from 1=very unhappy to 5=very happy)**

	Frequency	Mean	Judgement
Teaching	114	4.184211	Happy
Attending conferences	109	4.055046	Happy
Attending workshops	111	4.045045	Happy
Attending seminars	111	4.036036	Happy
Preparing lectures	115	4.017391	Happy
Data collection	108	3.87963	Happy
Preparing assessments	115	3.817391	Happy
Research report writing	109	3.743119	Happy
Data analysis	109	3.715596	Happy
Writing research proposals	110	3.690909	Happy
Preparing exams	115	3.66087	Happy
Attending webinars	106	3.575472	Happy
Academic publishing	110	3.572727	Happy
Attending students' proposal presentations	113	3.522124	Happy
Supervising students' thesis writing	111	3.432432	Happy
Marking assessments	114	2.877193	Moderately happy
Marking exams	115	2.8	Moderately happy
<b>General mean score</b>		<b>3.683835</b>	<b>Happy</b>

As it can be seen from Table 2, the academics' scores range from 2.8 to 4.1. This is a range from the state of moderately happy (between 2.4 and 3.4) and the state of being happy (above 3.4). The average mean score is above 3.4, implying that the academics are generally happy. However, it is to be noted that there are activities in which the academics are less happy, namely the marking of assessments and exams. These two activities are carried forward for the next analysis of determining if the gender, academic position, and working experience factors have impact on the happiness of the academics differently.

Table 3 shows the results of a two-sample t-test to compare marking exams and assessments between males and females.

**Table 3. Two sample t-test to compare marking exams**

	<i>Sex</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>t(df)</i>	<i>p-value</i>
Marking exams	Males	2.831169	1.140205		
	Females	2.736842	1.004966	-0.4334	0.605
Marking assessments	Males	2.868421	1.135395	0.1238	0.9017
	Females	2.894737	0.923842		

The results in Table 3 show that when a two-sample t-test was performed to compare the levels of happiness in marking exams in males and females, there was no significant difference in the levels of happiness in marking exams between males ( $M = 2.831169$ ),  $SD = 1.004966$  and females ( $M = 2.736842$ ,  $SD = 1.004966$ );  $t(df) = -0.4334$ ,  $p = 0.6655$ . Similarly, when a two-sample t-test was performed to compare the happiness in marking assessments in the males and females, there was no significant difference in the happiness in marking assessments between males ( $M = 2.868421$ ,  $SD = 1.135395$  and females ( $M = 2.894737$ ,  $SD = .9238426$ );  $t(df) = 0.1238$ ,  $p = 0.9017$ . Hence, there is no difference in the perception of less happiness between men and women.

Table 4 shows the Kruskal-Wallis H Tests conducted in order to examine the differences in feeling of less happiness in marking exams and marking assessments according to the academic positions and the academic working experience.

**Table 4. Kruskal-Wallis H Tests**

	<i>H Statistic</i>	<i>Degree of freedom</i>	<i>P Value</i>
Marking exams by academic positions	7.283	5	0.2004
Marking assessments by academic positions	8.192	5	0.146
Marking exams by academic working experience	5.665	2	0.0589
Marking assessments by academic working experience	2.401	2	0.301

The results in Table 4 reveal the following:

1. That there was no significant difference ( $H=7.283$ ,  $df=5$ ,  $P=0.2004$ ) in the feeling of less happiness among the six categories of the academic positions (tutorial assistant, assistant lecturers, lecturers, researchers, senior lecturers, professors) in marking the exams.
2. That there was no significant difference ( $H=8.192$ ,  $df=5$ ,  $P=0.1460$ ) in the feeling of less happiness among the six categories of the academic positions in marking the assessments.
3. That there was no significant difference ( $H=5.665$ ,  $df=2$ ,  $P=0.0589$ ) in the feeling of less happiness among the three categories of the academic working experience (little experience, moderate experience, very experienced) in marking the exams.
4. That there was no significant difference ( $H=2.401$ ,  $df=2$ ,  $P=0.3010$ ) in the feeling of less happiness among the three categories of the academic working experience in marking the assessments.

