Science Journal of Education
2025, Vol. 13, No. 1, pp. 27-37
https://doi.org/10.11648/j.sjedu.20251301.14

Research Article

Relating Decision-Making Styles, Examination Questions Types, Sleep Deprivation and Academic Performance of College Students in Tanzania

Joel Matiku Joshua*

School of Education, Mwalimu Nyerere University of Agriculture and Technology, Butiama-Mara, Tanzania

Abstract

This study examined the relationship between performance in examination questions types, decision-making styles, sleep deprivation and performance in general performance average in a sample of 598 students in the Community Development Training Institutes in Tanzania. The study responded to the quests as to whether or not could maximizers and satisficers differ in reporting sleep deprivation and Grade Performance Average; Could maximizers and satisficers differ in terms of performance with type of examination questions such as multiple choice items (MC), matching items (MI), true/false items (T/F), short answers (SA), or Essay; and what could be the relationship between sleep deprivation and academic performance in terms of GPA. Participants concurrently responded to the Sleep Deprivation scale (SDS) and Maximization Scale (MS). Then, performance scores in the examination questions types were traced directly to the examination scripts of the Community Psychology course purposely selected to match the researcher's area of specialization. Data were analyzed using MANOVA and Pearson's Moment Correlation Coefficient with an assistance of the Statistical Package for Social Sciences (SPSS). It was found that only 6.5% of respondents reported being maximizers while 93.3% reported being satisficers. Further, while there was a significant difference between Maximizers and satisficers in sleep deprivation, $F (1, 593) = 6.50$, $p = 0.011$, partial eta squared = 0.011; no significant difference between maximizers and satisficers was found in performance in GPA or in the examination questions types. In addition, there were from low to strong positive correlations between examination question types and performance in GPA. Although psychological factors such as sleep deprivation and decision-making have a reciprocal influence, their influence to students' GPA and scores in question types is not as clear as it is between scores in the question types and GPA, being an indication of malleability of maximization with domain and context specificity.

Keywords

Maximization, Satisfaction, Decision Making Styles, Question Types, Testing Formats

1. Introduction

Decision making is a key determinant of development from individual level to organizations, sectors, national and even at a global level. It even determines individuals' entire success or failure in every life events, actions and plans. This is because people make decisions in most aspects of life including their career basing to time, culture, available resources and

*Corresponding author: joel.joshua@mjnuat.ac.tz (Joel Matiku Joshua), matikujoel.joshua81@gmail.com (Joel Matiku Joshua)

Received: 24 December 2024; **Accepted:** 23 January 2025; **Published:** 11 February 2025

support from other people who can be friends, parents, teachers and relatives [29, 3]. Before embarking to the details of the relationship between decision making and academic performance, it sounds logical to characterize and contextualize the term decision making. According to Leach and Patall [18], decision making involves choosing a preferred option from the created list of requirements after comparing available options to that list. This definition matches a view by traditional economists that relied on rational choice theory of decision making. This view assumed that individuals have well known preferences so that selection is achieved by comparing options and choosing the best option which would maximize their preferences [33].

Scott and Bruce [30] categorize decision making styles into rational, dependent, intuitive, spontaneous and avoidant. Of these five, rational and avoidant styles have been widely studied and have been described to indicate that people with rational style of decision making tend to actively approach problems while those with avoidant style are relatively passive and would avoid to make decisions as their label suggests. Another decision making style, intuitive, is described as a decision made as per the decision maker's intuition or gut feeling basing on experience rather than making formal analysis; and is usually applied when one has to face situations quickly [11]. Another categorization of the decision making styles is maximizing and satisficing decision making styles. The maximization and satisfying concepts can be seen as a special case of the reflection in decision making [6]. Maximizers seek for the only best and sustainable option and not setting for everything less, requiring an exhaustive search of all possibilities [32, 7]. On the other hand, satisfiers would seek well enough until encountering an option that crosses the verge of acceptability [7]. For instance, in selecting a television show from 400 cable channels, a maximizer would surf all channels and spend time to get the best show for watching while a satisficer would surf channels until they encounter the first acceptable show and watch it. Decision making tendencies specifically, maximizing-satisficing tendencies have been associated with leadership styles such as transformational leadership style, transactional leadership style and laissez-faire leadership style [11], satisfaction with irreversible and reversible decisions [34], nonproductive decisional behavior [38]; adaptive decision making, decision behaviors, information distortion, and information processing [12]; life outcomes and problematic decision making styles [22]; perfectionism [19]; domain specificity [38]; counterfactual thinking [16, 28]; meaning in life [17, 21]; and well-being (adaptive or maladaptive), personality, and self-rumination [29, 37].

