



The influence of socio-demographic factors and risky lifestyles on the criminal victimisation of students: The Case of a Kenyan University.

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ABSTRACT

Unlike crimes committed against tourists or police officers, the annual crime statistics released by the Kenya National Police Service do not reflect crimes committed against university students *per se*. While there is substantial evidence on the extent and characteristics of criminal victimisation in the general population, as well as among university students in America and the West, evidence on this subject in Sub-Saharan Africa is drawn from limited studies. To date, the extent and characteristics of criminal victimisation among university students in Kenya are yet to be examined. While using a quantitative approach and a survey research design, a sample size of 1717 respondents was randomly computed from a population of 17167 individuals at a peri-urban university, west of Kenya, to determine the relationship between victimisation and socio-demographic factors and risky lifestyle exposure characteristics. Findings indicate that socio-demographic variables such as age, marital status, employment status, and residence were significantly related to victimisation. Additionally, risky lifestyle activities such as frequenting bars, socialising with strangers, partying on and off campus, and abusing bhang (a derivative of cannabis) and alcohol were significantly related to victimisation. To reduce student victimisation, we recommend the design of effective victimisation reduction advertisements and investment in on-campus housing.

Keywords: Lifestyle exposure, Risk, Socio-demographic factors, University students and Victimisation

INTRODUCTION

Criminality is inevitable in any society, and the phenomenon continues to claim victims on a daily basis, as reported in the media (Aineah, 2017; Chacha, 2014; Otieno, 2022). Embedded in the social and economic structure of society and the individual pathology, criminal victimisation is a reality that society has to contend with, typically responding by developing measures and designing programmes to mitigate, manage, or prevent it. Unlike other life experiences that are mainly sought, planned

and expected, victimisation is largely unavoidable, unforeseeable, and unexpected (Canadian Resource Centre for Victims of Crime (CRCVC), 2011). As a result, experiencing victimisation has a devastating impact on victims. According to CRCVC (2011), depending on an individual's situation, the impact of victimisation can manifest at five levels, physical impact (such as cuts, bruises, and broken bones), emotional impact (such as fear and anger), psychological impact (such as post-traumatic stress disorder and sleep disturbances), social

impact (such as social isolation and difficulties in building relationships), and financial impact (such as the cost of medical bills and replacement of merchandise).

In Kenya, the level of crime is on an upward trend. According to the National Police Service (NPS) (2016), in the year 2016, the police registered 76 986 criminal cases, representing an increase of six percent from the year 2015. In the same year, the number of personal crimes recorded was 19 911, representing 25.5 percent of the total crimes recorded in Kenya, while only 15 crimes committed against tourists were recorded, this being the lowest number of crimes recorded in the country by category. However, official records may not give accurate statistics on the number of crimes committed in any given society since many crimes go unreported (Daigle, 2018). This is a phenomenon that leads to the 'hidden' or 'dark' figures of crime. Various reasons influence victims' non and under-reporting of crime: victims may not appreciate that they have suffered harm; fear of re-victimisation from the Criminal Justice System (CJS); and a perception that the police will do nothing (Wolhuter, Olley, & Denham, 2009). Analysing the extent of victimisation is dependent upon the development and use of valid and reliable measures. Therefore, in order to remedy the shortcomings of official records, victimisation surveys are employed to determine the extent of victimisation and who are most likely to be victims (Daigle, 2018; Wolhuter et al., 2009).

Given the negative consequences associated with victimisation, there is a growing body of literature globally dedicated to the subject. "Research reveals that socially unequal groups, including women, minority ethnic communities, and the elderly, are more likely to experience both primary and secondary victimisation" (Wolhuter et al., 2009 p. 33). Here, we opine that university

students too are the equivalent of individuals that fall under the category of socially unequal groups in society. They arguably experience unequal distribution in earnings, economic resources, and social capital. Furthermore, available official data also indicates that demand for university education in Kenya continues to surge as the population of students enrolled across Kenyan universities rose from 509 468 in the academic year 2019-2020 to 546 699 in the academic year 2020-2021, depicting an increase of 7.3 percent (Faria, 2021). While economists may perceive such an increase as a good sign for the future development of the country, a victimologist in turn understands that such high numbers of students potentially bring more offenders onto campus, resulting in an increase in potential victims and victimisation rates amongst students. For these reasons, university students deserve special attention in victimisation research.

Even with the above reasons, a review of official records on victimisation and empirical research reveal that this special group has continued to receive disproportionate attention both from policymakers and academics in Sub-Saharan Africa and particularly in Kenya, with exceptions stemming from the media. The media's attempts to characterize victimisation among university students as a pressing issue indicate that the phenomenon is escalating and reaching unprecedented levels, usually at the expense of students who, in some cases, lose their lives (see Aineah, 2017; Chacha, 2014; Otieno, 2022). Although critics may claim that crime stories and victims of crime are staple raw materials for the media due to their newsworthy attributes (Surette, 2011), it is equally important to reflect on the real intention behind these crime stories, which is essentially to bring attention to a society,

policymakers and academics of the plight of students as victims of crime.

Thus, it is acknowledged that the Kenyan media is leading the way in constructing crimes committed against university students in Kenya as a security issue that deserves immediate policy action, but attention from academics and policymakers, has sadly lagged behind in this regard.

Away from the apprehensions of critics of the media's crime stories, what should be of concern is that the intended audience of crime stories, such as policymakers and academics, have not accorded this subject the attention it deserves. For instance, the scantiness of data on crimes committed against university students is reflected in the annual crime reports released by the NPS. These reports indicate that 15 crimes committed against tourists were recorded in 2016 as well as in 2017, and that number rose to 93 in 2018, a 520% increase. However, crimes committed against university students were overlooked in the annual crime reports (see, e.g., NPS, 2016; NPS, 2018). Undoubtedly, from NPS annual crime reports, we have an idea of rates and trends of crimes committed against tourists over the years, but rates and trends of crimes committed against university students cannot be determined from the available official crime reports.

Equally, empirical efforts to characterise victimisation among university students in Kenya are scarce; there is little to report on rates, extent and nature, as well as characteristics of victimisation among university students. In Kenya, formative studies on the subject of victimisation examined violent victimisation in the general population (e.g., Fry, 2015; Ndung'u, 2012; Parks, 2014). Other Kenyan researchers has examined violent victimisation among adolescent girls (Kabiru, Mumah, Maina, & Abuya, 2018), while others have focused on

farm crime victimisation involving rural farmers (Bunei & Barasa, 2017; Bunei, Rono, & Chessa, 2013). While there is an existing body of knowledge in America and the West on the subject of victimisation in the general population (see e.g., Bunch, Clay-Warner, & Lei, 2015; Kaakinen, et al., 2021; Van Kasteren, 2016), missing persons (see, e.g., Ferguson, Elliott, & Kim, 2023), high school students (see, e.g., Cho, Hong, Espelage, & Choi, 2017), as well as among university students (see, e.g., Coulter, Mair, Miller, & Blosnich, 2017; Fisher & Wilkes, 2003), evidently, we know little about the rates, extent, nature, and characteristics of victimisation among Kenyan university students. Theoretically, the available literature in Kenya implies that criminal victimisation has been examined through different theoretical lenses. Victimization has been understood from a routine activity approach (Bunei & Barasa, 2017; Bunei, Rono, & Chessa, 2013), crime prevention through environmental design (CPTED) approach (Fry, 2015), social disorganization (Parks, 2014). and through an integrated proposition of lifestyle-routine activities approach (Ndung'u, 2012).

