



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Suicidal Ideation and Suicide Attempts Among University Students: Prevalence and What Stopped them to Actually Committing Suicide

Lee Jun Choi, Ahmad Sofian Shminan, Mohamad Hardyman Barawi, Rehman Ullah Khan, Mohan A/L Rathakrishnan, Lee Jun Choi

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v11-i14/8572>

DOI:10.6007/IJARBSS/v11-i14/8572

**Received:** 28 November 2020, **Revised:** 26 December 2020, **Accepted:** 13 January 2021

**Published Online:** 29 January 2021

**In-Text Citation:** (Choi et al., 2021)

**To Cite this Article:** Choi, L. J., Shminan, A. S., Barawi, M. H., Khan, R. U., Rathakrishnan, M. A., & Choi, L. J. (2021). Suicidal Ideation and Suicide Attempts Among University Students: Prevalence and What Stopped them to Actually Committing Suicide. *International Journal of Academic Research in Business and Social Sciences*, 11(14), 256–269.

**Copyright:** © 2021 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen

at: <http://creativecommons.org/licenses/by/4.0/legalcode>

**Special Issue: Contemporary Business and Humanities Landscape Towards Sustainability, 2021, Pg. 256 – 269**

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Suicidal Ideation and Suicide Attempts Among University Students: Prevalence and What Stopped them to Actually Committing Suicide

Lee Jun Choi<sup>1</sup>, Ahmad Sofian Shminan<sup>1</sup>, Mohamad Hardyman  
Barawi<sup>1</sup>, Rehman Ullah Khan<sup>1</sup>, Mohan A/L Rathakrishnan<sup>2</sup>

<sup>1</sup>Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia, <sup>2</sup>Universiti Utara  
Malaysia, 06010 UUM Sintok, Kedah Darul Aman, Malaysia

Lee Jun Choi

Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak, 94300 Kota  
Samarahan, Sarawak, Malaysia.

Email: cljun@unimas.my

### Abstract

Even though university students realize that their journey is challenging and sometimes suffering, they kind of have to endure whatever it is, in order to get a better life or position in the society. Like it or not, university students may expose themselves to tiring and stressful situations which eventually may affect their emotional or psychological states which may lead them to the idea of taking their own life or commit suicide. The purposes of the present study were to examine the prevalence of suicidal ideation and suicide attempts among university students aged between 22 and 32 years. Using a simple random sampling technique, a total of 3879 (52.4% female) university students from two Malaysian public universities was surveyed by means of a self-reported questionnaire. In this study, 22.1% students reported to have suicidal ideation and 1.6% students reported to have almost committed suicide, but stopped doing it, of whom 43 also participated in an interview. Those who agreed to participate in the interview were also the one who fell in the Suicidal Ideating Student (SIS) category, and they also admitted to have almost committed suicide before. All the data collected were analysed using descriptive and inferential statistics. Based on the finding of the present study, major, gender, race, and accommodation had no impact on suicidal ideation among university students for the past twelve months. Based on the semi-structured interview with those students who nearly committed suicide, but stopped their attempts, there were five common reasons revealed in the present study.

**Keywords:** Suicidal Ideation, Suicide Attempts, University Students, Prevalence.

## Introduction

Being accepted to further their study at a university level is like a dream came through for most of the university students, despite the fact that studying in a university means additional responsibilities and pressure to succeed. In order to graduate, university students will have to do or involve in assignments, projects, small research, continuous assessments, written exams, attending classes, outdoor activities (extra co-curricular), group meetings, etc. Even though they realize that the journey is challenging and sometimes suffering, university student's kind of have to endure whatever it is, in order to get a better life or position in the society. Like it or not, university students may expose themselves to tiring and stressful situations which eventually may affect their emotional or psychological states (Tosevski et al., 2010) and lead them to the idea of taking their own life or commit suicide. According to the World Health Organization (WHO), suicide among youth is quite high and ranked as the third causes of death (WHO, 2010). Some people might think or assumed that those who have suicidal ideation, could be just having temporary suicidal ideation and they probably are not actually going to commit suicide. Their assumption could be right or could be wrong. But whatever it is, by having suicidal ideation means that the risk is there already and it is something that is worth to be taken into account. Suicidal ideation is a fundamental element which can eventually lead to suicide attempt as well as suicide completion (Thompson, Dewa & Phare, 2012). As suicidal ideation tends to be common in a university setting (Curran et al., 2009; Turecki & Brent, 2016) hence, it is important to look at the development of suicidal ideation and suicide attempts among students at university level. Therefore, the objective of the present study is to investigate the self-reported prevalence of suicidal ideation, suicide attempts and what actually stops the students when they were nearly committed suicide, in the previous twelve months.