1.1. Maximization and Academic Performance

With regard to the association between maximization and academic performance, little work has been done. Nasco and Nash [25] have indicated a linkage between maximization and satisfaction tendencies with future behavior intentions as well as academic performance of students. Likewise, Li et al [19] investigated the effects of maximizing tendency on university adjustment and academic performance among 552 university students in Study 1, among 309 university students after 4 years in study 2 and found that maximizers had better university adjustment after their first year at school and achieve higher GPAs when they finished their bachelor's degree. Literature search by the present work indicate that the area is even more understudied in Tanzania. The importance of studying the association between these decision making tendencies however, should not be underestimated. This is because academic performance has been bridging individuals to their long lifetime careers. For instance, in many cultures around the globe, individuals have been screened in the interviews, whose questions are set on the basis of a set of criteria, one of them being academic performance. Academic performance itself is acquired through passing examinations and tests, which needs decision making among other skills. According to Joshua [14], the term academic performance can be used to mean performance goal reflected in grades, marks, divisions, class ranks, or General Performance Average (GPA) obtained in the examination results. It can also mean mastery goal demonstrated by the skills, interests and efforts acquired in a specific training; and as self-authorship, characterized by one's inherent ability to define one's values and beliefs constituting construction of knowledge.

1.2. Maximization, Sleep Deprivation and Examination Question Types

Literatures report that adaptive decision-making, information distortion and information processing are affected by sleep deprivation [29, 38, 12]. Killgore [16] has argued that sleep deprivation modifies the framing effect, resulting into risk taking behavior when one expects the gains, a tendency usually demonstrated by maximizers than satisficers. Killgore also associates sleep deprivation with quality of judgments made to respond to difficult moral dilemmas. In addition, maximization has been associated with students' academic performance as reflected in GPA [26, 20]. The fact that response to examination questions involve decision making, calls for curiosity as to whether or not decision-making processes that are responsible for answering examination questions might also be affected by sleep deprivation and thus, affecting General Performance Average (GPA). In fact, GPA should be a reflection of the students' performance, which is their ability to produce valued and unique results as one continues to learn and grow [5]. In the theory of performance, Elger [5] has argued that performance is not a destination but rather a journey with locations, which are termed as levels of performance. According to the theory, a current level of performance is determined by factors such as context, level of knowledge, level of skills, level of identity, personal factors and fixed factors. In addition, three axioms such as perform-

er's mindset, immersion in enriching environment, and engagement in reflective practice will lead to the performance improvement from the current level of performance to the next. Examination question types that are normally set by tutors in the colleges as strategies to measure students' level of performance is analogous to assessment strategies to engage students in a reflective practice in the theory of performance. This is because reflective practice is constituted by actions that lead people to be attentive to and learn from their experiences.

1.3. Other Determinants of Grade Performance Average

Final GPA has been associated with a number of factors such as performance in the first year results [1] neighborhood, school, and age [9]. In addition, Kocak, Göksu and Goktas [8] have added in the list some psychological factors such as anxiety, depression, academic stress, external regulation and amotivation. Other reported determinants of academic performance in terms of GPA are policy environment, culture, student's ability and the teaching-learning environment [23]. In Tanzania, academic performance in GPA has been associated with factors such as insufficient schools and laboratories, libraries, and equipment; poor teaching strategies, lack of exercise and practice among students, poor teaching and learning of key concepts, and misinterpretation of information, less teaching experience, and in-service training, creative thinking, metacognition and teachers' ability to foster cognitive variables alongside quality of instruction and timely feedback [13, 17, 15]. The role of question types in the students' GPA has been given little attention.

