






## RESEARCH ARTICLE

# Knowledge, perception and experience of sexual entrapment among undergraduate students of the University of Ibadan, Nigeria [version 1; peer review: 2 approved, 1 approved with reservations]

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**V1** **First published:** 15 May 2019, 3:1466  
<https://doi.org/10.12688/gatesopenres.12954.1>  
**Latest published:** 15 May 2019, 3:1466  
<https://doi.org/10.12688/gatesopenres.12954.1>

## Abstract




**Background:** Deceit into sexual activities without the victim being aware of the intended action is common in tertiary institutions as the environment promote activities that make students vulnerable, especially females, young and new students. The resulting physical, psychological and social consequences, including harassment, sexual assault, non-consensual sex, injury, psychological trauma and suicide attempts, have affected many young people. This study was aimed at exploring the knowledge, perception, experience of sexual entrapment among undergraduate students of the University of Ibadan, Ibadan, Nigeria.

**Methods:** This multi-stage cross-sectional survey involved 422 participants using semi-structured questionnaire and an in-depth interview guide. Quantitative data were analyzed statistically, while Qualitative data was analyzed thematically.

**Results:** Mean age of respondents was  $20.5 \pm 3.0$  years, 52.6% were males, 58.8% and 81% had a good knowledge and perception of sexual entrapment, respectively. Prevalence of sexual entrapment was 18%, affecting more males (55.3%) and first year students (39.5%), 59.2% of the perpetrators are friends of the victim. Students were entrapped on campus through; emotional support (42.1%), money (34.2%), accommodation assistance (7.9%), material things/gifts (21.1%), assignment assistance (10.5%), help with registration (4.0%), religious activities (6.6%), debt repayment (11.8%) and counseling (9.2%). It resulted to; unwanted sex (34%), rape (4%), pregnancy (1.3%), STDs (4%), Injury (13%), psychological trauma (27.6%), loss of trust (52.6%) and attempted suicide (23.7%) among victims. Effective coping mechanisms were adopted by 55.3% of respondents. There was a significant association between knowledge and perception; knowledge and experience; perception and experience ( $p < 0.05$ ). Findings from the in-depth interview revealed care, tutoring, political

## Open Peer Review

Approval Status   

	1	2	3
<b>version 1</b>			
15 May 2019	<a href="#">view</a>	<a href="#">view</a>	<a href="#">view</a>

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Any reports and responses or comments on the article can be found at the end of the article.

positions, and pretense to need help as other tactics.

**Conclusions:** Sexual entrapment is common on campus, affecting males and females, knowledge and perception influence experience of sexual entrapment, requiring the need for a holistic approach to reduce its prevalence.

## Keywords

Sexual entrapment, Harassment, Abuse, Assault, University, undergraduates, Perception, Experience, Nigeria.

This article is included in the [International](#)



[Conference on Family Planning](#) gateway.

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**Competing interests:** No competing interests were disclosed.

**Grant information:** Publication of this study was supported by the Bill & Melinda Gates Foundation [OPP1181398].  
*The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.*

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**How to cite this article:** Sule AI, Titiloye MA and Arulogun OS. **Knowledge, perception and experience of sexual entrapment among undergraduate students of the University of Ibadan, Nigeria [version 1; peer review: 2 approved, 1 approved with reservations]** Gates Open Research 2019, **3**:1466 <https://doi.org/10.12688/gatesopenres.12954.1>

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## Introduction

Entrapment entails inducing persons not disposed to carry out an activity to carry out such activity or an act of deception to commit an act or crime. For sexual entrapment, an individual is lured to sexual act unwillingly or through deceit using several means and strategies<sup>1</sup>. Sexual entrapment is also a form of sexual abuse resulting in sexual harassment, involving an individual requesting for sex after rendering a gesture without the victim being aware of the intended action<sup>2</sup>.

The vulnerability of young persons, a lack of psychological maturity and the grooming process employed by the perpetrators renders them powerless to recognize the exploitative nature of the relationship and inability to give informed consent<sup>2,3</sup>. Initially, perpetrators present themselves as empathetic and compassionate friends who offer help in difficult or straining situations<sup>4,5</sup>. A young person that desperately needs help can easily be seduced by the perpetrator's fraudulent promises, help, safety and attention<sup>6</sup>. Tactics resembling coercive and controlling techniques, such as; romancing and spending money; building dependence and/or trust by helping; isolation; abduction and/or drugging; isolation; coercion by financial or debt bondage; recruitment by gang; manipulation due to intellectual disability and normalizing sex, are also commonly used for sexual entrapment as observed in other types of exploitative relationship<sup>3</sup>.

The university environment provides many opportunities for sexual activity, and first-year students, many of whom are classified as young people, are the most vulnerable to sexual entrapment due to their lack of experience to make good, risk-aware decisions about sexual liaisons as they are new on campus, there are many persons that may offer to help them through many activities and needs, such as the screening process, admission procedures, registration process, feeding, assignments and accommodation, among other things<sup>7</sup>.

The impact and scope of sexual harassment that may be a result of sexual entrapment in colleges and universities surfaced in the early 1980s, leading to the creation of policies, procedures, extensive training programs and materials designed to identify and prevent sexual harassment<sup>8</sup>. Despite these efforts to minimize or eradicate sexual harassment on campuses, the frequency of complaints is increasing<sup>8</sup>. About two-third of university students have been sexually harassed and one-third of first year (41%) have been sexually entrapped and harassed by their peers<sup>9</sup>. Age, year in school, gender, sexual orientation and familiarity has been identified as some of the risk factors associated with sexual entrapment on university campuses<sup>10-13</sup>.