## Methodology

### *Participants*

3879 university students (undergraduate and postgraduate) from two Malaysian public universities responded to a questionnaire of whom 43 students were also participated in an interview. These students, which consisted of 52.4% (2033) female students while 47.6% (1846) male students, enrolled in various science major programs and social science major programs. They were about 45.7% (1773) university students from science major programs such as Agriculture, Civil Engineering, Computer Engineering, Nursing, Mechanical Engineering, Doctor of Medicine, Resource Chemistry, Resource Biotechnology, Plan Resource Science, and Aquatic Resource Science took part in the study as science major representatives. Social science major programs (Art Management, Drama & Theater, Counselling, Psychology, Human Resource Development, Anthropology & Sociology, Social Work Studies, Business Economics, Creative Industry Management, Banking & Finance) represented by 54.3% (2106) students. All the participants were randomly selected from each program. The participants age ranged from 23 to 32 years old and they were all Malaysian. During the academic year 43.6 % of the students stayed in student hostels at respective university, 36.4 % stayed outside (renting a house or a room) with coursemates, 17.3% stayed alone (renting a room), 2.7% stayed with their families.

### *Instruments*

In order to collect the data, a survey questionnaire which consisted of 3 sections was used. In the first section, participants need to fill in their basic demographic information (their major or program they are taking, gender, age, race, and place they stay) and state their willingness to participate in the study by ticking either 'Yes' or 'No'. The second section focused on questions regarding student's suicidal ideation status, known as The Suicidal Ideation Questionnaire (SIQ). SIQ has been developed by Reynolds in 1988 and revised by Ferreira and Castela in 1999. This questionnaire was validated on a sample of Malaysian public university students with a Cronbach's alpha value at 0.85, and the item-total correlations varied from .42 up to .87 (M=0.67). The SIQ contains questions that evaluate thoughts related to death, desires and plans to commit suicide. A 6-point Likert scale ranging from 0 = never; 1 = almost never; 3 = sometimes, 4 = frequently; 5 = almost always; and 6 = always. For the present study, the SIQ was used to measure suicidal ideation of university students for the past twelve months. Any student that accumulated score equal or above 41 points will be considered as having the potential of harming themselves or taking their own life and considered as having psychopathology (Mazza & Reynolds, 2001), and put under Suicidal Ideating Students (SIS) category. In the third section, participants need to state by ticking 'Yes' or 'No' whether they had ever tried to commit suicide, but stopped or cancelled their intention. For those participants who ticked 'Yes', they were also asked whether they are willing to participate in a short interview (face to face or through a cell phone) by ticking 'Yes' to state their agreement. They also need to write down either their contact number or their email address, so that the researchers can get in touch with them. A semistructured questionnaire was used for the interview sessions in order to know in-depth students' experience, especially from students who tried to commit suicide, but stopped or cancelled their intention.

### *Procedures*

After authorization and ethical approval to carry out the study was granted from respective universities, classes were randomly selected from Social Science major programs and Science major programs of different faculties. All the respective lecturers were contacted and permissions were granted from them before the data collections processes were actually carried out in the class. The respondents completed the survey questionnaire in class (15 minutes) right after the researchers explained to them the ethical concerns related to confidentiality as well as their willingness to take part in the study thoughtfully and honestly.

After collecting data through a questionnaire, semi-structured interview sessions were conducted in the second phase of data collection. Only those who agreed to be interviewed took part in the 15-to-20-minute interview session, depending on availability and convenience of the interviewees. The place for the interview sessions (face to face) was in the authors' office for the conveniences and ease of the participants. All interview sessions were audio-taped using a cell phone with permission from the participants and after that transcribed for further analysis.