From these Kenyan studies, it is strikingly obvious that no study has examined victimisation in the general population as well as among university students through the lens of the lifestyle exposure perspective. But even more surprising and of significant importance is that scholars have continued to examine victimisation from the integrated perspective of lifestyle-routine activities theory (LRAT), contending that lifestyle exposure and routine activities perspectives have the same theoretical appeal (e.g., Cho et al., 2017; Fisher & Wilkes, 2003; Ndung'u, 2012). Here, we argue that the two perspectives are dissimilar, but their inherent differences have been masked over the years. The lifestyle exposure perspective is concerned with

explaining the probability of victimisation, i.e., that the odds of getting victimised increase with engagement in certain lifestyles and behaviours, in particular risky lifestyles. The routine activities theory seeks to explain the victimisation event itself - the idea that victimisation will only ensue when three factors converge in space and time, that is, a motivated offender, an attractive target, and the lack of guardianship. If one element of the routine activities theory is missing, no victimisation will materialise (for a detailed discussion, see Pratt & Turanovic, 2016).

Considering the preceding discussion, it can be concluded that criminal victimisation involving university students is a serious issue at universities and requires further examination. Thus, the initial analysis of the phenomenon requires an examination of its frequency and the socio-demographic features that influence the likelihood of becoming a victim of crime, using more valid and reliable measures such as victimisation surveys. Additionally, according to the premise of lifestyle exposure theory, because individuals are involved in obligatory and discretionary activities on a daily basis, they establish certain lifestyles. Lifestyle exposure theory denotes that these daily activities pursued by individuals predict their risk of victimisation (Ferguson, et al., 2023; Goldstein, 1994). Thus, lifestyle characteristics of an individual escalate or diminish an individual's likelihood of becoming a target of victimisation (Bunch, et al., 2015; Ferguson, et al., 2023; Lee & Hilinski-Rosick, 2012). Therefore, engaging in a risky lifestyle propels ones' likelihood of encountering victimisation. Thus, from the perspective of the lifestyle exposure theory, the purpose of this research was to fill the existing empirical and theoretical gaps on the victimisation of university students in Kenya. Therefore, it was guided by the following research question: What is the extent of victimisation among students at Masinde Muliro University of Science and Technology

(MMUST) in Kenya? Given that efforts to reveal the characteristics of student victimisation are narrow, the study also sought to determine the relationship between the socio-demographic factors and victimisation of students. Another objective was to find the relationship between students' lifestyle exposure attributes and victimisation.

LITERATURE REVIEW

Generally, criminologists and victimologists refute the idea that victimisation is random and acknowledge that some people are more likely to be victims than others (Fisher & Wilkes, 2003; Ndung'u, 2012). Thus, some scholars observe that a combination of demographics and lifestyle characteristics of an individual influence one's chances of encountering victimisation (Bunch et al., 2015; Ferguson et al., 2023; Ndung'u, 2012). By implication, encountering victimisation is dependent on one's lifestyle choices. Here, we draw upon existing empirical evidence and the lifestyle exposure theory of victimisation to analyse the relationship between demographics and lifestyle characteristics and the victimisation of students. But before delving into this relationship, we examine what we know about the extent of victimisation, both in general and among the university population in Kenya.

Extent of victimisation

According to Natarajan (2016 p.1), "it could be argued that many of the most serious crime problems are now to be found in developing countries, yet these problems have received only scant attention from criminologists and crime scientists, most of whom work in developed or Westernized nations." Research on victimisation in Kenya is limited. Results from a victimisation survey carried out in Kenya by the United Nations Office on Drugs and Crime (UNODC) (2010) indicated that at a household level, 22 percent of Kenyans were victims of motor vehicle theft, 13 percent

experienced cattle or animal theft, nine percent were victims of car hijacking, six percent were victims of burglary, and five percent experienced car vandalism. At an individual level, 22 percent of Kenyans encountered consumer fraud, 15 percent were victims of corruption, ten percent were victims of personal theft, five percent experienced assault, four percent experienced robbery, and just over one percent were victims of sexual offences (UNODC, 2010). In yet another study on violent victimisation and aspirations-expectations disjunction among adolescent girls in urban Kenya, Kabiru et al. (2018) established that 798 (33.8 percent) of the respondents had experienced at least one form of violent victimisation, of which 145 (6.1 percent) were victims of sexual violence.

Available data indicates that between January and June 2016, the security department at MMUST recorded a total of 136 crimes involving students. Thirty-seven percent of the crimes recorded involved theft, 12 percent involved assault, just over four percent involved corruption and abuse of office, almost 4 percent involved trespassing, almost 3 percent involved breach of contract, and less than one percent involved kidnapping (MMUST, 2016). However, the statistics incorporated all crimes committed against the institution and other individuals, and no attempts were made to specifically record and analyse crimes committed against students. In addition, the statistics included some transgressions that would ordinarily be categorised as civil wrongs, such as breach of contract. Although notoriously incomplete and inaccurate, according to these records, it appears that victimisation at MMUST is not widespread. Although there is empirical evidence to indicate that Kenyans encounter victimisation, available literature indicates that little has been analysed regarding victimisation among university students in Kenya. Thus, the research also explores the

extent of victimisation among students at MMUST.

Demographic characteristics of victims

In the general population, the probability of experiencing victimisation is linked to certain demographic features, also referred to as individual risk factors (Bunch et al., 2015; Mclytyre & Widom, 2011). For instance, drawing from the findings of victimisation surveys in England and America, being a young, single black male is linked to more encounters with victimisation (Fisher & Wilkes, 2003). In the general population of the United States, victims of property crime are likely to be males, singles, urban dwellers, and members of black households living in rental properties (Johnson & Kercher, 2009). In a study across 14 European countries, findings revealed that, on a personal level, being young and an immigrant was a predictor of hate crime victimisation, while being more educated increased the odds of being a hate crime victim at a community level (Van Kasteren, 2016). Other researchers find that being a young, single male with low income is related to victimisation through the mediating effect of routine activities (Bunch et al., 2015). However, contrary to the expected theoretical interpretation of the lifestyle exposure perspective, Ferguson et al. (2023) found that the risk of victimisation of missing persons was a factor of being a female, a child, or young and elderly. While examining the predictors of violent victimisation in the general Kenyan population, Fry's (2015) findings showed that among the demographic variables employed in his study, only education was a significant predictor of violent victimisation, with low education attributed to the likelihood of experiencing violent victimisation. In another study (Ndung'u, 2012), young, single, and educated individuals encountered more risk of violent victimisation, but that risk varied across

income groups and gender. In yet another study of victimisation in the general population in Nairobi, being young, female, and married increased the odds of experiencing victimisation from a family member, but being a male increased the odds of encountering violent stranger victimisation (Parks, 2014). Inconsistent with Ndungu's research and in support of Fry's research, Parks' (2014) findings show that educated persons were less likely to experience victimisation compared to uneducated individuals.