Sexual entrapment, which may result in sexual harassment leading to unwanted sexual intercourse, threatens the victim's sense of identity, thereby making it difficult for the individual to concentrate on studies, engage in promiscuous activities, depression, loss of trust, etc.<sup>14</sup>. Victims of sexual entrapment that results in rape may experience emotional, social and sexual problem as a result of being sexually assaulted. Some suffer severe injuries, contract sexually transmitted diseases (STDs) or even get pregnant<sup>15</sup>.

## Methods

### Study design and scope

A cross-sectional study design was used to determine the knowledge, perception and experience of Sexual entrapment among undergraduate students of University of Ibadan.

### Study setting

The study was carried out at University of Ibadan, the oldest university in Nigeria. The campus is located in the city of Ibadan (5miles i.e. 8 kilometers from the centre of the city), the capital of Oyo state, in south western Nigeria. The institution occupies over 1,032 hectares of land and was originally established on the 17th of November, 1948 as an external University College of the University of London. It was called University of Ibadan in 1962 and had over 12,000 undergraduate and post graduate students at that time. During the study, the institution had 13 faculties which include; Arts, Education, Law, Basic Medical science, Clinical sciences, Pharmacy, Public health, Dentistry, Veterinary Medicine, Technology, Agricultural sciences, Sciences and Social sciences. The University of Ibadan has 12 halls of residence, but there are 10 halls of residence for undergraduate students with 7 for males, namely Bello, Tedder, Mellanby, Independence, Nnamdi Azikiwe and Kuti, 3 for females, namely Queen Elizabeth II, Obafemi Awolowo and Queen Idia and one for both males and females, Alexander Brown Hall. The halls of residence have a caring capacity of over 8,000 students. The university has several social facilities that that can aid as a medium to sexually entrap on campus, including; the zoological garden, swimming pool, the university conference center, canteens and eateries, recreation center, cafeterias among others.

### Study population

The study population consisted of regular undergraduate students residing in the halls of residence within the campus. Regular students residing in halls of residence who accept to participate in the study by giving written informed consent were recruited for the study. Students who reside outside campus and those who did not consent to participating in the study were excluded from the study.

### Sampling procedure

A four-stage multi-stage sampling technique involving proportionate sampling at each stage was used to select 422 participants from all the halls of residence by randomly selecting one block from each hall and using proportionate sampling to get the specific number of participants to be selected from each hall and systematically selecting rooms from each block in August, 2017. Individual participants present in their room and who gave their informed consent at the time of recruitment were included in the study. The sample size was estimated using Leslie Kish's formula  $n = Z^2 pq/d^2$  with prevalence of 50% as there is no published prevalence of Sexual entrapment. Potential bias was controlled through effective training of research assistants and blinding them to the hypotheses of the research.

### Methods and instrument for data collection

A quantitative (questionnaire) and qualitative method (in-depth interview) were used for data collection. The questionnaire

explored socio-demographic characteristics of respondents, knowledge, perception, experience, reaction and coping mechanism towards sexual entrapment. The in-depth interview further explored the perception and experience of sexual entrapment among those that had experienced it. The questionnaire and interview guide are available as *Extended data*<sup>16</sup>.

#### Procedure for data collection

Copies of the questionnaire were administered to selected study participants by the researcher and the four trained research assistants after obtaining informed consent through provision of adequate information about the study; on the purpose, the risk involved, the benefit and the requirement of the participant. Data was collected in the selected rooms of the study participants after the day's lectures between 4.30 pm and 7:00 pm in August, 2017. The copies of the questionnaire were retrieved immediately after completion and checked to ensure they were correctly filled. The completed copies of the questionnaire were quickly reviewed to identify those that had experienced sexual entrapment for an in-depth interview. Verbal informed consent was sought from those identified to conduct in-depth interview immediately at their convenience to gain more insight of their experience. Verbal consent was obtained as written informed consent had been obtained previously. This was done in their room or a place that ensured convenience and privacy within the hall of residence. Each interview took a minimum of 10 minutes. The Audio recording and note taking was carried out during the interview sessions for those who consented to have a detailed interview.

#### Validity and reliability of instrument

Validity of the instrument was ensured through consultation of relevant literature and subjecting of the drafted questionnaire to critical review. The instrument was pre-tested among 10% (n=42) of the sample size at Obafemi Awolowo University, Ile-Ife undergraduate students due to their similar characteristics with the study population. This took place in July, 2017. Participants were selected randomly from 4 halls of residence and only those who gave written informed consent participated in the survey. Among the 42 participants that filled the questionnaire, three consented to the in-depth interview (2 females and 1 male). The data was inputted and analyzed using SPSS Version 22, reliability was obtained from Cronbach's alpha. A reliability coefficient of 0.97 was obtained for this study, which indicated strong reliability of the instrument.

#### Ethical considerations

Ethical approval was obtained from the University of Ibadan/ University College Hospital Ethics Review Committee. An informed consent was sort from each research participant and confidentiality of study participants were adequately ensured.

#### Data management, analysis and presentation

Data collected through questionnaire was serially numbered, coded and cleaned for errors by one person. The coding tree involved allotting numbers to responses to a particular question e.g. Yes= 1. No = 2, No response = 3 etc. Descriptive and

Chi-square statistics were done using Statistical Package for Social Sciences (SPSS) version 22 software at  $p < 0.05$ . The in-depth interviews sessions were transcribed and analyzed manually using thematic approach. The themes were identified based on general response to each question.