## **Results**

### *Quantitative Results*

#### *The Prevalence of Suicidal Ideation and Suicide Attempts during the Previous 12*

## A Months

Based on the finding of this study, out of 3879 who had responded to the questionnaire, there were 22.1% (n=857) of students had suicidal ideation in the past year. The result indicated that there was a significant difference between Science major students and Social Science major students in terms of having suicidal ideation in the past year  $t(3877) = 4.87$ . It was also found that Science major students had significantly higher number (n = 469) of students with suicidal ideation in the previous twelve months, compared to Social Science students (n=388). In addition, students who almost or attempted to commit suicide, but suddenly changed their mind was declared by 1.6% of the surveyed students. Among them, 10% were Science major students and 0.6% were Social Science students. Looking at the field separately, the majority of students having suicidal ideation from Social Science major are those enrolled in the Corporate Management program. On the other hand, the majority of Science major students having suicidal ideation as well as attempted suicide, were those enrolled in the Doctor of Medicine program. Sample from Anthropology & Sociology under Social science major has the highest number of students who almost or attempted to commit suicide, but suddenly changed their mind (Table 1)

Prevalence of suicidal ideation was higher among female (14.9%) when compared to male (7.2%) students (Table 2). Looking at the analysis of this study, it seemed that students who almost or attempted to commit suicide, but suddenly changed their mind, were reported by three times more female students (47) than male students (16) (Table 1).

In terms of race, prevalence of suicidal ideation was high among Malay students (7.8%) when compared to Chinese students (5.9%), Indian (4.5%), and Others (3.8%). Those who stayed outside campus and renting a room or a house seemed to have a high number of students having suicidal ideation (11.3%) compared to those who stayed in university's hostel (8.6%) and those who stayed with their family (2.2%) (Table 2)

*Table 1: Prevalence of Suicidal Ideation and Suicide Attempts during the past 12 Months  
a a Among University Students  
(N=3879)*

---

Variables a a a a a a a NSIS a a a SIS a a Nearly Commit Suicide  
a a a a a a a a a n (%) a a n (%) a a a n(Gender) a

---

### **Social Science Major a a a**

aArt Management a a a a 163(4.2%) a 31(0.8%) a a 4 (F=2, M=2)  
aDrama & Theater a a a a 178(4.6%) a 35(0.9%) a a 3 (F=2, M=1)  
aCounselling a a a a a 256(6.6%) a 16(0.4%) a a 2 (F=2, M=0)  
aPsychology a a a a a 151(3.9%) a 11(0.3%) a a 1(F=1, M=0)  
aHuman Resource a a a a 136(3.5%) a 19(0.5%) a a 2(F=2, M=0)  
Anthropology & Sociology, a a 132(3.4%) a 35(0.9%) a a 5(F=2, M=3)  
Social Work Studies, a a a 170(4.4%) a 27(0.7%) a a 0(F=0, M=0)  
Corporate Management, a a a 256(6.6%) a 120(2.7%) a a 3(F=3, M=0)  
Business Economics, a a a 163(4.2%) a 47(1.2%) a a 3(F=2, M=1)  
Creative Industry Management, a 136(3.5%) a 47(1.2%) a a 1(F=1, M=0)

### **Science Major**

Agriculture a a a a a 151(3.9%) a 50(1.3%) a a 1(F=1, M=0)



Civil Engineering a a a a 192(4.9%) a 11(0.3%) a a 5( $F=4$ ,  $M=1$ )  
 Computer Engineering a a a a 170(4.4%) a 66(1.7%) a a 6( $F=3$ ,  $M=3$ )  
 Nursing a a a a a 136(3.5%) a 62(1.6%) a a 6( $F=6$ ,  $M=0$ )  
 Mechanical Engineering a a a 93(2.4%) a 70(1.8%) a a 3( $F=2$ ,  $M=1$ )  
 Doctor of Medicine a a a a 105(2.7%) a 93(2.4%) a a 11( $F=8$ ,  $M=3$ )  
 Resource Chemistry, a a a a 123(3.2%) a 43(1.1%) a a 3( $F=2$ ,  $M=1$ )  
 Resource Biotechnology a a a 109(2.8%) a 8(0.2%) a a 1( $F=1$ ,  $M=0$ )  
 Plan Resource Science a a a a 93(2.4%) a 39(1.0%) a a 1( $F=1$ ,  $M=0$ )  
 Aquatic Resource Science a a a 109(2.8%) a 27(0.7%) a a 2( $F=2$ ,  $M=0$ )

*NSIS – Non-Suicidal Ideating Students, SIS – Suicidal Ideating Students,*

Even though there is a difference in terms of the percentage of those who fell in the SIS category between major, gender, race, and accommodation, the chi-square analysis revealed that there is no significant relationship between these variables and suicidal ideation (Table 2). In other words, major, gender, race, and accommodation have no impact on suicidal ideation among university students for the past twelve months.