Regarding student victimisation, a lingering question is: Do characteristics of victims of crime in Kenyan universities mirror those established in the general population? Some of the demographic factors linked to the probability of being a victim of crime in the general population might differ markedly from those identified among specific groups, such as university students. In a study on victimisation involving students at seven Texan universities, American Indian/Alaskan Native students were significantly more likely to experience victimisation, contrary to findings established in the general population (Johnson & Kercher, 2009). In the same study, and in line with findings in the general population, being a male, single or cohabiting, and a full-time student was linked to the likelihood of being a victim of crime. However, academic standing was insignificantly connected to the probability of victimisation (Johnson & Kercher, 2009). Findings in a United States Department of Justice study, to examine the socio-demographic characteristics of college students associated with violent victimisation, revealed that being a white male was associated with high rates of violent victimisation (Bureau of Justice Statistics, 2005). Additionally, although residing on or off campus was linked with a high frequency of violent victimisation, the majority of those

who lived on campus also encountered victimisation while off campus. In a comparative study between British and American students, contrary to findings from national victimisation surveys, in the British sample, being a male was likely to reduce the odds of victimisation (Fisher & Wilkes, 2003). So far, empirical evidence in support of the relationship between socio-demographic factors and victimisation, appears to be mixed. Thus, identifying who among the students is likely to be a victim of crime is significant, as it might enable university administrators to develop programs that educate students about the possibility of victimisation and protective strategies that can be adopted to prevent further or re-victimisation.

Lifestyle exposure characteristics and criminal victimisation

At the core of the lifestyle exposure perspective is the idea that risky lifestyles are a factor in personal victimisation (Hindelang et al., 1978). It is further observed that, although not a guarantee that victimisation is going to ensue, engagement in risky behaviours, such as frequenting bars and stealing, enhances the possibility of victimisation (Pratt & Turanovic, 2016). Thus, participating in risky behaviours implies an enhanced probability of experiencing victimisation. From the perspective of lifestyle exposure theory, since individuals who engage in risky behaviours are at increased risk of victimisation, they should encounter victimisation more often.

Outside of Kenya, modern studies in the America and the West have revealed that engagement in lifestyle activities considered to be risky, such as abusing drugs, drinking, and frequenting clubs and bars, increases the probability of an individual's exposure to victimisation (Lee & Hilinski-Rosick, 2012; Messon-Moore, Coates, Gaffey, & Johnson,

2008; Pratt & Turanovic, 2016). But efforts to test the lifestyle exposure perspective in the general population and among university students in Kenya remain undocumented.

Although media crime stories point to rising crimes committed against university students, it is not clear whether university students' risky lifestyles are linked to their victimisation. However, a study conducted by Parks (2014) using 2000 Nairobi Cross-sectional Slum Survey data to test the utility of social disorganisation theory supports the idea that risky behaviours are related to victimisation. In that study, Parks included the following risky behaviours as control variables: alcohol consumption, violent offending, drug use, and friends' drug use. Findings revealed that violent offending, alcohol consumption, and friends' drug use increased the odds of encountering violent stranger victimisation. Violent offending too increased the likelihood of experiencing victimisation from a family member, but drug use was not related to victimisation. Drawing on these findings, we enrich the empirical evidence base by testing the applicability of the lifestyle exposure perspective in explaining victimisation among a unique segment of the general population – university students.

THEORETICAL FRAMEWORK

This study was guided by the lifestyle exposure theory. Hindelang, Gottfredson, and Garofalo (1978) propounded the lifestyle exposure perspective, the idea that individuals' exposure to victimisation can be attributed to their lifestyle patterns. Consequently, an individual's risk of becoming a target of victimisation, increases or decreases depending on a person's lifestyle characteristics (Lee & Hilinski-Rosick, 2012). Therefore, because of their lifestyle characteristics or patterns, some individuals are more prone to victimisation

than others (Vakhitova, Reynald, & Townsley, 2016).

According to Hindelang et al. (1978 p. 241), "lifestyle constitutes one's routine daily activities, both vocational (attending school and working) and leisure (for example, frequenting bars and partying with friends away from home)." As advanced later by Robinson (1999), lifestyles comprise of obligatory (they must be undertaken) and discretionary (they are pursued by choice) activities that people engage in on a daily basis. For instance, an individual has a limited choice to undertake vocational duties (by attending classes) but has a great deal of discretion to engage in leisure activities (by going out to party). "Obligatory and discretionary activities have duration, position in time, a place in a sequence of events, and a fixed location or path in space" (Chapin, 1974 p. 37). As a result, victimisation is not distributed randomly across space and time. Consequently, "there are high-risk locations and time periods" (Pratt & Turanovic, 2016 p. 336). From this perspective, the probability of a person becoming a victim of crime is elevated if the person's lifestyle patterns bring the individual into contact with a likely offender (Vakhitova et al., 2016). Victimization is thus a "function of exposure to high-risk times, places and people" (Hindelang et al., 1978 p. 245).

Kennedy and Forde (1990 p. 208) summarised the lifestyle exposure, such that "it encompasses differences in age, sex, marital status, family income, and race, which in turn influence daily routines and ultimately vulnerability to criminal victimisation. Accordingly, due to disparities in lifestyles, the youth, men, singles, minority groups and the unemployed, would be expected to report higher risks of criminal victimisation, because of their increased exposure to it (Lee & Hilinski-Rosick, 2012).

For this reason, some scholars claim that the lifestyle exposure perspective posits that the chance that one will be exposed to offender or criminal situations, can be linked to an individual's lifestyle, which in turn is a factor of one's socio-demographic characteristics (Ndung'u, 2012). However, according to Pratt and Turanovic (2016), as originally conceptualised by Hindelang et al. (1978), the youth, men, minority groups, singles, and the unemployed were hypothesised to have different lifestyles and routines that brought them into contact with potential offenders compared to their counterparts. Hence, it was not the mere socio-demographics of individuals but the differences in lifestyles that were linked to varying degrees of risk of criminal victimisation (Bunch et al., 2015; Ferguson et al., 2023; Pratt & Turanovic, 2016). For instance, gender differences in victimisation rates are explained in terms of lifestyles: males are more likely to venture outside the home and be predisposed to risky situations than their female counterparts (Ferguson et al., 2023). Therefore, the youth, men, singles, and minorities were assumed to be proxies for engagement in risky lifestyles.

Although scholars indicate that Kenyan university students report engaging in a wide range of risky lifestyles, such as substance abuse (Magu, 2015), efforts to test the lifestyle exposure theory in Kenya have been limited. Thus, from a lifestyle perspective, it is expected that young, single, employed male students residing off-campus as well as those engaging in risky lifestyles should report experiencing more victimisation.

METHODOLOGY

Participants and procedures

The cross-sectional data for the present study came from a victimisation and fear of crime survey conducted in April of 2017. Utilising a survey research design, a

sample size of 1717 respondents was randomly computed from a population of 17167 individuals at a peri-urban university, west of Kenya. Immediately after class sessions ended, paper questionnaires were administered to the sampled students. In addition, each respondent signed a Letter of Informed Consent in which the purpose and benefit of the research were explained. It also stated that their anonymity would be protected and confidentiality ensured. The questionnaire for the study contained closed-ended questions. Respondents took approximately fifteen minutes to complete the survey. A total of 997 respondents participated in the study, representing a response rate of 58.07 percent. Data was analysed using the Statistical Package for Social Sciences (SPSS) computer program for Windows 22.0. Given the categorical nature of the cross-sectional data for the study, chi-square was used to test the relationship between independent variables and the dependent variable of the study.

