The Efficacy of Individual e Peer Mentorship Services on Mental Health among University Students Engaging in Transactional Sex in Laikipia University

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Abstract

Food insecurity is associated with increased sexual risk through transactional sex and lack of ability to negotiate safer sex. Food insecurity is associated with HIV acquisition risks through behavioural (e.g., Transactional sex) and mental health (e.g., alcohol use, depression) pathways. Food insecurity has also been associated with increased sexual risk practices among HIV-positive youth in sub-Saharan Africa (Aberman et al., 2014). Most university students in low or middle-income countries face many financial problems, leading them to Transactional Sex (TS) for survival, which creates challenges in their academic progress and mental health. This behavioural trend has been a significant cry by parents and other stakeholders in towns and suburbs with university campuses around them. The purpose of this study was to determine individual e-peer mentorship services on the mental health among university students engaging in transactional sex in Laikipia University. The research team recruited and trained 20 peer mentors to empower 20 university students (18-24yrs) who engage in transactional sex to improve mental health literacy and for sustainable psycho-social status. Peer relations, counselling, communication, and social skills were imparted under the guidance of research experts. The peer mentor trainees underwent the e-Peer Mentorship Model training. The research team developed indicators that were used to rate the targeted outputs and outcomes from time to time. To track the progress in behavioural change, the research undertook a baseline survey of the mental issues affecting female students engaging in TS. The study undertook mid-term and end-of-project evaluations to establish differences in mental health issues affecting mentees over the project lifespan. The programme is expected to benefit students by providing them with counselling skills, communication skills, entrepreneurship skills, social skills, and Information Communication Technology skills. The model may be used by universities and other tertiary institutions in handling issues of transactional sex.

Keywords: e-Peer mentorship, mental health, referral services, self-efficacy, transactional sex

Introduction

University students who engage in Transactional Sex (TS) frequently face mental health issues as well as physiological and psychological burdens. Students at higher levels of education often choose to engage in TS as a strategy for coping with various issues in their lives, such as ameliorating economic shocks arising from the high cost of living. Adolescent girls and young women (AGYW) in sub-Saharan Africa (SSA) are at a high risk of HIV acquisition. In East and Southern Africa, AGYW accounts for 80 percent of all new HIV infections (Lancet, 2020). Food insecurity, defined as 'the limited or uncertain availability of nutritionally adequate, safe foods, or the inability to acquire personally acceptable foods in socially acceptable ways', is an important underlying driver of HIV risk and vulnerability among AGYW. Food insecurity is associated with higher sexual risk-taking behaviour, sexually transmitted infections (STIs),

and even prevalent HIV (Pascoe et al., 2015). Food insecurity also impedes appropriate healthcare-seeking behaviour for reproductive health.

According to research by Miller et al. (2011), some women said that their male sexual partners would withhold access to food in order to regulate the circumstances surrounding sex, including the timing. The fact that many women relied on their spouses for food caused many of them to remain in dangerously violent or abusive situations. This was especially true for women who had children and lived far from relatives who could help them. Women were unable to successfully negotiate condom use due to their lack of control; many of them reported being threatened with losing access to food or even violence if they insisted on using condoms.

Female sex workers with HIV similarly identified food insecurity as a barrier to condom usage in a qualitative study from Swaziland (Fielding-Miller et al., 2014). Despite hunger, customers frequently offered to pay more for sex without using a condom. Many of the ladies thought that not using a condom during sex was how they got HIV. Similar effects of food insecurity on the ability to demand protection during sexual encounters were revealed in the qualitative study carried out in San Francisco, California (Whittle et al., 2015). Additionally, women described how their experiences with transactional sex occasionally compelled them to put their safety at risk by having interactions with clients they did not feel comfortable with.

It is important to consider the setting in which women suffer food insecurity (Aberman et al., 2015). This involves funding initiatives that strengthen women's legal, social, and economic rights, especially those that advance or secure their property and inheritance rights with food aid and income generation (Hardee et al., 2014). In order to strengthen women's legal and social rights and provide them with more economic power, it is also necessary to determine which initiatives and programmes work best (such as cash transfers, microfinance, vocational training, and skills development).

Transactional sex is a non-marital relationship motivated by an implicit assumption that sex will be exchanged for material support or other benefits (UNAIDS, 2018). Statistics on the number of students engaging in transactional sex is limited, but studies carried out indicate an increase in the practice among students. In a survey carried out in the United Kingdom involving 6750 students, 5 percent of men and 3.5 percent of women said they had worked in the sex industry, and nearly 22 percent considered doing so.

The choice of the e-peer-mentorship approach in mitigating transactional sex is informed by several empirical studies that have found peer mentorship interventions to be more effective in behaviour change management. DuBois and Felner (2016) found that behaviour change interventions modelled along peer-mentorship yields better results than traditional approaches. The authors attributed the greater success of peer-mentorship change interventions to the insight and expertise of survivors of behaviour change (DuBois & Felner, 2016). Moreover, a study by Smith (2014) found that victims of anti-social behaviour view their own peers as being more credible, having a better understanding of their concerns, have a sense of responsibility to their peer group, and are more likely to model the behaviour of peers than adults (Smith, 2014). Furthermore, Gotian (2016) observes that peer mentorship focuses on the needs of the victims of anti-social behaviour rather than the roles, expectations, or desires of the individual or organization(s) intervening. Household-level interventions that target both poverty and food insecurity may offer many advantages over individual-centred approaches in reducing sexual risk-taking. This is because household-level interventions address the context for risk behaviour.

The purpose of this study was, therefore, to determine the individual e Peer mentorship services for improved food security on mental health among university students engaging in transactional sex in Laikipia University.