From these findings, therefore, neither the groups in gender nor in academic positions and in academic working experience impact on the academics to cause difference in the feelings of less happiness with respect to marking of the exams and the assessments.

## **6.0 DISCUSSION OF THE FINDINGS**

From the results, it can be argued that, generally, the academics are happy with their activities, particularly in the areas of teaching, attending conferences, workshops, seminars, and preparing lectures. Such a finding is what is expected, given the academic profession:

The job of an academic is one of the best possible in terms of opportunities for job satisfaction. Unlike most jobs, there is tremendous scope for entering the satisfying flow state — especially through research — when exercising advanced skills. Academic work provides opportunities for developing diverse relationships and for helping others through teaching, research and service. More generally, academics have considerable control over what they do, when they do it and how they do it, providing opportunities to shape daily experiences in satisfying ways (Martin, 2011).

Hence, regardless of whether an academic begins from a lower set point of happiness which is determined by their genetic make-up, they are at an advantageous position in the 50% of happiness which is affected by the external circumstances and of the beliefs and behaviors that can be changed (Martin, 2011).

The finding that academics are mostly less happy in the areas of marking exams and marking assessments is worth noting and requires significant attention. Such finding is syntonic about academics in Australia: “Many academics, if asked to nominate the most

tedious aspect of their job, would say marking of assignments. Nothing is more depressing than a large pile of exam papers or essays” (Martin, 2011). However, the author refers to smaller numbers and that is why his solution is to re-shape the assessments that they can be both stimulating for students and enjoyable for the marker; this kind of re-shaping will allow students considerable choice, and the academic will look forward to reading the assessments because of their variability in nature. Martin (2011) cautions, however that re-shaping is not a solution for those given piles of exam papers.

Generally, e-education has been thought of and practiced as a solution to the challenges of the massification of higher learning. The online education is becoming no more of an option but a necessity in transmitting education at higher learning institutions (Dhawan 2020). E-learning is a means to reduce the number of direct contact hours required and to increase the enrolment in spite of the limitation of resources (Mohamedbhai, 2014). E-learning technologies are crucial for improving the quality of learning by means of access to resources, services, long distance collaborations and exchanges (Gyambrah 2007). E-learning is there because of the access issues of flexibility in scheduling, geographical positioning, access to course resources, and increased enrolments in higher learning institutions (Bichsel, 2013). For developing countries, e-learning is a solution to the increasing demand for higher education (Ngampornchae & Adams, 2016). E-learning is education for all because it aims to reaching out to students living too far from the cities and unable to afford the cost of conventional higher education (Iqbal & Ahmad 2010). It solves the problems of large classrooms, increasing enrollment, and limited staff (Ikpe, 2011).

Apart from the electronification of assessments coming as a result of electronification of learning (Brink & Lautenbach 2011; Appiah & van Tonder 2018; Doğan et al. 2020), the e-assessments have come to deal with the question of numbers. E-assessments are end-to-end electronic assessment processes whereby the information and communications technologies are used for the presentation of assessment activity, recording responses, reporting students’ assessment marks, and giving feedback (Appiah & van Tonder 2018). E-assessment systems consist of the assessment engine, which is the hardware and software needed to design and deliver the assessment task and the item bank, which contains the questions and/or instructions (Howath, 2015). The contrast between the traditional way of assessment and e-assessment is real: while the assessments based on the face-to-face teaching practices the instructor is brought to the forefront, with the e-learning the technological infrastructure and the instructor’s competences on technology usage are on the forefront (Patru & Khvilon, 2002). The use of e-assessments, particularly multiple-choice questions, has increased over time because of more significant student numbers, among other reasons (Nicol, 2007). With a wide range of offers of computer and

information technologies that can be used for assessment development, implementation, and delivery, it is critical not to lose sight of the purpose of the assessment: to decide whether they are successful in a particular course or task (formative assessment), to identify students' learning gaps (summative assessment), and to design activities to compensate them (assessment as learning) (Doğan et al. 2020).