Sample

The sample was made up of more male respondents (55.7%) compared to females (44.3%). The majority of respondents (73%) in the study were aged 24 years and below, while 27 percent were aged 25 years and above. The majority of respondents (58.1%) resided in off-campus housing, 27.8 percent on campus, while 13.9 percent lived at home with their parents. A large proportion of respondents (32%) were first-year undergraduate students, 26.5 percent third-year were undergraduate students, 19.1 percent were fourth-year undergraduate students, 18.5 percent second-year undergraduate students, and four percent were from other academic standings. More than half of the respondents (53.4 %) were not in employment, 32 percent were in part-time employment and 14.6 percent of the respondents were in full-time employment.

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The majority of respondents (44.6 %) were single, 28.9 percent were cohabiting, and 22.1 percent of respondents were married, while 4.4 percent were either divorced or separated. The sample distribution regarding key socio-demographic variables is representative of the population at MMUST and general trends in Kenyan universities.

Dependent variable

The dependent variable for the study, criminal victimisation was measured by asking a respondent whether, in the last six months preceding the study, they had been personally victimised by crime or criminally offended. It was measured as a binary variable, with response categories of yes or no. Encountering victimisation was coded 1, and having not encountered victimisation was coded 0.

Independent variables

Borrowing from previous victimisation research, several socio-demographic and risky lifestyle variables were included in the study. From previous research, we know that a typical victim is a young, black-male who is single and lives on campus. Race was not measured given that it is an insignificant variable in the Kenyan context, but economic status and academic standing were measured. Six socio-demographic variables were measured: age, gender, relationship status, residence,

economic status, and academic standing. Dichotomous variables were created for sex (female/male), age (<24 years/>24 years), relationship status (single/not single), residence (on campus/off campus), economic status (employed/unemployed), and academic standing (freshers/non-freshers). Consistent with the interpretation of the lifestyle exposure perspective, students' risky lifestyle characteristics that elevated their likelihood of victimisation were included in the study. It was hypothesised that students who frequent bars or pubs, socialise or party with strangers, go out alone at night, consume enough alcohol to get drunk, smoke bhang or take hard drugs, party on-and-off campus, and commit vandalism and theft predisposed themselves to the likelihood of victimisation. The seven variables were measured on a seven-point scale: (0) never, (1) once in the last six month, (2) less than once a month, (3) once a month, (4) once or twice a week, (5) more than twice a week, (6) daily or almost daily, and (9) don't know. Each of the seven variables was recoded into a dummy variable (no/yes).

RESULTS

In general, from Table 1, 38.27 percent of the respondents were direct victims of crime, while 18.55 percent were indirect victims. Findings also reveal that sampled students at MMUST experienced direct victimisation, more than vicarious victimisation.

Table 1 Extent of victimisation

Direct victimisation		Vicarious victimisation	
Prevalence of victimisation	%	Prevalence of victimisation	%
No	61.73%	No	81.45%
Yes	38.27%	Yes	18.55%

Table 2 shows the results of the relationship between socio-demographic

variables and victimisation. Age, residence, relationship status, and employment status

showed a statistically significant relationship with victimisation, P value $< .005$. Students aged <24 years, residing off-campus, employed, and in a relationship were more likely to experience victimisation than their counterparts. No significant statistical difference in victimisation by gender and

academic standing was established, P value $>.005$, denoting that there was no relationship between gender, academic standing, and victimisation. The results might imply that age, residence, relationship status, and employment status are predictors of victimisation among university students.

Table 2: Socio-demographic and victimisation

Variable	Victimisation		Total	P value
	No	Yes		
Gender				
Male	332 (60.3%)	219 (39.7%)	551	0.077
Female	243 (54.5%)	203 (45.5%)	446	
Age				
<24 years	353 (48.5%)	375 (51.5%)	728	0.000
>24 years	222 (82.5%)	47 (17.5%)	269	
Residence				
On-campus	248 (89.5%)	29 (10.5%)	277	0.000
Off-campus	327 (45.4%)	393 (54.6%)	720	
Relationship status				
Single	328 (67.1%)	161 (32.9%)	489	0.000
In a relationship	247 (48.6%)	261 (51.4%)	508	
Employment status				
Employed	244 (52.5%)	221 (47.5%)	465	0.002
Unemployed	331 (62.2%)	201 (37.8%)	532	
Academic standing				
Freshers	191 (59.9%)	128 (40.1%)	319	0.370
Non-freshers	384 (56.6%)	294 (43.4%)	678	

In Table 3, the results of the relationship between risky lifestyles and victimisation are shown. In summary, a statistically significant relationship between frequenting bars or pubs, socialising with strangers, consuming enough alcohol to get drunk, smoking bhang and abusing hard drugs, and partying on-and-off campus and victimisation, P value $<.005$ was established. Those who frequent bars or pubs, consume alcohol to get drunk, and party on-and-off campus are more likely to encounter victimisation. Shockingly, those who do not socialise with strangers and do not smoke bhang and use hard drugs have a high likelihood of becoming victims of

crime. No statistically significant relationship between victimisation and going out alone at night and committing vandalism and theft was detected, P value $>.005$.

DISCUSSION

The first objective of the study was to determine the extent of victimisation among students, while the second objective sought to determine the relationship between the socio-demographic characteristics of university students and their victimisation experiences. The third objective of the study was concerned with establishing the relationship

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between students' risky lifestyles and victimisation encounters.

Table 3: Risky lifestyle characteristics and victimisation

Variable	Victimisation		Total	<i>P</i> value
	No	Yes		
Frequenting bars and pubs				
No	214 (72.5%)	81 (27.5%)	295	0.000
Yes	354 (50.9%)	341 (49.1%)	695	
Socialising with strangers				
No	191 (40.6%)	280 (59.4%)	471	0.000
Yes	384 (74.0%)	135 (26.0%)	519	
Going out alone at night				
No	47 (58.8%)	33 (41.3%)	80	0.567
Yes	446 (54.7%)	369 (45.3%)	815	
Consuming enough alcohol to get drunk				
No	281 (86.2%)	45 (13.8%)	326	0.000
Yes	229 (47.4%)	254 (52.6%)	483	
Smoking bhang and using hard drugs				
No	316 (46.6%)	362 (53.4%)	678	0.000
Yes	240 (85.4%)	41 (14.6%)	281	
Partying on and off campus				
No	56 (88.9%)	7 (11.1%)	63	0.000
Yes	512 (56.8%)	389 (43.2%)	901	
Committing vandalism and theft				
No	207 (55.5%)	166 (44.5%)	373	0.313
Yes	368 (59.0%)	256 (41.0%)	624	

With regard to victimisation, contrary to the common notion that universities are safe havens, a major finding under this objective was that students at MMUST were not protected against victimisation as they encountered victimisation similar to other individuals in the general population. However, direct victimisation among students at MMUST was more prevalent (38.27%) than indirect victimisation (18.55%). Indirect victimisation among students at MMUST is not overly pronounced, however, the finding that more than a third of the respondents had experienced direct victimisation should raise concerns.