Research Methodology

An ex post facto causal-comparative research design was used in this study. This type of study design examines things that have already happened and cannot be changed by the researcher. Ex post facto study design is a technique for uncovering the causes of events after they have already occurred and cannot be designed or manipulated by the researcher. According to Mugenda and Mugenda (2003), this strategy is especially appropriate in social, educational, and psychological situations when the independent variable or factors are uncontrollable by the researcher. The participants in this study were undergraduates at a leading public university in Kenya who were involved in transactional sex. The female students of this public university were the study's target demographic.

The study concentrated on the impact of individual e-peer mentoring services on the mental health of university students who engaged in transactional sex at the university in order to increase food security. Participants for the study were chosen with purpose. Utilizing questionnaires and an interview schedule, research data was gathered. The research team recruited and trained 20 peer mentors to empower 20 university students (17-24yrs) who engaged in transactional sex to improve mental health literacy and for sustainable psycho-social status. Peer relations, counselling, communication, and social skills were imparted under the guidance of research experts. It was anticipated that there would be 60 percent improved access to mental health literacy and behaviour change in the mentees, which would be monitored and upscaled universally.

The study adopted the Peer Mentorship Model as an Innovation. The model comprised the following components; intervention strategies, training, monitoring, and advocacy. Training and supervision were critical components of the peer mentorship model. Training began with pioneer mentors for the reformed transactional sex practitioners with lived experience. However, training continued throughout the project. This model recognised that to be effective, peer mentors needed training on how to support mentors and have mastery of the contents of intervention strategies as well as subjects under study.

E-Peer mentorship training was structured to cover three important areas; namely, subject, intervention strategies, and leadership skills. Subject training equipped mentors with critical information about transactional sex, notably the causes, forms, and consequences of transactional sex. Training on intervention strategies covered the various interventions the project needed to adopt to mitigate transactional sex. These were psychological, sociological, and financial interventions. Leadership training aimed at equipping mentors with skills that helped them thrive in the mentor role, such as problem-solving, communication, interpersonal, relationship-building, and maintenance skills.

Results and Discussion

The study collected data from a sample of 35 student mentors and 35 student mentees. Table 1 presents the profile of the respondents.

Table 1: Respondents' Profile

Demographic Trait	Categories	Mentor N (%)	Mentee N (%)
Age	18-20	1 (2.9)	11 (31.4)
	21-23	32 (91.4)	21 (60.0)
	24-26	2 (5.7)	2 (5.7)
	Above 27	0 (0.0)	1 (2.9)
Year of Study	Year 1	0 (0.0)	10 (28.6)
	Year 2	4 (11.4)	11 (31.4)
	Year 3	19 (54.3)	8 (22.9)
	Year 4	12 (34.3)	6 (17.1)
Being a student counsellor	No	0 (0.0)	17 (48.6)
	Yes	35 (100.0)	18 (51.4)
Duration as a peer counsellor	NA	0 (0.0)	17 (48.6)
	< 6 months	12 (34.3)	6 (17.1)
	6month-1 year	17 (48.6)	7 (20.0)
	1-3 years	4 (11.4)	3 (8.6)
	3 years or above	2 (5.7)	2 (5.7)

Most of the mentors (91.4%) were in the 21-23 age bracket, as opposed to 60 percent of the mentees in this age bracket. Another 31.4 percent of the mentees were in the 18-20 age bracket. These results suggest that, on average, the mentees are younger than the mentors, but most students in both groups fall between the ages of 18 and 23. The mentors were more experienced in university life than the student mentees.

More than half (54.3%) of the student mentors were year 3 students, 34.3 percent were year 4 students, and the remaining 11.4 percent were year 2 students. On the other hand, 31.4 percent of student mentees were in their second year of study, 28.6 percent were in the first year, 22.9 percent were in the third year, and 17.1 percent were in the fourth year. These findings suggest that most student mentors were in the advanced years of their studies, while most mentees were in the early years of their studies.

All students' mentors were peer counsellors, hence their selection for the student mentor sample. About 51.4 percent of mentees also became student mentors after benefitting from the peer mentorship service, while the remaining 48.6 percent had not served as peer counsellors at the time of this study. These results suggest that most of the respondents had close interaction with the peer mentorship programme and are thus privy to information regarding its effect on the mental health of University Students Engaging in Transactional Sex (USETs).

Close to half (48.6%) of the student mentors had served as peer counsellors from 6 months to 1 year, while 34.3 percent had served for less than 6 months. About 11 percent had served for 1-3 years, while 5.7 percent had served for over 3 years. The study findings agree with research by Santos and Reigadas (2002), who found that relationships with mentors can broaden students' awareness about the resources available to successfully cope with demanding academic conditions and increase self-competence and self-efficacy. Besides, this research also proved that mentoring programmes facilitate students to set better academic goals. The frequency of contact with mentors has a positive relationship with students' adjustment to college life. This finding proved that a mentor appeared to be a person who can help and facilitate a student's personal and academic adaptation to college life by providing emotional support (Santos & Reigadas, 2002).

e-Peer Mentorship Platform

A wide range of digital platforms can be used for e-counselling. These include WhatsApp, YouTube, Facebook, X, Instagram, Telegram, and Email, among others. The study sought to establish the e-mentorship platform used by both the mentor and mentees in the USET programme. Table 2 summarizes this information.

Table 2: Mode of Mentorship Used

Mode of Mentorship	Mentor N (%)	Mentee N (%)
WhatsApp	34 (97.1)	28 (80.0)
Instagram	9 (25.7)	18 (51.4)
'X'	1 (2.9)	2 (5.7)
Facebook	11 (31.4)	6 (17.1)
Tiktok	1 (2.9)	3 (8.6)

Results in Table 2 show that WhatsApp was the most highly utilized platform for e-mentorship, with 97.1 percent of mentors and 80 percent of mentees reporting using this platform. This finding is consistent with Altarawneh and Alomoush (2022), who observed that WhatsApp was a popular e-counselling platform among students in public universities in Jordan because it is accessible to many students. It is also easy to use, unlike other platforms like YouTube, which require a lot of data and video equipment. WhatsApp also has a privacy element, unlike Channels like YouTube. In Kenya, it is estimated that 97 percent of internet users use WhatsApp at least once a month (Bayhack, 2021).