## Results

### Socio-demographic characteristics

The ages of the respondent ranged from 16 to 43 years with a mean of  $20.5 \pm 3.0$  years. Majority of the respondents (59.7%) were aged between 16 and 20 years. The majority (52.6%) were male and those in year one had higher number of participants (26.3%). Most of the respondents were Christians (85.3%). Yorubas as a tribe constituted the majority of the respondents (78.2%) and a majority (87.9%) were from monogamous families (Table 1). Demographic information, alongside answers to the questionnaire and interview as well as a coding guide, are available as *Underlying data*<sup>16,17</sup>.

### Knowledge of respondents on sexual entrapment

Generally, 58.8%, 39.1% and 2.1% had a good, fair and poor knowledge of sexual entrapment, respectively. Knowledge on different aspects of sexual entrapment indicated that 72.5% had good knowledge of the different modes or scenarios of sexual entrapment and 71.6% had good knowledge on the different tactics used for sexual entrapment. In relation to the causes, victims, perpetrator, experience and consequences of sexual entrapment, 54.0% had good knowledge (Table 2).

### Perception of respondents on sexual entrapment

Perception of sexual entrapment revealed that only 40.8% of participants perceived sexual entrapment as being serious in the society and campus community; 44.1% perceived some categories of persons as being susceptible to sexual entrapment and some factors to make individuals susceptible to sexual entrapment; 83.4% perceived sexual entrapment as being a threat to students on campus; 89.3% perceived sexual entrapment as being beneficial in satisfying sexual desires and 83.2% agreed to the suggested perceived ways of preventing sexual entrapment as presented in Table 3.

### Experience of sexual entrapment

Among the 422 respondents, 76 (18%) have experienced one form of sexual entrapment or another. Of the total respondents, 10.9% revealed that they were asked for sex in return for the help they had received. In determining the various tactics used for sexual entrapment, it was observed that more of the participants (42.1%) were lured through emotional support. In relation to determining the position/relationship of the perpetrators to the victims of sexual entrapment, the majority (59.2%) were entrapped by their friends, 22.4% by their classmates, 17.1% by a senior student, 5.3% by a religious fellowship member, 4% by a lecturer, 4% by non-academic staff and 9.2% by people outside the school environment including relatives and neighbors. 40.8% of the respondents' experienced sexual entrapment before coming to the university followed by 39.5% while in 100 level (Table 4).

**Table 1. Socio-demographic characteristics of respondents.**

Socio-demographics	Frequency	Percentage
<b>Age in Years</b>		
≤20	237	59.7
21–30	156	39.3
31–40	3	0.8
≥41	1	0.2
<b>Sex</b>		
Male	222	52.6
Female	200	47.4
<b>Level of study</b>		
100	111	26.3
200	97	23.0
300	66	15.6
400	94	22.3
500	41	9.7
600	13	3.1
<b>Religion</b>		
Islam	55	13.0
Christianity	360	85.3
Traditional	5	1.2
Atheist	2	0.5
<b>Ethnicity</b>		
Yoruba	330	78.2
Igbo	63	14.9
Hausa	1	0.2
Others*	28	6.7
<b>Family of Origin</b>		
Monogamy	371	87.9
Polygamy	38	9.0
Single parent	13	3.1

\*Other tribes: Edo (11), Efik (1), Ijaw (1), Gbagyi (1), Okrika (1), Urhobo (2), Tiv (1), Idoma (2), Epira (4), Igala (2), Edoborn (1) and Etulo (1).

### Outcome of sexual entrapment

Among the 76 respondents that experienced sexual entrapment, it resulted in sexual intercourse among 34%, 4% were raped, 13.2% acquired injury while trying to escape from being raped, 1.3% became pregnant, 4% discovered they had contracted an STD. The majority (66%) managed to escape from having sex with the perpetrator. A majority (52.6%) revealed that they lost trust in people, 44.7% were very angry, 38.2% felt embarrassed, 32.8% were afraid, 27.6% suffered psychological trauma and 19.7% lost their self-esteem (Table 5).

### Coping mechanism adopted after being sexually entrapped

Among the 76 participants, 46.1% avoided relationship with people, 26.3% later had a good relationship with the perpetrator, 44.7% talked to someone about it, 55.3% tried to forget about the incidence, 18.4% sought medical attention, 39.5% avoided activities for a while, 23.7% attempted suicide, 17.1% reported to the school authority, 36.8% resulted to risky sexual practices, 27.6% resulted to entrapping others and 22.4% eventually harmed the perpetrator as presented on Table 6. The majority (55.3%) possessed an effective coping mechanism after being sexually entrapped.

### Discussion

The result indicating that a good number of the respondents had a good knowledge of sexual entrapment (58.5%), a figure comparable to that observed in a study by Menon *et al.*<sup>15</sup>. This could be attributed to the fact that sexual entrapment occurs on campus and most people would have come across or heard about someone that had experienced it, even though most of them were not familiar with the term. The level of knowledge also influenced their perception ( $p < 0.05$ ) as majority (81%) of respondents had a good general perception towards sexual entrapment, perceiving it as being serious, seeing it as a threat within the campus community and considering everyone on campus to be at risk. This is because most of them disagreed that not only females can be entrapped within the campus. This is also in line with the study by Menon, *et al.*<sup>15</sup>.