National victimisation surveys in America and England reveal that in the general population, a typical victim is a young, single, black, male (Fisher & Wilkes, 2003). Though results are inconsistent, drawing on the results obtained from national victimisation surveys, among university students, the general expectation is that a victim of crime should be young, single, black, and male residing on-campus. In addition, employed students and those in their first year should be more predisposed to victimisation. A review of some of the findings emanating from the present study support those established previously. Consistent with national victimisation empirical findings on personal characteristics

and victimisation, young and employed students were more likely to encounter victimisation. Unexpectedly and contrary to established research findings, students residing off campus and those in a relationship had a high probability of becoming victims of crime, while gender and academic standing showed no statistically significant association with victimisation.

Mixed results on the relationship between personal characteristics and victimisation in the current study mirror those of other scholars. While examining violent victimisation in the Kenyan general population, Fry (2015) found that, among all demographic variables, only education was related to violent victimisation. Nonetheless, in the Kenyan general population, young, single, and educated individuals were more at risk of violent victimisation, while the risk of violent victimisation varied across income groups and gender (Ndung'u, 2012). Yet another study established that being young, female, and married increases the odds of being victimised by a family member, but being a male increases the odds of being victimised by a stranger (Parks, 2014). In another study, being a young, single male with low income was connected to victimisation through the mediating effect of routine activities (Bunch et al., 2015). Yet, Ferguson et al. (2023) established that being female, a child, or young and elderly increased the odds of victimisation. In line with our findings, Kaakinen et al.'s (2021) findings revealed that being in a relationship was positively linked to sexual victimisation by peers. The same observation can be made among university students. While comparing the risk of victimisation for violence, theft, and burglary between American and English university students, Fisher and Wilkes (2003) found that only gender was a significant predictor of property theft victimisation in the sample from England. Evidently, findings on the relationship between demographics

and victimisation appear to be inconsistent, and more research will be required in the future to determine the direction of the relationship.

But what might explain inconsistent results in this study, one may ask? Focusing on gender and academic standing, two variables that did not yield a statistically significant relationship with victimisation, showed that two explanations are possible. Looking at gender in particular, males were expected to report more victimisation than their female counterparts, but instead, findings show that gender and victimisation are independent of each other. Unlike females who are confined at home, males are more likely to venture out and therefore more likely to be exposed to a motivated offender; as such, males should encounter more victimisation. While this argument makes sense when considering variations in gender roles in the general population, a university is a very different context. Usually, students are expected to lead an independent life, where one is expected to fend for oneself. Thus, in a university context, gender roles, expectations, and constraints would not be expected to lead to lifestyle differences between female and male students. As such, male and female students are likely to engage in risky lifestyle patterns.

Alternatively, as advanced by power control theorists, it is possible that a majority of students hail from families where both parents occupy near equal positions of power in the workplace, denoting that they exercise equal control at the family level, including control over their children (Siegel, 2011). Such parents tend to exercise less control over both female and male children. That is unlike the case in conservative families, where the father is the breadwinner and the mother performs household chores, leading the mother to exercise more control over the girl child than the boy child. With reduced

control over both genders, it is hypothesised that children, both males and females, growing up in egalitarian families are likely to have been socialised to hold similar perspectives in life, such as pursuing similar careers, risk taking behaviours, as well as patterns of criminal behaviour and victimisation (Siegel, 2011). Thus, it is possible that male and female students tend to have similar patterns when going out at night alone, which may explain the near equal chances of victimisation as revealed in the study. Indeed, a separate cross-tabulation between going out at night alone and gender, gives credence to this supposition. Ninety-three percent of males went out at night alone, while seven percent did not, compared to 89 percent of females who did go out at night alone and 11 percent who did not, although Chi square results showed statistically significant results (P value <0.05).

Regarding academic standing, those in the first year of study were expected to report higher rates of victimisation than students in other years of study. However, no relationship was detected between the two variables. Previously, it was noted that residing off campus was associated with a high probability of encountering victimisation and results from a crosstabulation between residence and academic standing reveal that 67 percent of students in the first year and 75 percent of students in other years of study lived off campus. Taking these findings into account, a possible explanation is that most students in their first year and in other years of study lived off campus, where they were likely to have similar patterns of victimisation. Again, while previous research has shown that living on campus is associated with a high risk of victimisation, this study shows the contrary. Thus, a deduction can be made that of those living on campus, 33 percent of students in their first year and 25 percent of students in

other years of study tend to experience similar patterns and low rates of victimisation. As a result, it is conceivable that no statistical difference in victimisation would emerge across a year of study, as operationalised in the study. This is not to mean that no difference would be noted if academic standing was operationalised differently in another study.

Regarding objective three, the lifestyle exposure perspective argues that certain lifestyles, in particular risky lifestyles, expose one to risky situations, thereby elevating one's likelihood of encountering victimisation. It follows that those students who engage in risky behaviours, such as frequenting bars or pubs, mingling with strangers, consuming alcohol with the aim of getting drunk, smoking bhang and using other hard drugs, partying on-and-off campus, venturing out alone in the dark, and perpetrating vandalism and theft, predispose themselves to risky situations where they are likely to become victims of crime. The lifestyle perspective also acknowledges that engagement in risky lifestyles is not an assurance that one will be victimised but only elevates the odds of experiencing victimisation. Theoretically, some of the findings from the current study are in congruency with the theoretical expectations of the lifestyle perspective. Those who visit bars and pubs often, take alcohol to get drunk, and attend parties on-and-off campus had high chances of being victimised. Surprisingly, not socialising with strangers and not smoking bhang and using hard drugs raised the odds of encountering victimisation, while venturing out at night and committing vandalism and theft, resulted in an insignificant relationship with victimisation.

Earlier, it was noted that attempts to test the lifestyle exposure perspective have been scarce owing to a common misinterpretation that the principles espoused

by the perspective mirror those of routine activity theory. Rather than evaluate each perspective independently, since the two perspectives are inherently distinct (see Pratt & Turanovic, 2016), scholars usually combine the two into an integrated proposition of lifestyle-routine activity. While noting Pratt and Turanovic's (2016) concerns, the current study sought to examine the empirical utility of the lifestyle theory to explain victimisation among a sample of university students. While the findings may appear mixed, in the sense that some indicators of a risky lifestyle point to the possibility of a negative relationship or no relationship with victimisation, it should be noted that other scholars have registered similar results. For instance, in the previously mentioned comparative study, engaging in risky behaviours, such as frequent consumption of three or more alcoholic beverages did not predict risk of violence, theft, and burglary victimisation, for both cohorts. However, frequent abuse of recreational drugs was a significant predictor of violent victimisation for both groups, and a significant predictor of theft victimisation in the England cohort and burglary victimisation in the American group (Fisher & Wilkes, 2003). However, unlike our findings, Ferguson et al.'s (2023) findings showed that substance use and abuse increased the odds of experiencing victimisation by missing persons. Even with these mixed results, our research fills a theoretical, empirical, and contextual gap in the victimisation literature by making an initial attempt to explain victimisation from the perspective of lifestyle exposure while using a segment of the general population, university students – that has received little attention from Kenyan academics and policymakers.