Facebook was the second most highly utilized platform by the sampled mentors at 31.4 percent, followed by Instagram at 25.7 percent. On the other hand, Instagram was the second most highly utilized platform by the Mentees at 51.4 percent, followed by Facebook at 17.1 percent. Although there is a difference in the order of ranking of the two platforms by mentors and mentees, results suggest that these two platforms are also widely utilized for e-counselling. These results are consistent with several surveys showing that Facebook was the second most frequently used social media platform in Kenya, with 89.6 percent of the respondents reporting its usage. The third most utilized was Instagram at 69.4 percent, while WhatsApp took the first position at 93.5 percent.

Twitter was unpopular, with 2.9 percent of the mentors and 5.7 percent of the mentees reporting its usage. TikTok also reported low usage, with 2.9 percent of mentors and 8.6 percent of mentees reporting it. The low usage may be attributed to the low proliferation of these platforms when compared to WhatsApp, Facebook, and Instagram.

Most Effective Mode of E-Mentorship

Given the sensitive nature of the problem that the USET programme sought to address, some e-mentorship platforms are bound to be more effective than others. The study sought to establish the e-mentorship platform that the respondents found to be most effective. Table 3 summarizes the respondents' views.

Table 3: Most Effective E-Mentorship Platform

Mode of Mentorship	Mentor N (%)	Mentee N (%)
WhatsApp	30 (85.7)	25 (71.4)
Instagram	3 (8.6)	4 (11.4)
'X'	0 (0.0)	1 (2.9)
Facebook	4 (11.4)	5 (14.3)
Tiktok	0 (0.0)	(0.0)

Results in Table 3 show that 85.7 percent of the student mentors and 71.4 percent of the student mentees felt that WhatsApp was the most effective mode of E-Mentorship. Although the study did not ask respondents to give reasons for this choice, it can be presumed that the WhatsApp platform is preferred because of its wide reach and ease of use. Facebook came in second, with 11.4 percent of mentors and 14.3 percent of mentees picking this platform as the most effective. Instagram was third, with 8.6 percent of mentors and 11.4 percent of the mentees picking this option, while Twitter was fourth, with only 1 mentee picking this option, representing 2.9 percent of the sample. No respondents felt that TikTok was an effective option. This is probably because TikTok content is always public and, therefore, unsuitable for discussing sensitive issues like transaction sex.

Means of Internet Connection

Internet connectivity is vital to the success of any e-mentorship programme. Mentors and mentees can connect to the Internet through Wi-Fi, fibre optic broadband, mobile data, and satellite broadband. The study sought to establish the means mentors and mentees in the USET programmes used to connect to the Internet. Figure 1 summarizes this information.
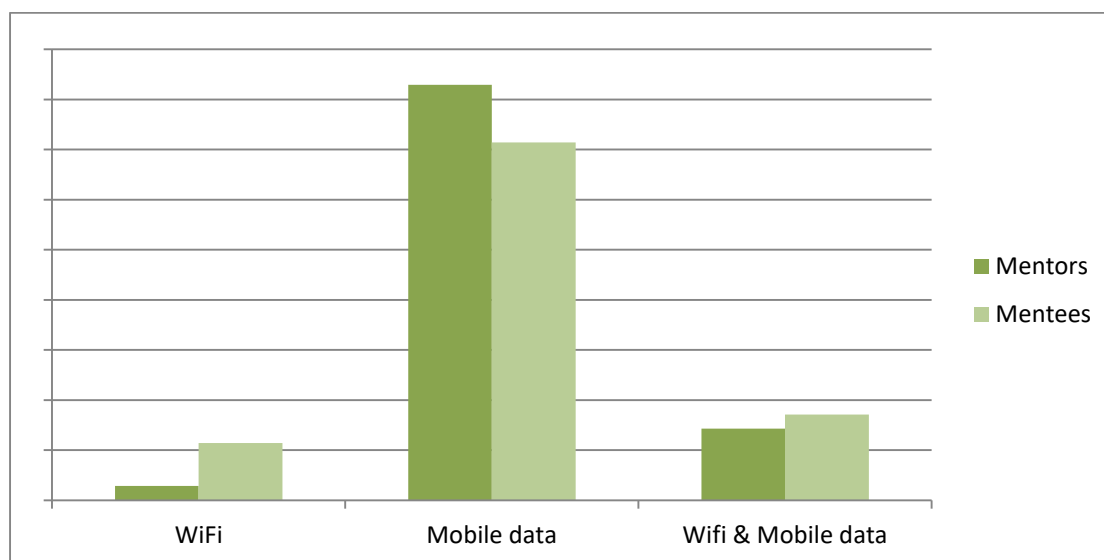


Fig. 1: Means of Internet Connection

Results in Figure 1 show that mobile data bundles were the most popular means of connecting to the internet by both the mentors and mentees, with 82.9 percent of the mentors and 71.4 percent of the mentees reporting using this means. These findings are consistent with a survey by UNESCO which established that 98 percent of internet users in Kenya connect to

the internet through mobile data. Although mobile data is quite accessible in Kenya, it can be expensive, especially among university students.

About 3 percent of mentors and 11.4 percent of mentees reported using Wi-Fi. Low usage of this means of internet connection is largely attributed to the unavailability of internet services in most of the students' locations. About 14 percent of mentors and 17 percent of mentees reported using Wi-Fi and mobile data. It is possible that these students use Wi-Fi when they are in locations where Wi-Fi networks are available and revert to mobile data when they move to areas with no Wi-Fi network.