This level of perception could be attributed to the fact that people see sexual entrapment as rampant within the campus, as there are several means, strategies and situation that can be used for sexually entrapping students ranging from distribution of phone numbers of females among some male students, using food

**Table 2. Knowledge on different aspects of Sexual entrapment (N=422).**

Knowledge	Level of knowledge		
	Good, n (%)	Fair, n (%)	Poor, n (%)
General knowledge of sexual entrapment	248 (58.8)	165 (39.1)	9 (2.1)
Definition, Modes/methods of sexual entrapment	306 (72.5)	89 (21.1)	27 (6.4)
Tactics used for entrapping students on campus	302 (71.6)	109 (25.8)	11 (2.6)
Causes, Victims, Perpetrators, Experience and Consequences of Sexual entrapment	228 (54.0)	185 (43.8)	9 (2.2)

**Table 3. Perception towards various aspects of sexual entrapment (N= 422).**

Perception	Perception level	
	Good, n (%)	Poor, n (%)
Perceived seriousness of sexual entrapment	172 (40.8)	250 (59.2)
Perceived susceptibility of certain categories of people to sexual entrapment and different factors that might make an individual susceptible to sexual entrapment	186 (44.1)	236 (55.9)
Perception of Sexual entrapment as a threat	352(83.4)	70(16.6)
Perception of Sexual entrapment as being beneficial	377(89.3)	45(10.7)
Perceived ways of preventing sexual entrapment	351(83.2)	71(16.8)
General perception on sexual entrapment	342(81.0)	80(19.0)

\*Multiple responses included

**Table 4. Experience of sexual entrapment (N=422).**

Experience of sexual entrapment	Frequency	Percentage
Ever experienced sexual entrapment	76	18.0
<b>Forms of sexual entrapment</b>		
I have ever been in a situation where someone asked me for sex in return for the help I had received	46	10.9
I was in a position where i couldn't say no to sexual advance	37	8.8
Someone deceived me into having sexual intercourse by pretending to be nice	27	6.4
My partner abandoned me immediately we had sexual intercourse because that was his goal unknown to me	18	4.3
Someone wanted to or had sex with me because he/she was in a position of helping me out of trouble	11	2.6
I was asked to offer sex because I could not pay up a debt	10	2.4
Someone deceived me into a sexual relationship after helping my spiritual life	7	1.7
<b>Tactics used for sexual entrapment</b>		
I was entrapped through help with emotional support	32	42.1
Money was used to entrap me	26	34.2
Material things/gift was used to entrap me	16	21.1
I was entrapped because i was indebt	9	11.8
I was entrapped through help with assignment	8	10.5
I was entrapped through help with Counseling	7	9.2
Accommodation was used to entrap me	6	7.9
I was entrapped through help with spiritual intercession	5	6.6
I was entrapped through help with registration	3	4.0
<b>Age of experience of sexual entrapment</b>		
18 years and below	52	68.4
Above 18 years	24	31.6

joints and canteens and the freedom of the opposite sexes to visit each other's rooms within the halls, among others. This finding, however, contradicts the statement that Nigeria as a society does not perceive the concept of harassment as evil or as a violation of human rights, as it is assumed that individuals have the right to express and satisfy themselves, which implies

that sexual entrapment is also considered a norm and not a big deal<sup>8</sup>.

According to Carina<sup>8</sup>, most Nigerian communities believe in male supremacy; thus, sexual entrapment may be perceived as an acceptable exercise of a male's prerogative over a female's

**Table 5. Outcome of sexual entrapment.**

Outcome of sexual entrapment	Frequency	Percentage
<b>Physical outcome</b>		
I managed to escape from having sexual intercourse with the person that sexually entrapped me.	50	66.0
I had unwanted sex with the person that sexually entrapped me	26	34.0
I acquired injury from trying to escape from being raped	10	13.2
I was raped by the person that sexually entrapped me	3	4.0
I contracted sexually transmitted infection(s)	3	4.0
I became pregnant	1	1.3
<b>Psychological outcome</b>		
I lost trust in people	40	52.6
I was angry	34	44.7
I felt embarrassed	29	38.2
I was always afraid	25	32.8
I suffered from psychological trauma	21	27.6
I lost my self-esteem	15	19.7

**Table 6. Coping mechanism adopted after being sexually entrapped.**

Coping with sexual entrapment	Frequency	Percentage
I tried to forget the incidence*	42	55.3
I avoided relationship with people	35	46.1
I talked to someone about it*	34	44.7
I avoided activities for a while	30	39.5
I resulted to risky sexual practices	28	36.8
I resulted to entrapping others	21	27.6
I Had a good relationship with the person that sexually entrapped me	20	26.3
I attempted suicide	18	23.7
I eventually harmed the perpetrator	17	22.4
I went to a health centre for medical checkup*	14	18.4
I reported to the school authority*	13	17.1

\*Positive responses

sexuality. This is, however, not in line with the present study, as a majority (81.5%) disagreed with manliness being a privilege or advantage for sexually entrapping females. This finding can be explained by the fact that the target population has acquired some level of education that has influenced their perception, maybe as a result of exposure to different media and circumstances where different forms of sexuality have been explained. They may also have witnessed or experienced sexual entrapment. Their level of education may have also influenced their perception to the fact that both males and females should have equal rights.