However, it is acknowledged here that two victimisation perspectives – routine activity and lifestyle exposure perspective,

have dominated victimisation research (Daigle, 2018). Now we know that other theories exist that account for victimisation. We also have clarity that the proponents of the lifestyle exposure perspective did not expect that all established individual lifestyle activities would enhance an individual's risk of victimisation. Rather, certain lifestyles, in particular risky lifestyles, should raise the odds of victimisation. And again, from the lifestyle perspective, there is no guarantee that a risky lifestyle will lead to victimisation, they only raise the probability of victimisation. Thus, when a finding is made that suggests engagement in risky behaviours, such as socialising with strangers and smoking bhang or abusing hard drugs, is not related to victimisation risk, we must turn to other victimisation theories to fill this gap. Consistent with this interpretation, some authors acknowledge that facilitators of victimisation are multifaceted (e.g., (Balogun, Akngabe, & Salihu, 2021). Therefore, future research may turn to these theories to develop our understanding of victimisation.

A cautionary approach is necessary and should be exercised when interpreting these findings, particularly because of the limitations of the study. First, surveys are beset by various problems, such as the misinterpretation of questions by respondents as hypothetical, rather than referring to actuality. Secondly, the operationalisation of the dependent variable requires consideration. Although attempts were made to tap into personal victimisation by asking respondents whether 'one' had been a victim of crime or had been criminally offended, research shows that a more precise measure would have been adequate. Thus, the empirical utility of the lifestyle exposure perspective should have been enhanced if respondents were asked about encountering a specific type of victimisation. For instance, had the study asked about experiencing

contact, property, cyber, or hate crimes, the results would have been different, but the measures employed in the research are dependent on the available data. Relatedly, we know that some individuals are victimised more frequently than others. Thus, more detailed information would abound, and the nature of the relationship between risky lifestyles and victimisation would be different if the research measured the frequency of victimisation in the past six months. Thirdly, the study used seven items to depict risky lifestyles; future researchers should benefit by including more indicators of risky lifestyles so as to enrich their findings. For these limitations, the conclusion reached should be approached in a cautious manner, taking into consideration these limitations, the available data, and the research context.

RECOMMENDATIONS

In line with our findings, we recommend the design of effective educational campaigns geared toward victimisation reduction among students at MMUST. In particular, victimisation reduction advertisements should be designed by the security department in conjunction with researchers at MMUST. "Victimisation-reduction campaigns strive to increase the use of personal crime prevention techniques by citizens" (Surette, 2011 p. 159). Thus, engagement in self-protective behaviours can be effective in reducing victimisation when students attend parties on-and-off campus. However, for students to adopt self-protective behaviours, victimisation-reduction campaigns should be designed to convey the risk of encountering victimisation, the likely severity of victimisation, the effectiveness of the recommended measures, and the cost of taking action as opposed to inaction (Surette, 2011). Given our findings show that students living off-campus are likelier to experience

victimisation, we also recommend to the authorities at MMUST that they invest in on-campus housing.

CONCLUSION

Empirical evidence suggests that university students are not protected against victimisation. Experiencing victimisation seems to be a factor of being in a relationship, young, employed, and living off campus. This work adds to the existing body of knowledge in the utilisation of lifestyle exposure theory. Regarding risky lifestyle, it can be concluded that frequenting bars or pubs, consuming alcohol to get drunk, and partying on-and-off campus predisposes individuals to victimisation. Finally, the mixed results obtained from the research on the characteristics of victimisation mirror findings elsewhere. However, given the inconsistent findings and the limitations of the research, the reader should exercise more caution while reaching such a conclusion.

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The Adoption of Blended Learning by Rural-Based Institutions of Higher Learning in South Africa Amid Covid-19: Experiences and Challenges

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ABSTRACT

Many institutions of higher learning were forced to adopt blended learning since the outbreak of coronavirus disease (Covid-19). The adoption of blended learning amid Covid-19 has delayed learning processes in most rural-based institutions of higher learning in South Africa. Thus, the study has adopted a non-empirical research design: a systematic review, and it was conducted to establish solutions to blended learning challenges faced by rural-based institutions of higher learning in South Africa amid Covid-19. Conversation theory was adopted in this study because it advocates that students should get the opportunity to interact with the lecturers, which could help to amend the digital divide and promote advanced blended learning in rural-based institutions of higher learning. Therefore, the data for the study was obtained by using scientific search engines for articles and books. The study's articles were obtained from the computer-based scientific search engines Google Scholar, EbscoHost, ResearchGate, ScienceDirect, and Scopus. Thus, purposive sampling was used to select relevant articles rather than using any articles that had no bearing on the study. The secondary data was then analysed using thematic analysis. It was found that the delay in advanced blended learning was caused by the digital divide and barriers to digital transformation in rural-based institutions, among other challenges. It was recommended that the government should provide digital equipment to rural-based institutions of higher learning and provide training to all students and lecturers on how to use different technologies to ensure the accessibility of blended learning.

Keywords: Blended learning, Covid-19, higher learning, rural-based institutions, South Africa

INTRODUCTION

Education is an evolving and dynamic field. In the previous decades, it has always been associated with the physical presence of the institution, classrooms, examination hall, lecturer, textbooks and examination, among others (Ma'arop & Embi, 2012). Before blended learning and the Covid-19 outbreak, most higher academic institutions accepted e-learning as an alternative to traditional classroom teaching without any resistance. In this regard, Olawale and Mutongoza (2021) explained that internet-based

learning during the Covid-19 pandemic is considered as an option given that it is an alternative to traditional learning, and it became an essential element for maintaining the activities in higher education institutions.

However, to ensure the effectiveness of e-learning, many institutions of higher learning across the globe are currently using blended learning for teaching and learning. According to Volchenkova and Bryan (2016), blended learning is a formal education programme in which a student learns, at least in part, through the online

delivery of content and instruction with some element of student control over time, place, path, and/or pace and, at least in part, at a supervised brick-and-mortar location away from home. Further, these authors explained that the origins of blended learning pre-date the advent of digital technology.

Thus, the era of Covid-19 and technological innovations has resulted in new trends in the learning environment and introduced a more modern and advanced conception of learning.

Since the outbreak of Covid-19 in China (Wuhan), the pandemic has had a massive impact on people's lives and habits (Fevale, Soro, Trevisa, Drago & Mellia, 2020). World Health Organisation (2021) explained Covid-19 as an infectious disease caused by a newly discovered coronavirus.

Wang, Hassan, Pyng and Ye (2022) explained that the epidemic crisis has disrupted education all over the world, and to ensure the continuous development of the teaching and learning process most institutions opted for a mixed method of combining online and face-to-face classes (blended learning). In the context of South Africa, Olawale and Mutongoza (2021) explained that Covid-19 has predominately caused a major disruption in the education sphere. According to the above-mentioned authors, for the first time, both students and lecturers in many developing countries including South Africa were required to communicate officially through an online platform for academic-related purposes. As a result, many educational institutions were forced to adopt blended learning. Yet, blended learning is ideal for the current terrain of the Covid-19 pandemic which requires learning modalities that promote social distancing to reduce the spread of the disease while ensuring that students have access to quality teaching and learning materials and frequently stay engaged (Muhuro & Kang'ethe, 2021). In this regard, Fevale *et al.* (2020) explained that

the urge to respect social distancing and lockdown measures adopted to limit the spread of the infection led to a shift in the realisation and supply of a wide number of services, i.e. the shift to online lessons and the adoption of blended learning.