The e-assessments have opportunities for the students, teachers, institutions, and the educational aims (Alruwais et al. 2018). Students prefer e-assessment because they can have more control, with friendly interfaces, flexibility, and immediate feedback, and because they can be accessed in remote areas. E-assessments save the teachers' time and reduces the teachers' burden to assess large student number. Educational institutions, in the context of increasing number of enrolments, benefit from the e-assessments because they are fast and productive of timely results, accurate, less costly, and with potentialities of high security measures against cheating and support for high-order thinking skills such as critiquing, reflection on cognitive processes. Despite these opportunities, e-assessments face challenges, among which the poor technical infrastructure and unfamiliar student with ICT issues. However, as the education systems have always to grapple with the question of improvement of learning and teaching processes, among which the appropriate assessment tools, providing feedback, including students to the assessment processes, and evaluating teaching practices by students' feedback (Doğan et al. 2020), the provision of the required technological infrastructure is the responsibility of institutions that provide education services, with support from the governments; such responsibility will not only be an essential requirement for sustainable and quality e-learning in general (Nicholas, 2008), but also for e-assessments in particular.

## **7.0 CONCLUSION AND RECOMMENDATIONS**

Regardless of the massification, the academics in Tanzania are, generally, happy. However, they are less happy in their profession with respect to the activities of marking assessments and marking exams. Their happiness does not depend on their gender or position or work experience.

With the un-expectation of the enrolment in higher learning institutions growing less, on the one hand, and taking advantage of the growing digitalization of the education processes in terms of e-learning processes, on the other hand, it is recommended that higher learning institutions continue doing more research on e-assessments that are suitable for the different academic circumstances and use the already existing e-assessment technologies; e-assessment technologies will de-pressurize the marking workload leading to more happiness of the academics. On the other hand, the government needs to embark on institutional frameworks that promote the research and use of e-assessments. As there is no

doubt that happiness of the academics will lead to the improved performance of academics, higher learning institutions need to put in place mechanisms of regularly measuring happiness by instituting the annual happiness index from which to evaluate the happiness of the academics annually and act accordingly. Similarly, as the use of e-technologies in education seems to be a way out to address the challenges that come with the massification, again, the higher learning institutions need to institute the annual use of education e-technologies index from which to evaluate the use of e-technologies in education and act accordingly.

## REFERENCES

- Aichinger, et al. (2015). The happiness of Japanese academics as revealed through job satisfaction surveys in 1992 and 2007. In Holthus, B. & Manzenreiter, W. (eds). (2015). *Deciphering the Social DNA of Happiness: Life course perspectives from Japan*. <https://ora.ox.ac.uk/objects/uuid:78afd9e4-ea51-4713-9380-58fde702a745>
- Alipour, A., Pedram, A., Abedi, M.R., & Rostami, Z. (2012). What is happiness? *Interdisciplinary Journal of Contemporary Research Business*. 12, pp 660-667.
- Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and Challenges of Using e-Assessment. *International Journal of Information and Education Technology*. 8(1). pp 34-37. DOI: 10.18178/ijiet.2018.8.1.1008
- Appiah, M. & van Tonder, F. (2018). E-Assessment in Higher Education: A Review. *International Journal of Business Management and Economic Research (IJBMER)*. 9(6). pp. 1454-1460.
- Awada, N.I & Ismail, F. (2019). Happiness in the workplace. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*. 8(9), pp 1496-1500.
- Bentham, J. (1789). *Introduction to the Principles of Morals and Legislation*. London, Payne.
- Bichsel, J (2013). The state of e-learning in higher education: an eye toward growth and increased access (Research report). Louisville, CO: EDUCAUSE Center for Analysis and Research. <http://www.educause.edu/ecar>
- Bilal, A. & Kinza, Y. (2020). Understanding Happiness in University Employees. *Journal of Research and Reviews in Social Sciences Pakistan*. 3(1). pp 610-623.

Black Dog Institute - BDI (2012). Happiness. Randwick: BDI.

<https://www.blackdoginstitute.org.au/docs/defaultsource/factsheets/happiness.pdf?sfvrsn=2>, accessed the 30<sup>th</sup> April 2022 2017.

Brink, R. & Lautenbach, G. (2011). Electronic assessment in higher education. *Educational Studies*. 37(5). pp 503-512

Cheng, H. & Furnham, A. (2002). Personality, peer relations, and self-confidence as predictors of happiness and loneliness. *Journal of Adolescence*. 25(3). pp 327-339. DOI: <https://doi.org/10.1006/jado.2002.0475>.