Even with the high levels of good perception observed in this study, some students considered sexual entrapment within the campus community as a norm and an event that should be expected within the campus. This finding was supported by a study that revealed that students perceive entrapping other students sexually to be a way of having fun, and just one of school's escapades, while some perceive that the victims also wanted sexual attention and are responsible for being entrapped<sup>18</sup>. This may be because the campus is seen as an environment that enables perpetration of such activities as a result of an absence of laws against it on campus and a lack of punitive measures

within the campus. According to Okoro and Osawemen<sup>19</sup>, many of them believed that sexual harassment generally was a norm in society, as they see their society as being unsafe, hostile and intimidating, and may alter their own behaviour in an attempt to decrease their sense of vulnerability and were of the view that the prevalence of sexual harassment may have resulted from sexual entrapment in the societies.

The prevalence of sexual entrapment amongst 18% of the participants (n=76), affecting 42 males and 34 females indicates that sexual entrapment is common among undergraduates of the University of Ibadan, although this result cannot be directly compared to any study conducted on sexual entrapment as this area has not been researched on independently, but have been incorporated as a means of sexual harassment (i.e. sexual entrapment has not been researched on as a single entity but has been indirectly identified as a means of sexual harassment in studies). In this regard, the prevalence is lower than that of a study conducted among undergraduate students in Udipi district, which revealed that enticing persons through gifts and rendering of help and services (which is a form of sexual entrapment constituted 45.5% of the various means to sexual harassment among the students<sup>20</sup>. Sexual entrapment was observed to be higher in males than females, although this was not statistically significant ( $p>0.05$ ). This finding contradicts most of the studies on sexuality generally, as it is expected that females are usually more affected than males as they are seen as vulnerable and the fact that culture has placed females on the receiving end of sexual advances, as it is believed that males are meant to approach females<sup>9</sup>. However, this finding is similar to a study conducted among university students in Kenya, which revealed that more males were sexually harassed than females<sup>20</sup>. The possible explanation for this finding could be attributed to the fact that times are changing and both males and females have sexual needs to meet, although the female perpetrators often use non-verbal cues like seduction after rendering help.

Asking for sex in return for help rendered especially emotional support was the mostly used tactics for sexually entrapping others on campus. This is supported by Reid *et al.*<sup>3</sup> that propounded coercive and controlling techniques used for sexual entrapment where independence and trust is built first by the perpetrator. This could be explained by the fact that a majority of the victims are young people who are often faced with one emotional/psychological problem after the other, including pressures in their relationships and academic and family life, and may need someone to talk to or confide in.

This study observed that victims were mainly sexually entrapped by their friends, classmates, senior students, fellowship member, lecturers and non-academic staff, people outside the university environment, such as relatives, neighbors, etc. This finding conforms to that of a study that revealed perpetrators are mostly male friends, partners, teachers and peers<sup>21</sup>. The higher prevalence of sexual entrapment by friends can still be attributed to the fact that perpetrators try to gain the trust and love of their victims and become friends before opening up on their intentions<sup>3</sup>. It was observed that the prevalence decreased with seniority of class, as a majority experienced it during their

first year. Among tertiary institution students, attention has been paid to the “red zone”, (i.e. when students are new on campus) during which students are at perceived risk of experiencing sexual assault or entrapment. Evidence has been established that the start of school for first year students is the most risky time for students to be prone to sexual assault and entrapment, as they are new on campus and may need help to adapt to the school environment, and most of them are young and naïve<sup>22</sup>. This finding is also in line with a study by Cranny, 2014<sup>12</sup>.

The study revealed that most of the victims of sexual entrapment were entrapped by the opposite sex, while few males were entrapped by the same sex and one person was entrapped by both the same and opposite sex. Our finding, that the same-sex form of sexual entrapment is more prevalent among males, is comparable to a study where one-quarter of males admitted harassing male students, compared to one-tenth of female students’ harassed female students in a nationally representative survey of undergraduate college students<sup>18</sup>; i.e. males sexually entrap themselves more than females insinuating intended action of homosexuality on campus.

The findings of this study revealed that unwanted sexual intercourse with the perpetrator was the most frequently experienced negative outcome of being sexually entrapped, followed by acquiring injury while trying to escape from having sex with the perpetrator, rape, pregnancy after having sexual intercourse with the perpetrator and contracting STDs. This findings conforms to the report by Maharaj<sup>23</sup> highlighting the short/intermediate-term consequences of sexual entrapment in the form of unwanted touch, unwanted kiss, unwanted sexual intercourse, rape, etc.<sup>24,25</sup>. It resulted in sexual intercourse more in males than females because some of the males may be overtaken by emotion and seize the opportunity to explore and have sexual intercourse, since they may feel they have nothing to lose. The females on the other side are more at risk for the resulting consequences, and hence will try to fight to avoid any form of sexual intercourse, thereby resulting to high prevalence of escape from having sex with the perpetrator in females than males.

In exploring the various ways in which victims of sexual entrapment tried to cope and deal with the experience and the various actions taken aftermath, 55.3% of victims adopted an effective coping mechanism, such as talking to someone about it, going to the health center for a medical checkup and reporting the incident to a school authority, while the rest adopted ineffective coping mechanisms, such as avoiding relationship with people, avoiding activities, attempting suicide, resulting to sexual risky practices, resulting to sexually entrapping others and harming the perpetrator. This finding relates to the modes of reactions established by Michele *et al.*<sup>26</sup>, which include advocacy/help seeking, social coping (i.e. seeking support from friends), avoidance/denial (i.e. trying to ignore what happened) and confrontation/negotiation (i.e. trying to deal directly with the perpetrator).