1.4. Examination Question Types and GPA

Examination questions are inevitable when a need to measure learners' behavioral outcomes arises. Indeed, as long as education system makes decisions on educational outcomes by using examinations, questions, whether written or oral, make a central theme to the exercise. These questions that usually comprise a set of tasks determining actions of the learners' knowledge, abilities, skills or feelings are also known as tests [4] Their role extends to collecting data systematically so that comparisons are made across individual learners, classes, schools, even countries; provision of feedback to learners on their tested traits, and even making decisions. A test can be an achievement, aptitude or personality among others; out of which achievement tests is more relevant to classrooms. An achievement test usually measures the specific learning outcomes or training. Achievement tests can be standardized or teacher-made.

Whether standard or teacher-made, an achievement test can take a format of either objective test or an essay. Objective test presents to the examinee highly structured questions, limiting their answers to a single word, short comment, number, symbol selecting correct responses from the list of provided options. Objective tests may be formulated in multiple choice items (MC), Alternate-response including matching items (MI) and true-false items (T/F) completion or short answers items, among others. On the other hand, essay type requires the examined learner to provide their own responses using their own words and free to write in response to the inquired content. Despite the fact that examinations intend to measure the learning outcomes in terms of knowledge, abilities, skills or feelings, it has been reported that examination question types can influence academic performance and probably be influenced by decision making styles as the question types themselves involve decision making.

For example, one would be curious to ask whether or not maximization could be associated with cognitive skills as measured by Multiple Choice questions types (MC), Matching Items questions types (MI), True False questions type (T/F), Short Answers questions type (SA) and Essay questions type. Therefore, this paper is a response to the research questions: 1. Do maximizers and satisficers differ in reporting sleep deprivation and Grade Performance Average? 2. Could maximizers and satisficers differ in terms of performance with type of examination questions such as MC, MI, T/F, SA, or Essay? And 3. What is the relationship between sleep deprivation and academic performance in terms of GPA?

2. Methodology

2.1. Respondents

The study involved a sample of 598 college students studying Diploma in Community Development Program, of whom 252 (42.1%) were Males and 346 (57.9%) were Females. Their ages ranged from a minimum of 19 and a maximum of 35 (Mean= 21.62, SD=2.18).

2.2. Measures

Decision making styles were measured using the Maximization scale [MS, 31]. MS is a self-reported scale that required respondents to rank their decision making tendency from completely disagree to completely agree. The responses were set in a 5 point scale so that those whose mean scores were higher than 3 were considered as maximizers.

Sleep deprivation was measured using the James Maas's Sleep Deprivation Test. It is a dichotomous response scale, requiring that yes responses for any 3 items could imply sleep deprivation [22, 29]. All 'yes' responses in the sleep deprivation test scale were totalized to obtain the total respondent's score. The respondents' scores were then categorized so that the scores less or equal to 9 were labeled 'normal range'; between 10 and 11 were labeled 'borderline'; and scores above 12 were labeled 'abnormal'.

2.3. Reliability of the Scales

The Maximization scale reached acceptable reliability index, which should be greater or equal to α = 0.7 [35, 10, 26], as its internal consistency was Cronbach α = 0.9. This was higher than some past internal consistencies such as α = 0.7 found with Romanian sample [2]. On the other hand, Sleep Deprivation Scale was α = 0.6, which was a bit lower than the threshold.

2.4. Performance in the Examination Question Types

Performance in the examination question types was represented by direct students' scores in the students' semester examinations. Semester examination questions in the Community Development Training Institues (CDTIs) in Tanzania are normally set by subject tutors, sent to the mother Ministry to be centrally moderated, and the acceptable questions are brought back to the colleges to be administered by both college and external tutors. The examination scripts are then marked by college tutors and checked by external examiners. The performance in examination question types of the respondents was traced directly in the marked examination scripts of the Community Psychology Course, which was selected due to researcher expertise in the field of Psychology. This was traced from the official records of the colleges in the academic office. The row scores in each specific section of the final semester examination scripts as marked by subject tutors and approved by external examiners were recorded and analyzed. Specific types of examination questions used for analysis included; Multiple Choice questions type (MC), Matching Items questions type (MI), True False questions type (T/F), Short Answers questions type (SA) and Essay questions type. In addition, students were compared on the basis of their final GPA. Semester GPA is normally described, classified and interpreted as illustrated in Table 1.