Blended learning, according to Muhuro and Kang'ethe (2021), has also become important during the outbreak of diseases such as Covid-19 where face-to-face teaching is prohibited to combat the spread of the disease.

Desirably, therefore, blended learning is an innovative endeavour that could benefit students in rural-based universities in Southern Africa (Muhuro & Kang'ethe, 2021). The statement above is supported by Mhlanga (2021:15) who explained that the Covid-19 pandemic created opportunities for the introduction of blended learning post-Covid-19, which can help to expand access to education in South Africa.

As Marwala (2021) sees it, the necessary move to modern modes of teaching and learning during the era of the Covid-19 pandemic has revealed what works and where institutions of higher learning need to refocus their efforts. Olawale and Mutongoza (2021) explained that while digital transformation is affecting and changing various sectors significantly, the education system is being encouraged to take advantage of new technologies and tools to develop strategies and actions to play an active role in the digital transformation process.

Related to what Marwala (2021) and Olawale and Mutongoza (2021) explained, Muhuro and Kang'ethe (2021) add that for many rural-based universities, successful blended learning implementation implies an exploration of possible ways to strengthen existing practices.

For Olawale and Mutongoza (2021), given that teaching and learning

have historically been confined to students gathering in the lecture halls to listen to lecturers or gathering around a table for discussion among their peers, technology innovation is challenging those traditional practices, thereby bringing about radical change to the higher education system.

Thus, there is a need for strategies to improve the working conditions of teaching at rural institutions of higher learning to ensure that there is improvement in terms of students' performance across the rural areas of South Africa.

STATEMENT OF THE PROBLEM

In his study, Dube (2020) revealed that Covid-19 and the implementation of blended learning have magnified the challenges faced by rural students and lecturers. Olawale and Mutongoza (2021) found that because blended learning has limited mechanisms for monitoring assessments, lecturers are often left unsure of how effectively they can measure students' learning abilities. From the above-mentioned statements, one could concur that the outbreak of Covid-19 has found teachers unprepared for using technologies to enhance the blended learning approach in higher education institutions.

Thus, teaching using new technologies, according to Dube (2020), is new to many students, especially those living in rural areas, which leads underprivileged students to fear that education during the time of Covid-19 will serve their counterparts students who have the privilege and who are connected to resources such as the internet and Wi-Fi. Without any doubt, it can be argued that students from rural-based institutions are still left behind in terms of using new technologies and this negatively affects their learning performance amid and beyond Covid-19.

Olawale and Mutongoza (2021) explained that based on challenges like the lack of internet connectivity, irregular electricity supplies, and the lack of technological resources which enable online learning, the rural and poor populations appear to be the most alienated from access to education. Similar to the above, UNESCO (2021) revealed that lack of connectivity and devices excluded at least one-third of students from pursuing learning remotely. The statement above shows that lack of connectivity also determines the performance of students when blended learning is adopted by rural-based institutions.

RESEARCH QUESTIONS

The research questions of this study are as follows:

- What is the importance of blended learning in institutions of higher learning amid Covid-19?
- What are the blended learning challenges faced by rural-based institutions of higher learning amid Covid-19?
- What are the solutions to blended learning challenges faced by rural-based institutions of higher learning?

THEORETICAL FRAMEWORK: CONVERSATION THEORY

The Conversation theory developed by Gordon Pask in the 1970s was adopted and used as a theoretical lens to ensure that there is flexibility in delivering education that integrates technology and digital media with traditional instructor-led classroom activities. In this regard, Bouman (2012) explained that traditional instructor-led classrooms are teaching in a style that is contradictory to the way students learn outside of the classroom.

According to Creswell (2014), theory in research may often serve as a lens

for the inquiry or it may be generated during the study. Leavy (2017) sees theory as an account of social reality that is grounded in data but extends beyond that data.

In the context of this study, Heinze and Procter (2007) explained that the Conversation theory depicts the communication process that occurs between the lecturer and student in the development of the student's knowledge. In this regard, one can concur that the adoption of blended learning as a result of Covid-19 means a reduction of face-to-face contact time, which reduces opportunities for face-to-face lecturer-student dialogue. In their overview of this theoretical approach, the aforementioned authors suggest that it is important that conversation should be encouraged and take place in a virtual space.

Using conversation as the basis for teaching, the learning relationship becomes more transparent and open to both the student and lecturer (Heinze & Procter, 2007). Based on what the above-mentioned authors indicated in the context of Covid-19, and with particular reference to rural-based institutions of higher learning in South Africa, one can argue that there is a need for students and lecturers to use conversation to promote social and learning conditions.

Laurillard (2002) is of the view that there is no one right medium for the conversation; each medium has its drawbacks and hence it is important to maintain the various dialogic aspects all the time. With the above-mentioned statement, one can suggest that lecturers should strike balance between face-to-face and virtual platform conversations so that students benefit from blended learning.

LITERATURE REVIEW

Importance of blended learning in institutions of higher learning

As far as the importance of blended learning in institutions of higher learning is concerned, Marwala (2021) believes that given the history of South Africa, a blended model is appropriate as it takes into account the unique circumstances of the student. Instead, Olawale and Mutongoza (2021) point out that this model brought about the use of a flipped classroom, which is a simple strategy for providing learning resources such as articles, pre-recorded videos, and YouTube links before the class. The above-mentioned authors also believe that the modern kind of learning deepens understanding through discussions among students.

In the study conducted by du Plessis, Jansen van Vuuren, Simons, Frantz, Roman, and Andipatin (2022), it was highlighted that institutions of higher learning familiar with blended learning shifted to this new kind of learning fully, and fairly swiftly, by employing the necessary tools, teaching practices and requirements for online learning. In this regard, du Plessis *et al.* (2022) indicated that in this case, the impact on students resulted in much less disruption to continue with their academic programmes.

Findings from the study conducted by Muhuro and Kang'ethe (2021) indicated that prospects of blended learning entail providing opportunities for flexible learning, enabling access to a wide range of educational resources, and limiting alienation associated with purely online education delivery. Similar to this statement, Perumal, Pillay, Zimba, Sithole, van der Westhuizen, Khosa, Nmngcoyiya, Mokone and September (2021) state that a large number of colleges and universities are transitioning to online or blended pedagogy due to the need to maintain a competitive edge and classes more

accessible to growing and diverse student population.

In the context of the importance of blended learning in institutions of higher learning, Mhlanga (2021) argues that the other unique feature of blended learning is that it takes advantage of different learning experiences that can be offered by using a mix of learning environments such as lectures, self-paced study, online collaboration, and communication exercises simulations and using interactive multimedia.

In their perspective, Muhuro and Kang'ethe (2021) explained that rural institutions benefit from using blended learning because they can hire part-time staff to offer some of the classes online and use social media platforms, mobile learning tools, and/or learning management systems to reduce the strain on staff having to repeat lessons for students who miss classes due to illness or other constraints. The above-mentioned authors believe that students benefit from blended learning as they can learn the materials at their own pace and can use other technological tools for further research to access important learning content that improves the student experience.