*Table 2: Prevalence of Suicidal Ideation by Demographic (N=3879)*

Variables a a a a a SIS a a a Pearson Chi-Square a a a Sig.  
 a a a a a a a n(%)

#### Major

Social Science a a a 388 (10.0) a a a a 2.782 a a a .179  
 Science a a a a 469 (12.1)

#### Gender

aMale a a a a a 279 (7.2) a a a a 3.119 a a a .213  
 aFemale a a a a a 578 (14.9)

#### Race a a a a

Malay a a a a a 303(7.8) a a a a 3.211 a a a .241  
 Chinese a a a a a 230(5.9)  
 Indian a a a a a 175(4.5)  
 Others a a a a a 149(3.8)

#### Accommodation

Hostel a a a a a 332(8.6) a a a a 2.157 a a a .153  
 Renting a room/house a 437(11.3)  
 Family a a a a a 88(2.2)

Note : SIS – Suicidal Ideating Students

### *Qualitative Results*

Initially, there were 52 students agreed to take part in the semi-structured interview session, but 9 students did not turn up or answering their cell phone when they were contacted by the author. All together, there were 43 participants took part in the semi-structured interview sessions and were interviewed personally by the first author and the other authors at their respective universities, either face to face (17 students) or through a cell phone (26 students). Non face to face interviews were carried out through a cell phone because some participants felt a little bit uncomfortable talking face to face with the interviewer about their personal experiences related to suicidal attempts. The main reason why the interviews were carried out by all the five authors was because of the time constraint. Both the interviewers and students were actually quite busy with other commitments such as attending classes, doing their assignments, etc. Sometimes, the authors need to rearrange some of the interview sessions (face to face or non face to face) due to some circumstances that cannot be avoided. Whatever the obstacles, we were grateful and thankful that the interview sessions have been carried smoothly and all the participants involved were really supportive. The objective of the interview was to reveal what actually stop the students when they were nearly or almost taking their own life especially when they were so determined to do it. All the conversations during the interviews were audio-taped using a smartphone and then fully transcribed by all the authors. Thematic analysis was used to interpret the data. The data (coded and re-coded) were reviewed and revised in order to ensure that the particular categories or theme, in this case, factor, that the authors identified were representative of the interview data. All together, there are five factors that actually stopped the students from taking their own life especially when they were so determined to do it; (i) support and help from a professional, (ii) self awareness, (iii) pets, (iv) having someone around, and (v) intervening from the unexpected person.

a All the 43 participants admitted that in the beginning they were so happy, ambitious, aimed high, full of energy and ready to do anything for the sake of their future. All of them had no history of psychological disorder at the time of enrolment. But somehow, after quite some time, they were kind of unable to maintain or following the right track that they were supposed to follow, and the worst thing was that, for some reasons, they were even trying to take their own life away. Among the reasons why they were so determined to commit suicide were; misunderstanding in relationships, using a lot of drugs and alcohol, raped and end up getting HIV, involved in a forbidden sexual relationship, stress and depress due to family factors, unable to cope with their studies, and financial problems. During the interviews with the students, these reasons were not discussed in detail because the authors were actually focusing more on what actually stop the students when they were nearly or almost taking their own life especially when they were so determined to do it.

a When the students were asked to share what actually stop them when they were nearly or almost taking their own life, especially when they were so determined to do it, some of them said that support and help from a professional such as student counsellor, psychologist, family doctor, and a psychiatrist did play a big role (21 students). The comments and sharing given below were the most responses given by the students: *"I was so depressed, not normal me and ready to take my own life because .....and after my roommates managed to persuade me, I eventually decided to give it a try to seek professional help. I went to see my family doctor and she introduced me to a psychiatrist. Wow, thanks God such service exists in this world. Now I'm very proud to say that, it's OK and live goes on"* (Student 11); *"Looking back, I really feel grateful and thankful that I followed my*