Table 1. *Description and classification of academic performance.*

Grading of Examination Performance				**Degree of Classification**	
Letter grade	**Range of marks**	**Grade point**	**Classification**	**Overall GPA**	**Classification**
A	100 – 80	4	Excellent	4.0 – 3.5	FIRST CLASS
B	79 - 65	3	Very Good	3.4 – 3.0	SECOND CLASS
C	64 – 50	2	Average	2.9 – 2.0	PASS
D	49 – 40	1	Poor	NIL	NIL
F	0 - 39	0	Failure	NIL	NIL

Source: Joshua, 2022.

3. Findings

3.1. Responses to the Scales

Table 2. *Responses to Sleep Deprivation Scale (n = 594, M = 9.21, SD = 3.13, Min = 1, max = 14).*

Statements	**Responses**			
	No		**Yes**	
	f	***%***	***f***	***%***
I need an alarm clock to wake up at the appropriate time	222	37.1	374	62.5
It's a struggle for me to get out of bed in the morning	194	32.4	403	67.4
I feel tired, irritable, and stressed out during the week	139	23.2	458	76.6

Statements	Responses			
	No		Yes	
	f	*%*	*f*	*%*
I have trouble concentrating	164	27.4	433	72.4
I have trouble remembering	252	42.1	345	57.7
I feel slow with critical thinking, problem solving, and being creative.	131	21.9	466	77.9
I often fall asleep watching TV.	252	42.1	345	57.7
I often fall asleep in boring meetings or lectures in warm rooms	303	50.7	294	49.2
I often fall asleep after heavy meals or after low doses of alcohol	132	22.1	463	77.4
I often fall asleep within five minutes of getting into bed	103	17.2	494	82.6
I often feel drowsy while driving	251	42.0	346	57.9
I often sleep extra hours on weekend mornings	249	41.6	348	58.2
I often need a nap to get through the day	55	9.2	542	90.6
I have dark circles around my eyes	415	69.4	182	30.4

Table 2 is negatively skewed (-.231) indicating that most respondents (M = 9.21, SD = 3.13) affirmatively responded to the sleep deprivation items. Thus, sleep deprivation identified among college students varied from normal range (39.6%), borderline (33.9%) to abnormal sleep deprivation (25.8).

Table 3. *Responses to the Maximization Scale (n = 597, M = 1.81, SD = 3.13, Min = 1, max = 4.36).*

Variables	Responses									
	1		2		3		4		5	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Whenever I'm faced with a choice, I try to imagine what all the other possibilities are, even ones that aren't present at the moment.	190	31.8	309	51.7	70	11.7	24	4.0	4	.7
Whenever I make a choice, I try to get information about the other alternatives turned out.	206	34.4	261	43.6	68	11.4	27	4.5	35	5.9
When I am in the car listening to the radio, I often check other stations to see if something better is playing, even if I am relatively satisfied with what I am listening to	280	46.8	228	38.1	31	5.2	17	2.8	41	6.9
When I watch TV, I channel surf, often scanning through the available options even while attempting to watch one pro-gram	311	52.0	183	30.6	31	5.2	24	4.0	48	8.0
I treat relationships like clothing: I expect to try alot on before finding the perfect fit.	318	53.2	218	36.5	49	8.2	6	1.0	6	1.0
I often find it difficult to shop for a gift for a friend.	225	37.6	256	42.8	81	13.5	28	4.7	7	1.2
Renting videos or DVDs is really difficult. I'm always struggling to pick the best one.	392	65.6	135	22.6	33	5.5	23	3.8	14	2.3
When shopping, I have a hard time finding clothing that I really love.	209	34.9	292	48.8	73	12.2	20	3.3	3	.5

Variables	Responses									
	1		2		3		4		5	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
I'm a big fan of lists that attempt to rank things (the best movies, the best singers, the best athletes, the best novels etc.)	318	53.2	223	37.3	39	6.5	10	1.7	7	1.2
I find that writing is very difficult, even if it's just writing a letter to a friend, because it's so hard to word things just right.	352	58.9	185	30.9	38	6.4	17	2.8	5	.8
I often do several drafts of even simple things.	285	47.7	227	38.0	43	7.2	19	3.2	23	3.8
No matter what I do, I have the highest standards for myself.	244	40.8	242	40.5	45	7.5	30	5.0	36	6.0
I never settle for second best. I often fantasize about living in ways that are quite different from my actual life.	215	36.0	228	38.1	92	15.4	43	7.2	19	3.2

As indicated in Table 3, respondents' scores in the maximization scale seem to be positively skewed (1.22) indicating that most respondents (M = 1.81, SD = 0.64) reported being satisficers. Thus, respondents' variation was such that only 6.5%, reported maximization while 93.3% reported being satisficers.