Das, D. & Halde, K. (2020). Happiness of college teachers. *Journal of Indian Research*. 8 (3-4). pp 26-36.

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*. 49(1). pp 5–22. DOI: <https://doi.org/10.1177%2F0047239520934018>

Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjective wellbeing. *Indian Journal of Clinical Psychology*. 24. pp. 25-41

Dockery, A. (2003). Happiness, Life Satisfaction and the Role of Work: Evidence from Two Australian Surveys.

Doğan, N., Kıbrıslıoğlu Uysal, N., Kelecioğlu, H., & Hambleton, R. K. (2020). An overview of e-assessment. *Hacettepe University Journal of Education*. 35(Special Issue). pp 1-5. DOI: <https://doi.org/10.16986/HUJE.2020063669>

Gyambrah, M.K. (2007). E-Learning Technologies and Its Application in Higher Education: A Descriptive Comparison of Germany, United Kingdom and United States. PhD Dissertation, University of Munchen, Germany.

Howarth P. (2015). The opportunities and challenges faced in utilizing e-Based assessment. <http://www.educationalrc.org/oldconf/old/pdf/Paul%20Howarth%20-%20Beirut%20Presentation.pdf>

Hornsby, D.J & Osman, R. (2014). Massification in higher education: large classes and student learning. *Higher Education*. 67(6), pp 711-719. DOI: 10.1007/s10734-014-9733-1



Huda, S.S.M, Kabir, M.D, & Siddiq, T. (2020). E-Assessment in Higher Education: Students' Perspective. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*. 16(2). pp. 250-258

Ikpe, I. B. (2011). E-learning platforms and humanities education: An African Case Study. *International Journal of Humanities and Arts Computing*, 5(1). pp 83–101.

Iqbal, M. J., & Ahmad, M. (2010). Enhancing quality of education through e-learning: The case study of Allama Iqbal Open University. *Turkish Online Journal of Distance Educatio.*, 11. pp 84–97.

Joo, B.K & Lee, I. (2017). Workplace happiness: work engagement, career satisfaction, and subjective well-being. Evidence-based HRM. *A Global Forum for Empirical Scholarship*. 5(2). pp 206-221. DOI: <https://doi.org/10.1108/EBHRM-04-2015-0011>

Kamanzi, A. (2014). Connectedness in Evolution: The Discourse of Modernity on the Ecosophy of the Haya People in Tanzania. Pretoria: Institute of South Africa

Keyes, C. L., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82 (6). pp 1007-1022.

King, G. and Wand, J. (2007). Comparing incomparable survey responses: Evaluating and selecting anchoring vignettes. *Political Analysis*, 15(1)

Knutson, B., Taylor, J., Kaufman, M., Peterson, M. & Glover, G. (2005). Distributed neural representation of expected value. *The Journal of Neuroscience*, 25(19). pp 4806–4812. DOI: <https://doi.org/10.1523/jneurosci.0642-05.2005>.

Lyubomirsky, S. (2008). *The how of happiness: A scientific approach to getting the life you want*, Penguin, New York.

Martin, B. (2011). On being a happy academic. *Australian Universities' Review*. 53(1), pp 50-56. <https://files.eric.ed.gov/fulltext/EJ926449.pdf>

Mertoğlu, M. (2018). Happiness level of teachers and analyzing its relation with some variables. *Asian Journal of Education and Training*. 4(4), pp 396-402. DOI: 10.20448/journal.522.2018.44.396.402