## Conclusion and recommendations

Sexual entrapment is common among undergraduate students of the University of Ibadan surveyed, and affects both male and



female. Younger and first year students are most affected. Young people should be mindful of the kind of friends they keep and parents should establish a good relationship and always educate their children starting from a younger age to be able to detect exploitative relationships.

## Data availability

### Underlying data

Harvard Dataverse: Knowledge, perception and experience of Sexual entrapment among Undergraduate Students of the University of Ibadan, Nigeria. <https://doi.org/10.7910/DVN/7XXADC><sup>16</sup>.

Sule *et al.* data file.tab contains answers to each question from each participant.

Harvard Dataverse: Knowledge, perception and experience of sexual entrapment among undergraduate students of the University of Ibadan. <https://doi.org/10.7910/DVN/L2S1R2><sup>17</sup>.

Coding guide for Knowledge, perception and experience of sexual entrapment among undergraduate students of the University of Ibadan.docx contains a coding guide for the above dataset.

## Extended data

Harvard Dataverse: Knowledge, perception and experience of Sexual entrapment among Undergraduate Students of the University of Ibadan, Nigeria. <https://doi.org/10.7910/DVN/7XXADC><sup>16</sup>.

Questionnaire and IDI guide.docx contains the questionnaire and interview guide used in this study.

Data are available under the terms of the [Creative Commons Zero](https://creativecommons.org/licenses/by/4.0/) “No rights reserved” data waiver (CC0 1.0 Public domain dedication).

## Grant information

Publication of this study was supported by the Bill & Melinda Gates Foundation [OPP1181398].

*The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.*

## Acknowledgements

We are grateful to all the respondents for consenting to participate in the study.

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## Open Peer Review

Current Peer Review Status:   

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### Version 1

Reviewer Report 15 March 2022

<https://doi.org/10.21956/gatesopenres.14059.r31790>

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**Laila Rahman** 

University of Western Ontario, London, ON, Canada

#### **General comments:**

This article took me to an interesting path to understand the phenomenon of sexual entrapment among the undergraduate students in a Nigerian university. Based on a cross-sectional survey conducted among the undergraduates, the authors presented the prevalence of sexual entrapment among the students, the consequences they faced, and the coping mechanisms they employed. This research has generated questions for future research and contributed to the scholarship on sexual entrapment.

However, in navigating this article, I stumbled upon several times with a few concerns and questions that need clarification. Addressing these questions might improve the transparency and rigor of this interesting work.

#### **Specific comments:**

##### ***Piquing readers' interest:***

The Introduction section of any research article has to do the heavy lifting of piquing readers' interest by responding to their implicit question: why should the readers care for this particular research?

I am afraid that this article's introduction and abstract's background sections fell short in answering this question. The abstract had a good start as it informed readers that students in tertiary institutes commonly experience sexual entrapment which has severe consequences for them. Then, without highlighting the gap in the literature or value for their research, the authors presented the research aim that would apparently produce information already known to them. It would have been helpful if they had articulated the connection that bridges the research problem with the research aim. For example, it would have been helpful to read statements along the following lines:

"...Sexual entrapment, growing out of the sexual trafficking literature, has not been explicitly

studied among the university students. Examining sexual entrapment might help understand this specific phenomenon and facilitate students and universities to reduce student sexual exploitation in the future. Therefore, this study aims to..."

Curiously, the authors started the introduction section with a definition of entrapment and ended with the consequences of sexual entrapment for students. Before delving into the methods section, readers need to be persuaded about the aims and value of this research. For this, they need to know the research problem (i.e., sexual entrapment) for the relevant population group (i.e., undergraduates) in a particular research setting (i.e., a Nigerian university) in order to be convinced that this problem can be (at least partially) remedied by taking up this research project.

The authors have touched on some of these issues but left out others to readers' imagination. They, for example, did not point out what was not known about this problem that needed to be known (by way of exploring the knowledge, perception, and experiences of sexual entrapment among the undergraduates). And how taking up this research could address the problem of sexual entrapment faced by students.

Starting off the introduction section with texts similar to the abstract's background section and ending with research aims/questions and the significance of this research might be helpful. Clarifying the value in invoking the concept of sexual entrapment rather than sexual harassment might also help readers to fully appreciate this innovative research.

### ***Conveying the meandering methods***

Clearly conveying the methods, especially when it is meandering and complex, is always a challenge. However, as readers need to understand the methods to value the findings of any research initiative, clearly describing the methods is important.

I am afraid that the sampling procedure, especially the four-stage sampling technique, was not at all clear. The authors might present a figure on sample selection that will start with the sample universe and end with the final selection of the sample. Specifying the numbers of non-responses and missing cases is also important to fully appreciate this study.

Before presenting the validity and reliability of the study measure (by the way, what measure? Sexual entrapment measure?), the authors also need to provide a description of outcome and explanatory variables in a sub-section on Variables. Merely providing the questionnaire and code as supplementary materials does not replace the need for this information.

While some information was left out, providing others such as the procedures of qualitative in-depth interviews without presenting their findings was misleading. I expected to read insights gained from these interviews, but they were not included in this article, right? Therefore, consider removing information about in-depth interviews from the abstract, and how they were analyzed from the methods section.