3.2. Performance in the Examination Question Types

Table 4. *Performance in the Examination Question Types in Community Psychology (n =598).*

Question Type	Min.	Max.	Mean	Std. Deviation	Skewness	
					Statistic	Std. Error
Multiple choice questions type (MC)	3.0	12.0	7.366	1.89	0.065	0.100
Matching items questions type (MI)	0.0	13.5	6.171	2.40	-0.055	0.100
True - False questions type (T/F)	3.0	13.5	9.635	1.92	-0.506	0.100
Short answers questions type (SA)	1.4	13.5	9.489	2.91	-0.708	0.100
Essay questions type (Essay)	16.0	37.0	31.473	4.31	-1.080	0.100
Results in Community Psychology	46	80	66.78	7.17	-0.439	0.100

Table 4 indicates respondents' scores in the examination questions types were negatively skewed with exception of multiple choice questions type (0.065) indicating that most respondents performed above the mean.

3.3. Maximization, Examination Question Types, and Sleep Deprivation

A one-way between-groups multivariate analysis of variance (MANOVA) was conducted to explore whether or not there would be a difference between maximizers and satisficers in their performance in examination question types in semester examination and in reporting sleep deprivation. The dependent variables used were: students' score in multiple choice questions type, matching items questions type, short answers questions type, essay questions type, and sleep deprivation. The independent variable was decision making styles (maximizers versus satisficers). Mahalanobis test for Normality was performed and a maximum mahalanobis distance for all dependent variables was 23.1. This was less than a critical value of 24.3, indicating compliance to normality assumptions. In addition, a test of homogeneity of variance-covariance matrices indicated compliance of the assumption (p = 0.74). All preliminary analyses for assumptions of were performed and no

serious violation was noted. A statistically significant difference between maximizers and satisficers on the dependedent variables combined, F (1, 598) = 2.35, p = .040; Wilks' Lambda = .98; partial eta squared = .02 was found. A separate observation of dependent variables revealed that only sleep deprivation reached statistical significance, F (1, 593) = 6.50, p = 0.011, partial eta squared = 0.011. An inspection of the mean scores indicated that maximizers reported slightly higher levels of sleep deprivation (M = 10.4359, SD = 2.44) than satisficers (M = 9.1225, SD = 3.15).

3.4. Correlations Among Variables

Table 5. *Correlations among the Variables.*

Variables		1	2	3	4	5	6	7	8	9	10
1	Age	1									
2	MC	0.005	1								
3	MI	-0.017	0.003	1							
4	T/F	-0.044	.134**	-0.021	1						
5	SA	-0.031	0.059	.336**	-.108**	1					
6	Essay	0.010	-0.009	.201**	-.206**	.411**	1				
7	Semester results in Psychology	-0.012	.200**	.391**	0.018	.650**	.607**	1			
8	Total Sleep Deprivation	0.021	0.021	0.035	-0.029	.081*	0.036	0.065	1		
9	Overal mean for the Maximization scale	-0.023	-0.022	0.053	-0.028	.084*	0.057	0.076	.377**	1	
10	GPA	-0.045	.119**	.437**	0.024	.513**	.413**	.765**	0.074	0.048	1

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed)
Key:
MC = Multiple Choice Questions Type
MI = Matching items questions type
T/F = True - False questions type
SA = Short answers questions type
GPA = General Average Performance

3.5. The Difference Between Maximizers and Satisficers in Performance with Type of Examination Questions

Table 6. *Difference between maximizers and Satisficers in performance with type of examination questions.*

Variable	School Ranking	Descriptive		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	*Sig.*	*t*	*df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		Mean	S. D	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower

Variable	School Ranking	Descriptive		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	*Sig.*	*t*	*df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
MC	Satisficers	7.37	1.89	.42	.52	-.19	60	.85	-.06	.31	-.67	.56
	Maximizers	7.42	1.85			-.19	43.73	.85	-.06	.31	-.68	.56
MI	Satisficers	6.14	2.38	1.00	.32	-.91	60	.37	-.34	.40	-1.14	.42
	Maximizers	6.50	2.58			-.84	42.65	.40	-.36	.43	-1.22	.50
T/F	High Performing	9.63	1.91	.27	.61	-.20	60	.84	-.06	.32	-.69	.56
	Low Performing	9.69	2.06			-.17	42.70	.85	-.06	.34	-.75	.62
SA	Satisficers	9.43	2.95	6.39	.01	-1.79	60	.07	-.86	.48	-1.81	.08
	Maximizers	10.30	2.18			-2.34	48.36	.02	-.86	.37	-1.61	-.12
Essay	Satisficers	31.52	4.29	.77	.38	.69	60	.49	.49	.71	-.91	1.89
	Maximizers	31.01	4.52			.66	42.93	.51	.49	.75	-1.01	1.99

Results in Table 6 indicate statistically significant difference between satisficers (M = 9.43, SD = 2.95) and maximizers (M = 6.50, SD = 2.58) in the performance in short answers question types, t (595) = -2.34, p = .02 (two tailed) in the performance in the short answers questions types. Satisficers performed well than maximizers in SAs questions. However, no statistical difference was observed between satisficers and maximizers in other questions types such as MC, MI, T/F and Essay.

3.6. Examination Question Types and GPA

Results in Table 5 indicates from low positive (r = 0.12**, n = 598, p < .01) to strong positive (r = 0.51**, n = 598, p < .01) correlations between students' performance in various examination question types and their semester GPA. Performance in SA contributed higher to the GPA (r^2 =0.26), which is 26.3% of the variance; followed by MI (r^2 =0.19), which is 19% of the variance. The least contribution was MC (r^2 =0.19), which is 19% of the variance.

3.7. Maximization and Sleep Deprivation

Results in Table 5 indicates a moderate positive correlation (r = 0.38**, n = 598, p < .01) between maximization and sleep deprivation. The higher one scored in maximization scale, the higher one reported sleep deprivation, implying that maximizers experienced sleep problems than their counterpart satisficers.

3.8. Maximization and GPA

Results in Table 5 indicates no significant correlation (r = 0.05, n = 598) between maximization and students' GPA, implying the likelihood of the role of chance in the observed associations.

4. Discussion

This study identified a small number (6.5%) of maximizers among the studied sample; and a positive relationship between maximization and sleep deprivation while revealing no relationship between maximization and both GPA and performance in the examination question types. Satisficers reported lower sleep deprivation relative to maximizers while no difference between them in the GPA performance. Similarly, Parker et al [27] reported a suggestion that maximizers experienced more negative life outcomes probably due to their self-reported incompetence. Sleep deprivation is hereby considered as a negative life outcome given that it has been positively associated with maladaptive decision making, information distortion, risk taking behaviors and low information processing [27, 36, 12, 16].

The fact that these results have indicated significant dif-

ference between satisficers and maximizers in the performance in short answers question types but not in other question types; needs discussion. Satisficers performed well than maximizers in SAs questions. The nature of SAs questions requires one to provide the answers than selecting from the existing options. This might inform that different types of questions might determine students' academic performance. There is a need therefore, to consider a balanced distribution of question types in the construction of examination questions if students' ability intended for assessment is to be realized.

Again, both maximization and sleep deprivation did correlate to neither GPA nor performance in the examination question types. This is conceptually similar to what is reported in the past researches that maximizing tendency varies across domains and contexts [31, 24, 38]. This is important given that decision making will similarly vary with the field in question and contextual nature of the problem addressed. Thus, regardless of the examination question types, it might happen that the measured skills do not call for responses that demand employing maximization-satisfaction decision making styles. This might explain why maximizers and satisficers might significantly differ in their GPA performance in one study while showing no significant difference in another study. Interestingly, Ma, et al [20] suggests that maximizers can potentially benefit from their positive relationships with past-positive and future-oriented thinking, because these are crucial traits in enhancing people's meaning in life as well as achieving a rational and meaningful life. This conveys a message to the malleability of the maximization-satisfaction styles of decision making and a suggestion that past-positive and future-oriented thinking can be trained to both maximizers and satisficers.