- Mohamedbhai, G. (2014). Massification in higher education institutions in Africa: Causes, consequences and responses. *International Journal of African Higher Education*. 1(1), pp 59-83.  
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.686.1499&rep=rep1&type=pdf>
- Ngampornchae, A., & Adams, J. (2016) Students' acceptance and readiness for E-learning in Northeastern Thailand. *International Journal of Educational Technology in Higher Education*. 13. DOI: 10.1186/s41239-016-0034-x.
- Nichols, M. (2008). Institutional perspectives: The challenges of e-learning diffusion. *British Journal of Educational Technology*. 39(4). pp. 598–609.
- Nicol, D. (2007). E- assessment by design: using multiple- choice tests to good effect. *Journal of Further and higher Education*. 31(1). pp 53-64.
- Ofori, D.W. & Bell, J. (2020). Societal expectations and well-being of academics: Views from University lecturers in Ghana. *Journal of Education, Society, and Behavioral Science*. 33 (10), pp 74-84.
- Omar, M. K., Ramdani, N. F. S. M., Mohd, I. H., & Hussein, N. (2018). Organizational happiness index (OHI): A study of a public university in Malaysia. *International Journal of Academic Research in Business and Social Sciences*. 8(11). pp 1984-1994.
- Patru. M and Khvilon, E (2002). *Open and distance learning: trends, policy and strategy considerations*. UNESCO.
- Ravallion, M. & Lokshin, M. (2005). Who Cares about Relative Deprivation? Policy Research Working Paper; No. 3782. World Bank, Washington, DC.  
<https://openknowledge.worldbank.org/handle/10986/8578> License: CC BY 3.0 IGO.”  
<https://openknowledge.worldbank.org/bitstream/handle/10986/8578/wps3782.pdf?sequence=1&isAllowed=y>
- Rosewell, K. & Ashwin, P. (2018). Academics' perceptions of what it means to be an academic. *Studies in Higher Education* 44(4). pp 1-11. DOI: 10.1080/03075079.2018.1499717

- Ruggeri, K., Garcia-Garzon, E., Maguire, Á., Matz, S., & Huppert, F. A. (2020). Well-being is more than happiness and life satisfaction: a multidimensional analysis of 21 countries. *Health and quality of life outcomes*, 18(1). pp 1-16. DOI: <https://hqlo.biomedcentral.com/articles/10.1186/s12955-020-01423-y>
- Seligman, M.E & Csikszentmihalyi, M. (2020). Positive Psychology: An Introduction. *American Psychologist*. 55(1), pp. 5-14. DOI: <https://doi.org/10.1037/0003-066X.55.1.5>
- Seligman, M.E. & Csikszentmihalyi, M. (2000). Happiness, excellence, and optimal human functioning [Special issue]. *American Psychologist*. 55(1). pp 5-183.
- Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*. 134(1). pp 138–161. <https://doi.org/10.1037/0033-2909.134.1.138>
- Steger, M (2017). Creating Meaning and Purpose at Work. In Lindsay G. O, Steger, M.F., Fave, A/D & Passmore, J. (eds.). (2017). *The Wiley Blackwell Handbook of the Psychology of Positivity and Strengths-Based Approaches at Work*. Oxford, UK: John Wiley & Sons, Ltd, pp. 60-81.
- TCU (2018). *Higher education students' admission, enrolment, and graduation statistics. 2012/13 - 2017/18*. Dar es Salaam: TCU.
- Tight, M. (2016). Examining the research/teaching nexus. *European Journal of Higher Education*. 694), pp 293-311.
- Varghese, N. V. (2013). Governance reforms in higher education: A study of selected countries in Africa. *IIEP/SEM334/Theme paper*. [http://www.iiep.unesco.org/sites/default/files/governance\\_reforms\\_in\\_he\\_paper\\_p\\_f.pdf](http://www.iiep.unesco.org/sites/default/files/governance_reforms_in_he_paper_p_f.pdf), . Accessed 23.01.2022.
- Veenhoven, R. (1991). Questions on happiness: classical topics, modern answers, blind spots. In Strack, F., Argyle, M. & Schwarz, N. (eds) (1991). *Subjective Well-Being: an interdisciplinary approach*. Great Britain: Pergamon Press. pp 7-26.
- Veenhoven, R. (2009). How do we assess how happy we are? Tenets, implications and tenability of three theories. In Dutt, A. K. & Radcliff, B. (eds.) (2009). *Happiness, Economics and Politics: Towards a multi-disciplinary approach*. Cheltenham UK,

Edward Elger Publishers, Chapter 3, pp. 45-69

Woolston, C. (2015). A case for a university happiness ranking. *Nature*. 517. 415. DOI:  
<https://doi.org/10.1038/517415f>