Convenient Time for E-Mentorship

Picking appropriate time for peer counselling is vital to the success of e-mentorship programmes. The study sought to establish the time the mentors and mentees found to be most convenient for e-mentorship activities. Figure 2 summarizes the respondents' views.
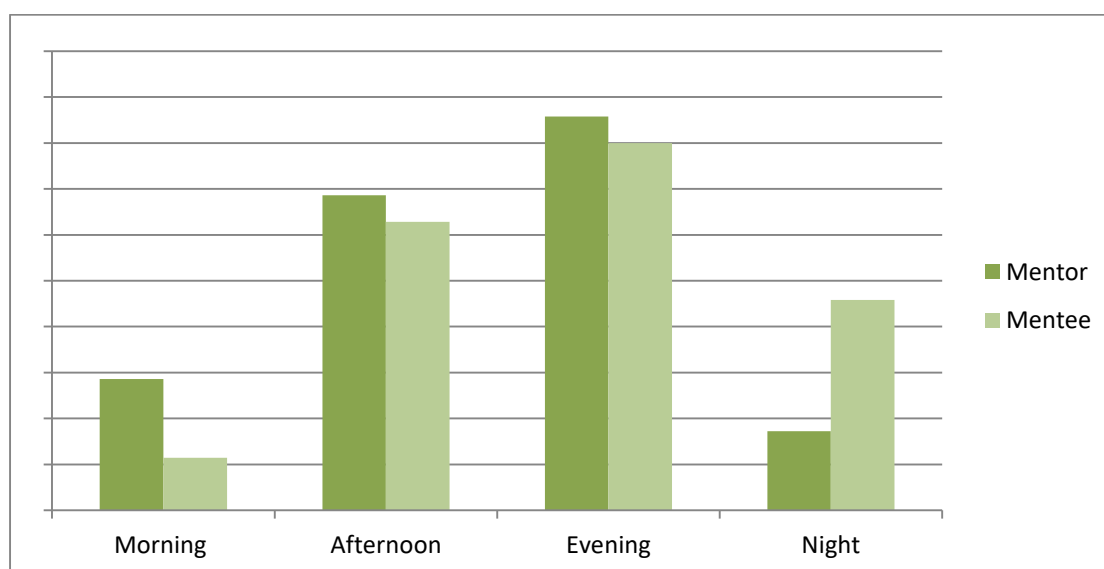

Fig. 2: Respondents' View on The Most Convenient Time

About 43 percent of the mentors and 40 percent of the mentees believed that evening was the most convenient time for e-mentorship. These findings suggest that evening is the most preferred time for e-mentorship aimed at preventing USET. The findings are consistent with Cronin et al. (2021), who observed that students in an American public university preferred appointment times after 4.00 pm because this was the time when most of them were free. About 34 percent of the mentors and 31 percent of the mentees said that afternoon was their most convenient time, which suggests that many students affected by USET at the university under study are free during afternoon hours. About 8 percent of mentors and 22.9 percent of mentees preferred night hours. While most students are often free during night hours, it is evident that most students do not prefer to hold peer counselling sessions at this time. Morning hours are the least preferred time.

Factors Contributing to Transactional Sex

The study sought the respondents' views regarding factors contributing to the high prevalence of transaction sex among university students. Several themes emerged from the responses. Figure 3 summarizes these themes.
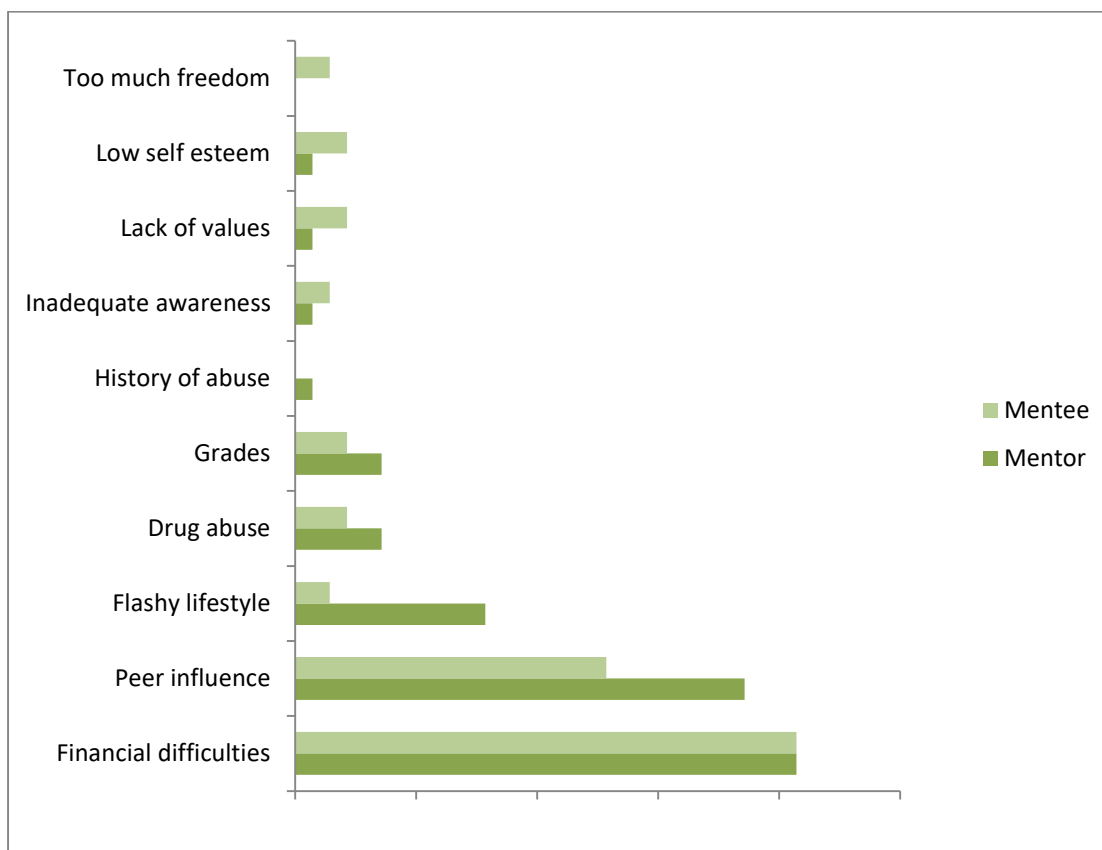
Fig. 3: Factors Promoting Transactional Sex