Regarding generalization, it is important to note that the findings on the relationship between decision making styles and sleep deprivation have been in line with the past studies on the message that self-reported maximizers have been also self-reporting negative than positive sides of their lives [27, 36, 12, 16, 38]. On the other hand, the fact that there was no significant difference between maximizers and satisficers in academic GPA and performance in examination question types has also been consistent with an argument that maximization is malleable with domain and context [20]. Yet, one need to consider the fact that the studied sample was drawn from college students studying community development; leading to a need of caution prior to generalization of these results, as one needs to consider similarity of the context and field of specialization of the studied group. Thus, generalization is possible to college students with similar socioeconomic backgrounds, similar level of education, as well as the nature of the domain under study. Lastly, this study just studied correlations that do not necessarily connote causality but rather the fact that the variables have an interwoven relationship.

4.1. Potential of Examination Question Types on the Assessment of Academic Performance

It has been found that performance in short answers (SA) contributed to 26.3 % of the variation in GPA followed by matching items (MI) question types with a contribution of 91% of variation in GPA while Matching Items types contributed to 12% of the variance. Studying the effects of variations in the examination question types on students' performance, Caldwell and Pate [4] found that non-standardized test items appeared more difficult to students than standardized ones, leading to students' incorrect responses. Although Caldwell and Pate insist the use of standard tests without rejecting the use of non-standardized ones, they recommend the adherence to the professional guidelines in writing the test-items by teachers.

The fact that non-standard tests are inevitable in continuous assessments in all levels of education from pre-primary to tertiary, the need to continuously train teachers on test writing skills is even more crucial. Examination question types have a significantly strong contribution in the students' performance so much so that if not checked, one might conclude students' academic performance that are taking advantage of poorly constructed and imbalanced types of examination questions instead of the intended cognitive, affective and psychomotor skills to be assessed. In addition, it is hereby argued that all types of examination questions are equally important in assessing learners' skills. If tutors are well trained in test construction skills leading to properly construction of the examination question types, they can all measure from lower to higher cognitive, affective, and psychomotor skills. The importance of training test construction skills among tutors is even more emphasized here because these results come from the colleges whose most tutors are not professional teachers. Most tutors in the community development colleges were found to have undergraduate or master degrees in Community Development programs without any education profession. Despite having a good examination format imposed to the colleges by the Mother Ministry, most of these tutors, expected to prepare community development professionals, are equipped with neither test construction nor teaching methodology skills.

4.2. Conclusions and Recommendations

This study intended to examine the relationship between performance in examination types and performance in general performance average (GPA) in the Community Development Training Institutes in Tanzania. Specifically, it was addressing the questions: Do maximizers and satisficers differ in reporting sleep deprivation and Grade Performance Average? Do maximizers and satisficers differ in academic performance with performance in the types of examination questions such as MC, MI, T/F, SA, or Essay? and what is the relationship between sleep deprivation and academic performance in terms of GPA? Although there was a signifi-

cant difference between maximizers and satisficers in sleep deprivation, no significant relationship was found between them in both GPA and examination question types. On the other hand, there were significant strong positive correlations between students' scores in examination question types and their performance in GPA. Therefore, although psychological factors such as sleep deprivation and decision making styles (maximization and satisfaction) have a reciprocal influence, their influence to students' GPA and scores in question types is not so clear. In addition, the relationship between scores in the question types and GPA is so clear so that attention to question formats and their role in academic performance is professionally crucial and inevitable. While it is important to emphasize on students' clear thinking for their daily problem solving, teachers need to improve their skills in composing examination questions that meet assessment criteria so as to minimize the influence of examination questions types on students' academic performance. In fact, no examination questions types that should be considered superior to others, but rather a match between the skills to be assessed and its relevant question type should be of a paramount role.

Abbreviations

CDTI	Community Development Training Institutes
GPA	Grade Performance Average
MC	Multiple Choice Items
MI	Matching Items
T/F	True or False Items
SA	Short Answers Items
SD	Standard Deviation
SPSS	Statistical Package for Social Sciences
SDS	Sleep Deprivation scale
MS	Maximization Scale

Author Contributions

Joel Matiku Joshua is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

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