### ***Ethics in researching violence and traumatic experiences***

As recounting traumatic experiences may cause further discomfort and trauma, the readers need to know if the participants were provided with information on support services if they needed help

to deal with such discomfort and trauma.

### ***Presenting atypical findings***

This study findings indicated that more men compared to their women counterparts had experienced sexual entrapment, although this difference, according to the authors, were not statistically significant. Given that sexual entrapment occurs between the opposite and within the same sex individuals, it would be better if the authors could provide further information, especially the prevalence rates across at least four categories of sexual entrapment: (a) men to women, (b) men to men, (c) women to men, and (d) women to women.

### ***Doing research towards changing social structures and processes***

The Discussion section needs to discuss the implications of this research for future research, policy, and intervention programs. As transformative research projects aim to change social structures and processes, the authors need to discuss what structures and processes in the universities and societies are conducive to sexual entrapment and how they might be disrupted to stop sexual exploitation against students in the future.

### ***Reporting statistics with uncertainty***

To acknowledge the uncertainty in statistical methods, the authors might present the 95% confidence intervals of different point estimates; and they should report the missing cases of age category in Table 1. The authors should avoid presenting the significance level at  $p < 0.05$  without an accompanying statistical estimate. All tables should have a note on the name, date, and sample size of the survey. All multiple responses should be identified in tables (e.g., forms of sexual entrapment in Table 4, physical and psychological outcomes in Table 5). As the difference between forms and tactics of sexual entrapment in Table 4 felt conflated, the authors might clarify their differences or present tactics only in texts or in a separate figure. In Table 6, instead of using asterisks (\*), positive and negative coping mechanisms should be presented under separate categories similar to Table 5's physical and psychological outcomes.

### ***Playing the language game***

Playing the language game well, among other things, is required to increase the uptake of any research. The authors need to closely read and re-read their article to edit the text. A few examples of such edits (purely for demonstration) are given below. The authors are advised to take help from a professional copy-editor to edit the full article, if possible.

#### *Example 1.*

Original text: "Deceit into sexual activities without the victim being aware of the intended action is common in tertiary institutions..."

Edited text: "Getting deceived into sexual activities is common in tertiary institutions."

Explanation: The phrase, without the victim being aware of the intended action, is redundant as this idea is implied in the word 'deceive.'

*Example 2.*

Original text: "This multi-stage cross-sectional survey involved 422 participants using semi-structured questionnaire and an in-depth interview guide."

Edited text: "This multi-stage cross-sectional survey involved 422 participants using semi-structured questionnaire and 76 participants using an in-depth interview guide."

Explanation: Follow the parallelism in sentence construction.

*Example 3.*

Original text: "Students were entrapped on campus through; emotional support,..."

Edited text: "Students were entrapped on campus through emotional support,..."

Explanation: A semi-colon is not appropriate to present a list of items.

*Example 4.*

Original text: "There was a significant association between knowledge and perception; knowledge and experience; perception and experience ( $p < 0.05$ )."

Edited text: "Sexual entrapment knowledge was associated with sexual entrapment perception (chi-squared (degrees of freedom?,  $N =$  sample size?) = ?,  $p = ?$ ) and experience (chi-squared (degrees of freedom?,  $N =$  sample size?) = ?,  $p = ?$ ). Perception was also associated with experience (not shown)."

Explanation: Using semi-colons instead of commas to separate a simple list of items is not appropriate. Statistical results need to be presented with evidence. P-values should not be presented without the associated estimates such as correlation, chi-squared or regression coefficient values.

*Example 5.*

Original text: "The university environment provides many opportunities for sexual activity, and first-year students, many of whom are classified as young people, are the most vulnerable to sexual entrapment due to their lack of experience to make good, risk-aware decisions about sexual liaisons as they are new on campus, there are many persons that may offer to help them through many activities and needs, such as the screening process, admission procedures, registration process, feeding, assignments and accommodation, among other things."

Edited text: "The university environment provides many opportunities for sexual activity, and first-year students, many of whom are young people, are most vulnerable to sexual entrapment (Ref?). They fall into these traps, as they lack experience to make risk-averse decisions about sexual liaisons with people who offer them help. For being new on campus, they need support in going through the screening, admission, and registration processes, planning for eating and accommodation, and completing assignments among other things (Ref?). When people offer them help with an ulterior motive, they might fall into their traps of sexual exploitation."

Explanation: The original text is one big, run-on sentence, expressing at least five ideas without appropriate use of connecting words. The authors might have wanted to avoid repeating the same reference. However, an ambiguous sentence that slows down readers is more problematic than a repeated reference.

*Example 6.*

Original text: "...and one-third of first year (41%) have been sexually entrapped and harassed by their peers."

Problems: One-third does not represent 41%, two-fifths does. And who is the subject in this clause? One-third of first year students? Please clarify.

***Weaving a credible web of references***

In-text citations and references help authors to tell a story that is credible. This article has met with a few in-text citation and reference related problems. These include: (a) not providing a reference when it is warranted, (b) citing a reference for a claim that was not supported by the cited reference, (c) providing somewhat vague references in the reference list. Examples of these concerns are provided below.

(a) What is the reference for the first sentence of this article that depicted 'entrapment'? As this information is not required for readers to get into the weeds of sexual entrapment, the authors might consider getting rid of this sentence. Also, what is the "relevant literature" under the validity and reliability of instrument section?

(b) Reference no. 20 does not support the claim that the authors stated in page 8. This is because this study was conducted in India, not in Kenya; and it examined the levels of students' knowledge, not their sexual harassment experiences.