The most frequently occurring theme was financial difficulty, with 82.9 percent of both the mentor and the mentee sample citing this as one of the factors promoting transaction sex among university students. The respondents explained that most students engage in transaction sex because they experience financial difficulties and, hence, are unable to access basic needs like food, rent, and sanitary towels. Lack of basic needs leads to desperation that compels these students to engage in transaction sex to get money for upkeep. Some respondents connected the issue of financial difficulties to the students' family backgrounds, noting that some of the USET come from humble backgrounds. These students have to engage in transactional sex in order to get money for school fees and upkeep. Other respondents noted that financial difficulties experienced by students have been exacerbated by the escalating cost of living characterized by drastic increases in the cost of foodstuff, power, and transport.

Statistics on the number of students engaging in transaction sex is limited, but studies carried out indicate an increase in the practice among students. In a study carried out in the United Kingdom involving 6750 students, 5 percent of men and 3.5 percent of women said they had worked in the sex industry, and nearly 22 percent considered doing so.

The second most frequently appearing theme was peer pressure, with 74.3 percent of mentors and 51.4 percent of mentees identifying this as a major contributor to transactional sex. The respondents explained that some students engage in transactional sex in order to get the money that will enable them to fit in with their peers' lifestyles. This explanation led to the extraction of a third theme: flashy lifestyle. According to 31.4 percent of mentors and 5.7 percent of mentees, some of the USET are driven by the desire to get money to sustain a flashy lifestyle to fit in with their peers from wealthy backgrounds. These students tend to use the money they get from transactional sex to purchase luxury items like expensive phones or finance partying activities. According to Turner and Philip (2011), more students are turning to the streets to fund their studies and meet their basic needs, including food.

According to Turner and Philip (2011), more female university students turn to the streets to fund their studies, enjoy themselves, and live decent lives. The study findings further articulate that peer pressure, lack of awareness of sex education, poor parental guidance, and a culture that promotes promiscuity are the main causes of female promiscuity in the university. Social change, accompanied by a lack of parental support and guidance, leaves young boys and girls unprepared for the complexities of sexual relationships (Wamoyi & Wight, 2014). Young boys and girls get exposed to societal activities, which later influence their mental health status. Transactional sex is practised in search of food and other basic needs. Lack of food poses food security issues among the students in higher learning institutions.

It was found that 14.3 percent of mentors and 8.6 percent of mentees believed that substance abuse is also to blame for the prevalence of USET. According to these respondents, students engage in transactional sex in order to get money to purchase drugs. About 14 percent of mentors and 8.6 percent of mentees linked USET behaviour to students' pursuit of better grades. These students noted that the issue of missing marks is rampant at the university and tends to make female students vulnerable to exploitation by instructors, where they are asked to engage in sex in exchange for grades. Some students engage in sex to receive improved grades on units in which they have underperformed.

About 3 percent of the mentors link USET habit to a history of abuse, while 2.9 percent of mentors and 8.6 percent of mentees link it to low self-esteem. The two themes (historical abuse and low self-esteem) are interconnected, as historical abuse can lead to low self-esteem. Low self-esteem could also result from lacking basic commodities like decent clothes and sanitary towels. Other factors that were identified include inadequate awareness regarding the dangers of transactional sex, lack of values, and excess freedom among students.

Measures for Preventing Transactional Sex

The study also sought respondents' views regarding measures that should be implemented to prevent transactional sex among university students. Several themes that included counselling, education, and awareness emerged.

Results in Figure 4 show that counselling was the most frequently occurring theme, with 68.6 percent of mentees and 42.9 percent of mentors recommending this solution. Counselling entails providing students with systematic assistance and guidance on resolving their personal problems. These respondents expressed the need to assist and guide students in resolving personal issues such as inadequate access to basic needs, peer pressure, and missing marks. This position is reinforced in the study by Saripah and Naghirah (2020), who observed that guidance and counselling were effective strategies for promoting healthy sexual behaviours among high school students in West Java province in Indonesia.

The second most frequently occurring theme is education and awareness. About 46 percent of mentors and 31 percent of mentees felt that transaction sex could be minimized by educating and creating awareness among students on various issues. These issues include the dangers of irresponsible sex, ethical ways of generating income without compromising studies, good study habits for improving grades, and prudent financial management. Online platforms such as WhatsApp videos, Facebook Live, TikTok, Instagram, Telegram, and YouTube can be used to facilitate education and awareness programmes.

The third most frequently occurring theme was financial support, with 17.1 percent of mentors and 28.6 percent of mentees recommending this solution. According to these respondents, transactional sex can be prevented by providing financial support to needy students in the form of bursaries and scholarships. This recommendation is founded on the premise that it is poverty that drives students into transactional sex. About 17 percent of mentees and 3 percent of mentors also recommended that guardians should be advised to provide adequate finances to students. One of the respondents

recommended that the university should communicate the minimum amount that guardians should give to their children to ensure they are able to meet their basic needs and learn. This premise is supported by studies conducted in Kenya by Jones and Gong (2018) and Handa et al. (2014) on the impacts of financial incentives on TS, which found that financial incentives led to reductions in TS as a risk-coping response to shocks.