Another important aspect of blended learning is that to attain its benefits there is a need for a strong commitment from teaching staff and institutional support for their efforts (Mhlanga, 2021).

Blended learning challenges faced by rural-based institutions of higher learning amid Covid-19

The education sector was the most hard-hit as the virus demanded social distance making learning impossible in tertiary education (Mhlanga, 2021). Further, the study conducted by Mhlanga (2021) discovered that introducing blended learning is associated with challenges related to high levels of inequality, the

massive digital divide, resource constraints, and skills shortages. This is supported by Dube (2020) who indicated that the greatest challenge faced with modern education is that an internet connection is very expensive and, in some cases, very limited. In this regard, UNESCO (2021) also found that since its outbreak two years ago, the Covid-19 pandemic has disrupted education systems and it has increased inequalities, and exacerbated a pre-existing education crisis.

As far as Marwala (2021) is concerned, while Zoom, Microsoft Teams, and even WhatsApp provided solutions, they failed to answer issues of inequality, inequity, and lack of success. Similarly, Mhlanga (2021) explained that one of the greatest challenges of switching to blended learning is the problem of inequality in South Africa. Further, Mhlanga (2021) argued that inequality in South Africa manifests itself through skewed income distribution and unequal access to opportunities that later cause disparities in almost every sector, education included.

According to Marwala (2021), data, Wi-Fi and access to smartphones and tablets, at the very least, are necessities for a complete transition to the new method of teaching and learning. To this end, one can concur that rural-based institutions of higher learning in South Africa are seemingly helpless on how to approach blended learning during the Covid-19 lockdown.

In their study, du Plessis *et al.* (2022) also revealed that the challenges surrounding the new kind of learning highlighted the inequalities at higher education institutions and demonstrated that South Africa may not be prepared for the 4th industrial revolution (4IR). Further, du Plessis *et al.* (2022) revealed that the Covid-19 pandemic exposed the inequalities within and between universities as some institutions were ready to move to

a new kind of teaching and continue with the academic term, whereas others faced severe constraints related to students' poor access to technology and poor socio-economic circumstances.

As a result of the outbreak of the Covid-19 and adoption of blended learning, Olawale and Mutongoza (2021) revealed that most institutions of higher learning have witnessed high rises in students' academic dishonesty, and in most cases, they simply do not have effective mechanisms to combat this illicit behaviour. Most importantly, the above-mentioned authors explained that owing to Covid-19-induced learning, most institutions do not have measures that regulate academic integrity online. Thus, lecturers are often left to believe in the honesty and independence of students in doing assignments, thus institutions often bemoan the rise of contract cheating where assignments and tests are increasingly being done for students by 'ghost writers' at a price.

Pertaining to lecturers, Lassoued, Alhendawi and Bashitialshaaer (2020) discovered that lecturers have become accustomed to traditional teaching and favoured it for many years without thinking about the new method of teaching i.e. blended learning. According to du Plessis *et al.* (2022), those institutions that were much less prepared for the new kind of learning struggled to upskill academic staff and students, and at the same time needed huge investments in technology to effect the change to blended learning. In addition, Olawale and Mutongoza (2021) indicated that for many lecturers, the Covid-19 pandemic is a transformative challenge in which there is no specified guide for an appropriate response when they communicate through an online platform with their students.

According to Marwala (2021), lack of data, Wi-Fi, and access to digital devices,

among others, negatively affect the new kind of learning. Similar to the above, Muhuro and Kang'ethe (2021) found that many institutions have constraints related to unstable or non-existent network coverage characteristics in rural locations, and curricular deficits stemming from the blended learning model not aligning to context, thus lowering morale for wider implementation. The above-mentioned constraints according to the authors are exacerbated by weak goodwill and limited policy guidelines on a specific blended learning model. Also, du Plessis *et al.* (2022) explained that the lack of inclusion of institutional documentation such as protocols or policies that address the Covid-19 pandemic is a challenge. Further, the above-mentioned authors accentuated that whilst this would have provided insight into how South African higher education institutions made sense of the Covid-19 pandemic from the institutional perspective, these policies did not exist or are only in development as higher education institutions navigate the unprecedented and unpredictable nature of the Covid-19 pandemic.

Mhlanga (2021) explained that many students in rural areas were excluded from teaching and learning due to challenges related to resource constraints such as lack of internet access, absence of learning management systems, and low-tech software. The author revealed in his study that apart from challenges related to resources, students were also concerned with future professional careers and studies and a lot of them experienced boredom anxiety, and frustration due to the various hygienic practices that were practised and the various restrictive measures that were imposed by the government.

Unpacking the blended learning challenges faced by rural-based institutions of higher learning amid Covid-19 in South Africa, Mhlanga (2021) explained that when educators do not have digital literacy

skills, it will be very difficult for blended learning to achieve meaningful results.

Plausible solutions to blended learning challenges faced by rural-based institutions of higher learning

Before planning, designing, and implementing blended learning there is a need to assess the environment. In his study, Dube (2020) argues that in the time of Covid-19, the traditional approach to teaching is no longer permissible, and there is a need to invent new ways of teaching, which, unfortunately, is new to many students in rural areas, leading to the fear that education during the time of Covid-19 will serve a few privileged students who are connected to resources.

Based on the findings of his study, Dube (2020) suggests that rural lecturers and students should have access to data. With the availability of data, one can concur that this could help both lecturers and students to engage in the blended learning process, especially if they are not going to have face-to-face lectures. This, of course, could also mitigate learning challenges caused by the outbreak of Covid-19 in the South African education system, particularly at rural-based institutions of higher learning where there is a lack of digital education tools for lecturers and students.

Marwala (2021) explains that data, Wi-Fi, and access to devices, at the very least, are necessities for a complete transition to this kind of new learning. In this regard, Lassoued *et al.* (2020) state that institutions of higher learning need to take advantage of developments in communication technology and use them to provide their curricula to those who wish to continue their higher education anytime, anywhere.

Recommendations from the paper presented at the 12th Annual AISA International Interdisciplinary Conference

by Sundani and Mangaka (2021), posit that to avoid the digital divide and lack of provision of teaching and learning in the era of Covid-19, the South African government should provide Wi-Fi, digital devices and data to students and lecturers, especially from rural-based institutions.

Related to what Sundani and Mangaka (2021) suggested, Olawale and Mutongoza (2021) believe that the South African government should ensure the availability of effective communication tools and promote technology-enabled learning for students capable of bridging the digital divide that exist both in the community and in the education system. In the context of the provision of resources, the study conducted by Muhuro and Kang'ethe (2021) recommends governmental support for resourcing rural universities to acquire affordable and usable resources to offset challenges hindering blended learning. Further, the two authors recommend that rural institutions should also strive to strengthen support to students and staff to build confidence in the potential of blended learning. As suggested by these authors, the digital divide should be dealt with by the government so that blended learning can be implemented in rural-based institutions of higher learning.

Further, Marwala (2021) explained that higher education institutions will remain pivotal for engaging in meaningful action to contribute towards local, national, and global debate through this kind of new learning approach. Like other higher education institutions, universities must continually revisit their strategic plans and curricula to ensure constructive alignment with a rapidly changing society.

Further, the paper presented by Sundani and Mangaka (2021) suggests that the Ministry of Higher Education in South Africa should develop a curriculum that promotes the usage of new media