Please do check all references closely to present them accurately.

(c) What is the difference between reference numbers 16 and 17? They appear to be the same except for their hyperlinks. In these references, to clear the ambiguity, the authors might introduce a sub-title, indicating their content such as questionnaire, in-depth guideline, code, or data set, as appropriate.

**Is the work clearly and accurately presented and does it cite the current literature?**

Partly

**Is the study design appropriate and is the work technically sound?**

Yes

**Are sufficient details of methods and analysis provided to allow replication by others?**

Partly

**If applicable, is the statistical analysis and its interpretation appropriate?**

Partly

**Are all the source data underlying the results available to ensure full reproducibility?**

Yes

**Are the conclusions drawn adequately supported by the results?**

Partly

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Gender-based violence, adolescent sexual and reproductive health, and maternal health using quantitative and qualitative research methods with the lenses of feminist and intersectionality theories.

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.**

Reviewer Report 07 March 2022

<https://doi.org/10.21956/gatesopenres.14059.r31792>

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**Andreas Witt**

University of Ulm, Ulm, Germany

Generally, the manuscript is well written and informative. The methods seem sound.

Introduction:

The introduction reads well and includes information about what sexual entrapment is and a rationale for how first year students are vulnerable. What I am missing is information about the magnitude of the problem, probably in comparison to international data and more importantly a clear scope or aim of the present research. Also, while sexual entrapment might be the broader focus of the present manuscript, there are many parallels to the sexual abuse and sexual harassment literature that should be considered in the introduction as well as in the discussion section.

Methods:

The authors offer a lot of information on the University, which seems less important for the current study, but do not provide important information such as:

1. You asked about psychological trauma; did you offer some type of support to participants?
2. Sampling procedure: how were the (potential) participants approached? How many were



eligible? How many declined? How representative is the sample? How many participated in the quantitative study? Who conducted the interviews? Were the interviews transcribed? Who conducted the thematic analyses of the interviews? Were there independent raters?

3. Instruments used: It would be nice for the reader to have a description of the instrument used in the text. What were the variables and how were the psychometrics? The authors report that the instrument showed “a reliability coefficient of 0.97”, but I doubt that the instrument is only one scale. There are several themes explored with the instrument. Additionally, the knowledge questions about sexual entrapment seem a little suggestive.

4. You report that Chi-square statistics were done, but there are no results reported in the manuscript, but then referred to in the discussion section.

Results:

1. How was “good”, “fair” and “poor” knowledge operationalized? Such information should be included in the methods section.
2. “40.8% of the respondents’ experienced sexual entrapment before coming to the university followed by 39.5% while in 100 level” is unclear to me.

Discussion:

1. The discussion should include a section about the limitations of the study. While there are many strengths, there are a couple of limitations (e.g. social desirability in answers, etc.).
2. In my opinion the discussion should not only discuss whether the findings are in line with other studies, but also how they can and should be used to for example design prevention strategies or to offer support for victims.

**Is the work clearly and accurately presented and does it cite the current literature?**

Partly

**Is the study design appropriate and is the work technically sound?**

Yes

**Are sufficient details of methods and analysis provided to allow replication by others?**

Partly

**If applicable, is the statistical analysis and its interpretation appropriate?**

Yes

**Are all the source data underlying the results available to ensure full reproducibility?**

Partly

**Are the conclusions drawn adequately supported by the results?**

Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Trauma, child maltreatment, interventions, out of home placement

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

Reviewer Report 22 August 2019

<https://doi.org/10.21956/gatesopenres.14059.r27587>

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**Caleb Adegbenro** 

Department of Community Health, College of Health Sciences, Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria

The following are my comments:

- 1) "Sexually Transmitted Diseases (STDs)" should be changed to "Sexually Transmitted Infections (STIs)" so as to conform with the current trend globally.
- 2) Under Study setting:
  - Line 8 from the top, the word "called" University of Ibadan in 1962 should be replaced by "changed" to University of Ibadan in 1962.
  - Line 4 from the bottom, the whole sentence, "The University has several social facilities that that can aid as a medium to sexually entrap on campus..." should be changed to "The University has several social facilities that can serve as a medium to sexual entrapment on campus..."
- 3) Under Sampling procedure:
  - These sections should be arranged by putting Sample size Determination first.
  - Leslie Kish's formula was not referenced both in the body of your write up and in the full referencing.
  - The word "respondents," should be written as "Respondents'" i.e. putting an apostrophe at end of "s".
- 4) Data management, analysis and presentation:
  - There was no information on the criteria for classifying "Knowledge" into either, "poor" or "fair" or "good" knowledge. Also, the criteria for classifying "Perception" into either "Negative" or "Positive" perception.
- 5) Results:
  - Under Table 3: The level of "Perception" should either be "Negative" or "Positive" perception

and NOT "Good" or "Poor" perception.

General comment: You should be consistent on the use of "Respondents" and "Study Participants". You should stick to only one of the two.

**Is the work clearly and accurately presented and does it cite the current literature?**

Yes

**Is the study design appropriate and is the work technically sound?**

Yes

**Are sufficient details of methods and analysis provided to allow replication by others?**

Yes

**If applicable, is the statistical analysis and its interpretation appropriate?**

Yes

**Are all the source data underlying the results available to ensure full reproducibility?**

Yes

**Are the conclusions drawn adequately supported by the results?**

Yes

***Competing Interests:*** No competing interests were disclosed.

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

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