About 8.6 percent of mentors and mentees recommended establishing strict rules governing students' conduct, student movement, class attendance, and student-lecturer relations. Other recommended measures include co-curriculum activities such as sports to keep students busy, promoting income-generating activities to augment students' finances, campaigns against substance abuse, spiritual intervention, a work-study programme, and monitoring the award of grades. Figure 4 summarises these themes.
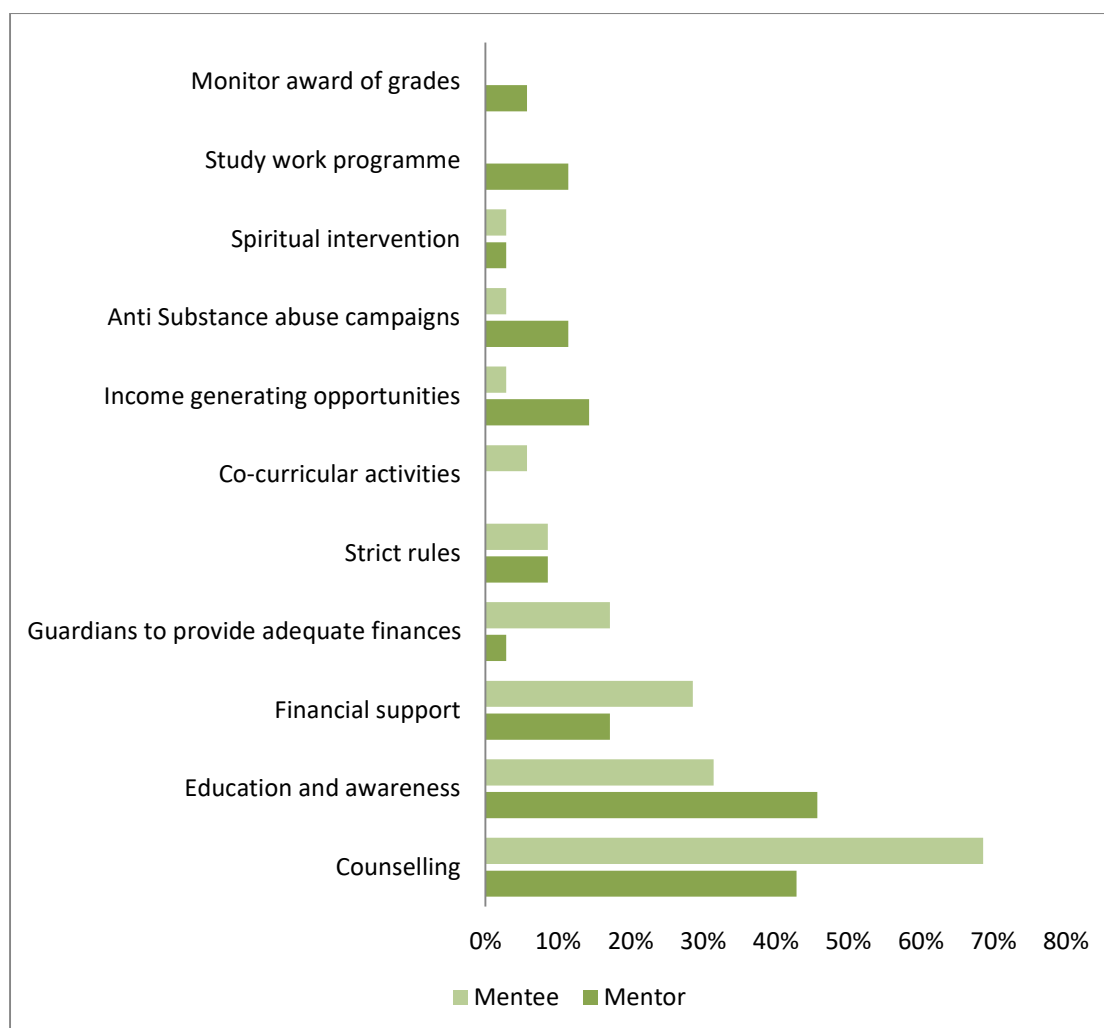
Fig. 4: Measures for Preventing Transactional Sex

Individual E-peer Mentorship Services and USET Mental Health

The study sought the mentors' views regarding the influence of individual e-peer mentorship services on the mental health of USET. The mentors were presented with a set of 9 statements related to this issue and asked to indicate their agreement with each on a five-point scale: 1-Strongly Disagree, 2-Disagree, 3- Neutral, 4-Agree, 5- Strongly Agree. Table 4 summarizes the mentors' views.

Table 4: Individual E-Peer Mentorship and USET Mental Health

Statements	Respondent	1	2	3	4	5
-Individual e-peer mentorship programmes are effective when using social media	Mentor	0.0	8.6	11.4	54.3	25.7
	Mentee	5.7	8.6	20.0	31.4	34.3
-Individual e-peer mentorship programme offered at Laikipia University is effective in reducing pregnancies among students	Mentor	11.4	17.1	31.4	25.7	14.3
	Mentee	5.7	25.2	14.3	31.4	22.9
The individual e-peer mentorship programme offered at Laikipia University is effective in reducing abortions among students	Mentor	17.1	14.3	37.3	20.0	11.4
	Mentee	14.3	17.1	28.6	25.7	14.3
The individual e-peer mentorship programme offered at Laikipia University is effective in reducing substance abuse among students	Mentor	8.6	11.4	25.7	31.4	22.9
	Mentee	14.3	8.6	20.0	34.3	22.9
-Individual e-peer mentorship programmes improve mental health among student	Mentor	0.0	2.9	14.3	31.4	51.4
	Mentee	5.7	5.7	11.4	20.0	57.1
-After attending individual e-peer mentorship sessions, mentees cannot go back to transactional sex	Mentor	5.7	22.9	22.9	31.4	17.1
	Mentee	11.4	28.6	20.0	28.6	11.4
-After attending individual e-peer mentorship sessions, mentees have the confidence to mentor other students	Mentor	0.0	2.9	20.0	31.4	45.7
	Mentee	5.7	5.7	17.1	40.0	31.4
-Individual e peer mentorship sessions are effective in sexual behaviour change	Mentor	2.9	2.9	31.4	34.3	28.6
	Mentee	5.7	5.7	20.0	31.4	37.1
-Individual e-peer mentorship sessions are effective in dealing with other mental issues.	Mentor	5.7	0.0	20.0	25.7	48.6
	Mentee	8.6	5.7	8.6	28.6	48.6

Results in Table 4 illustrate that 54.3 percent of mentors agreed and 25.7 percent strongly agreed that the individual e-peer mentorship programme is effective using social media. Similarly, 31.4 percent of the mentees agreed, and 34.3 percent strongly agreed with this statement. These findings imply that there is a general agreement by both mentors and mentees that individual e-peer mentorship is effective when using social media. These findings are consistent with Giota and Kleftara (2014), who found that social media creates an environment that promotes thorough self-disclosure and is, therefore, an effective tool for fostering intimate conversation with clients.

The largest section of the mentors either agreed (25.7%) or strongly agreed (14.3%) with the assertion that the individual e-peer mentorship programme offered in the university under study effectively reduces pregnancies among students. However, this is a sizeable section of these respondents (31.4%) who were not sure about this claim, while nearly a quarter of the sample either disagreed (17.1%) or strongly disagreed (11.4%) with the claim. These findings

imply that mentors had varied opinions regarding the effectiveness of e-peer mentorship in addressing pregnancies among students. However, most mentees either agreed (31.4%) or strongly agreed (22.9) that e-peer mentorship programmes reduce pregnancies among students. More studies are needed to elucidate the effectiveness of individual e-peer mentorship in reducing pregnancies.

The opinion of both mentors and mentees was sharply divided regarding the effectiveness of individual e-peer mentorship programmes offered in the university under study in reducing abortions among students. Almost one-third of the mentors either strongly disagreed (17.1) or disagreed (14.3) with the assertion that e-peer mentorship has reduced abortion. A further 37.3 percent were unsure, while the rest either agreed (20%) or strongly agreed (11.4%) with the assertion. Similarly, 14.3 percent strongly disagreed with the mentees, another 17.1 percent disagreed with the assertion, 28.6 percent were uncertain about the claim, and 40 percent supported the claim. More studies are therefore needed to clarify the effectiveness of individual e-peer mentorship in reducing abortion.

On the other hand, the majority of mentors (54.3%) and the majority of the mentees (57.2) supported the position that the individual e-peer mentorship programme offered in the university under study effectively reduces substance abuse among students. These findings suggest that individual e-peer mentorship is a potent tool for addressing the substance abuse challenge among university students.

In addition, most mentors (82.8%) and most mentees (77.1%) were positive that the Individual e-peer mentorship programme improves mental health among students. These findings support the position that individual e-peer mentorship is an effective tool for addressing mental health issues of students, particularly those engaging in transactional sex.

The opinions of both mentors and mentees were, however, divided regarding the effectiveness of individual e-peer mentorship in preventing mentees from going back to transactional sex. About 28.6 percent of mentors felt that the individual e-peer mentorship was ineffective in achieving this goal, while 22.9 percent were unsure and 48.5 percent were positive. On the other hand, 40 percent of the mentees believed that e-peer mentorship was ineffective in stopping transaction sex, another 40 percent were of the contrary opinion, and 20 percent were indecisive. These findings suggest the need for additional research to clarify the effectiveness of individual e-peer mentorship sessions in addressing transactional sex.

Most mentors (77.1%) and most mentees (71.4%) supported the statement that after attending individual e-peer mentorship sessions, mentees have the confidence to mentor other students. This finding implies that individual e-peer mentorship is an effective tool for nurturing students who can act as mentors to other students. Similarly, most mentors (62.9%) and the majority of the mentee (68.5%) agreed that individual e-peer mentorship sessions are effective in sexual behaviour change. Most mentors (74.3%) and most mentees (77.2%) agreed that individual e-peer mentorship sessions effectively deal with other mental issues.

Finally, most mentors (74.3%) and mentees (65.7%) agreed that e-peer mentorship programmes should be blended with traditional face-to-face peer mentorship programmes. This finding is consistent with the observations of Schuster et al. (2018), who noted that Austrian psychotherapists preferred blended interventions (combined with in-person components) to exclusively online interventions. Blended interventions were preferred because they helped the therapist overcome the limitations of online interventions, such as privacy threats and technological barriers.

Results showed that most of the peer counselling sessions were conducted via the WhatsApp platform mainly because it was the most accessible. Most of the mentors and mentees relied on mobile data to connect to the internet. This suggests that costs could be a barrier to the effectiveness of this model. Mentees and mentors found both the individual and

group e-peer mentorship programme to be effective in improving the mental health of students engaging in transactional sex. Results also suggest that both individual and group e-peer mentorship sessions are effective in reducing substance abuse and nurturing mentors.

Results further showed that e-peer mentors are adequately trained and have adequate supervisor support. However, available data did not support the effectiveness of individual or group e-peer mentorship in reducing pregnancies and abortions among university students. There are also doubts regarding the existence of an elaborate referral system that would enable students experiencing problems to reach the e-peer mentors. Results suggest the need for improvement in these areas.

Conclusions

Transaction sex is a significant problem in Kenyan universities. This problem is largely fuelled by financial difficulties experienced by students, peer influence, and the desire to maintain a flashy lifestyle. E-peer mentorship has been proposed as one of the solutions for addressing this challenge. The respondents also support the blending of e-peer mentorship with traditional in-person peer mentorship. An e-Peer Mentorship Model was implemented at the university under study. This study sought to determine the effectiveness of this model for improved food security in improving mental health among students engaging in transactional sex at the university.

It is recommended that university students be sensitized to the use of e-peer mentorship services for improved mental health. e-peer mentors should be given psychosocial support after e-peer mentorship sessions to prevent compassion fatigue and burnout. To improve university student mental health, e-peer mentorship should be blended with traditional in-person peer mentorship.

References

Aberman, N.L., Rawat, R., Drimie, S., Claros, J.M., & Kadiyala, S. (2014). Food security and nutrition interventions in response to the AIDS epidemic: assessing global action and evidence. AIDS Behav 2014, 18 Suppl 5: S554–565.

Altarawneh, A., & Alomoush, R. (2022). The reality of E-counselling services in the light of digital learning from the point of view of teachers in Jordan. *Education and Information Technologies, 27,* 12773–12792.

Bayhack, J. (2021). 97% of internet users in Kenya use WhatsApp. *CNBC Africa.* Retrieved from https://www.cnbcafrica.com/2021/97-of-internet-users-in-kenya-use-whatsapp-heres-how-businesses-can-reach-them-by-james-bayhack/

Cronin, C., Hungerford, C., & Wilson, R. L. (2021). Using digital health technologies to manage the psychosocial symptoms of menopause in the workplace: A narrative literature review. *Issues in Mental Health Nursing, 42,* 541–548. https://doi.org/10.1080/01612840.2020.1827101

DuBois, D., & Felner, J. (2016). *Mentoring for youth with backgrounds of involvement in commercial sex activity*. National Mentoring Resource Centre.

Fielding-Miller, R., Mnisi, Z., Adams, D., Baral, S., & Kennedy, C. (2014). There is hunger in my community: A qualitative study of food security as a cyclical force in sex work in Swaziland. *BMC Public Health, 14*, 79.

Giota, K.G., & Kleftaras, G. (2014). Mental health apps: Innovations, risks and ethical considerations. *E-Health Telecommunication Systems and Networks, 3*, 19-23. http://dx.doi.org/10.4236/etsn.2014.33003

Gotian, R. R. (2016). Mentoring the mentors: Just because you have the title does not mean you know what you are doing. *College Student Journal*, *50*(1), 1–4.

Handa, S., Halpern, C.T., Pettifor, A., & Thirumurthy, H. (2014). The government of Kenya's cash transfer program reduces the risk of sexual debut among young people aged 15–25. *PLoS One*, 9 (1), e85473.

Hardee, K., Gay, J., Croce-Galis, M., & Peltz, A. (2014). Strengthening the enabling environment for women and girls: What is the evidence in social and structural approaches in the HIV response? *J. Int AIDS Soc, 17*:18619.

Jones, K., & Gong, E. (2018). Improving shock-coping with precautionary savings: Effects of mobile banking on transactional sex in Kenya. *Operational Research.* American University and Middlebury College.

Lancet, H. (2020). The syndemic threat of food insecurity and HIV. *The Lancet HIV. 7*(2), e75. https://doi.org/10.1016/S2352-3018(20)30004-7.

Miller, C.L., Bangsberg, D.R., Tuller, D.M., Senkungu, J., Kawuma, A., Frongillo, E.A., & Weiser, S.D. (2011). Food insecurity and sexual risk in an HIV endemic community in Uganda. *AIDS and Behaviour, 15*(7), 1512–1519.

Mugenda, O. M., & Mugenda, A.G. (2003). *Research methods, quantitative and qualitative approaches.* ACT.

Pascoe, S.J.S., Langhaug, L.F., Mavhu, W., Hargreaves, J., Jaffar, S., …& Hayes, R. (2015). Poverty, food insufficiency and HIV infection and sexual behaviour among young rural Zimbabwean women. *PLoS One. 2015;10*(1), e0115290. https://doi.org/10.1371/journal.pone.0115290.

Santos, S. J., & Reigadas, E. T. (2002). Latinos in higher education: An evaluation of university faculty mentoring programme. *Journal of Hispanic Higher Education, 1*(1), pp. 40-50.

Saripah, I., & Naghirah, A. (2020). Guidance and counselling to improve healthy sexual behaviour of adolescents in West Java. *Advances in Social Science, Education and Humanities Research, 399*(1), 121- 125.

Schuster, R., Pokorny, R., Berger, T., Topooco, N., & Laireiter, A. (2018). The advantages and disadvantages of online and blended therapy: Survey study amongst licensed psychotherapists in Austria. *Journal of Medical Internet Research, 20*(12), e11007.

Smith, D. J. (2014). *AIDS does not show its face: inequality, morality, and social change in Nigeria.* University of Chicago Press.

Turner K., & Philip O. (2011). *NUS: Students turning to prostitution to fund studies.* [Radio Broadcast]. BBC Radio 5 live Breakfast, December 14, 2011.

UNAIDS. (2018). *Transactional sex and HIV risk: from analysis to action*. Geneva: Joint United Nations Programme on HIV/AIDS and STRIVE.

Wamoyi, D., & Wight, D. (2014). Mom never loved me': how structural factors influence adolescent sexual and reproductive health through parent-child connectedness: A qualitative study in rural Tanzania. *African Journal of AIDS Research. Vol. 13*, 2. p. 169–178.

Whittle, H. J., Palar, K., Napoles, T., Hufstedler, L.L., Ching, I., Hecht, F.M., Frongillo, E.A., & Weiser, S.D. (2015). Experiences with food insecurity and risky sex among low-income people living with HIV/AIDS in a resource-rich setting. *J Int AIDS Soc, 18*, 20293.