*consciousness to see a student counsellor, otherwise ...” (Student 7); “You know what, last time I thought seeing a counsellor is a waste of time and there nothing he/she can do because he/she does not give real medicine. Luckily my lecturer, thanks to him, referred and ordered me to see a counsellor. Now, I understand why counsellor and psychologist charge very high for their service” (Student 9); “As a victim of.....and been betrayed.....my situation at that time was like upside down and I realized that taking sleeping pills or getting drunk did not make me feel ease or OK...I was lucky that my mom referred me to a psychologist. It’s a history now” (Student 2). “Whenever you feel like you are out of control that you might end your life, always remember, seek professional help first. Don’t be stupid” (Student 34). “Luckily the university has this counselling service that now I started to appreciate my life” (Student 18).*

a Besides that, self awareness or self consciousness that their action (commit suicide) would really hurt their loved ones, was also one of the reasons that stopped them when they were nearly committed suicide (5 students). Their comments included: *“ I tried to kill myself twice actually, but each time I wanted to do it, the image of how hurt my family members (my mum, father, brothers and sisters) would be, stopped me from hurting myself” (Student 1); “I still remember, when I was in secondary school, my father cried right in front of me when I fell off my bicycle and I broke my leg. I know my father loves me very much and I cannot imagine how would he react if I kill myself. Even though I was determined to kill myself at that time, realizing that, that action (killing myself) would hurt my father so much, I just forced myself to stop” (Student 17); “ To be frank, I have HIV, surprise.....that’s why I only want to be interviewed through a cell phone. How I got it, very long story. Why I stopped my suicide attempt, that was your question. Correct or not? I almost did it 3 times, but, each time when I was about to do it, the image of my father and my mother crying in agony, distress, painful, and pleading to God when my elder brother passed away (car accident) and the thought of them having to go through that again, actually telling me to make a promise to my self that I will never ever try to kill myself anymore” (Student 40).*

a Some of the participants admitted that, they would have already committed suicide if not because of their pets (5 students). Even though their pets do not know how to talk, their actions and expressions of wanting to be loved, treated and cared nicely were so touching that made them cry and cancelled their attempts. Their comments were: *“There was one time, I planned it already and everything that I need was ready and when I was about to reach that bottle (poison), suddenly my cat (Lucy) jumped on my leg, meowing so gentle, pushing and rubbing herself against my stomach. She just stared at me and oh my God, what am I doing, how could I just leave this animal behind. Actually, if my cat was not there, I think I won’t be sharing this with you” (Student 23); “My.....cheated on me. We even had....a few times. How can...do that. When I was so down and angry with my stupidity, mistake, ....that I was so determined to kill myself so that .....would regret it for the rest of...life, suddenly I was kind of felt like worrying who is going to take care of my ‘Mi Mi’. By now taking care of my ‘Mi Mi’ make me feel like I have a purpose in my life” (Student 27). “Some people they don’t like to keep a dog. You should give it a try first.. This animal is amazing, very loyal and you will not be lonely and when the whole world pushed you away, your dog will always be there for you. Really appreciate and thankful to my “Bobbie” that I’m still OK and breathing” (Student 28); “That night, I never thought that my dog followed me from behind and when I was about to.....my dog barked, ran towards me and shaking its tail as usual. That poor thing had no idea that I was going to commit suicide. I hug my dog and then cancelled my stupid plan” (Student 16).*



a Having someone around and try to talk to them whenever one feels depressed, stressful, lost hope, angry, frustrated, doesn't know what to do, etc. is better and beneficial according to some of the participants (5 students). Their comments included: *"When I was about to commit suicide, somebody (my classmates) banged my door and broke it open. My attempt failed. I was so surprised and embarrassed when at the same time recalling back how I talked to one of them regarding my situation. Now I'm glad that I talked to someone around me regarding my situation"* (Student 4); *"Just talked to someone before you actually kill yourself. You might change your plan, you never know. That's what happened to me last time"* (Student 32); *"No man is an island. I guess that's true. I failed a few times (commit suicide) because, my good friends, my family members, and even my classmates were like monitoring me twenty four seven, keep on approaching me, cheering me up and motivating me. Initially I felt so annoyed, but deep inside my heart, I know they really care for me, eventually they won"* (Student 31). *"I was a perfectionist and everything must be perfect, including my academic performance. I would hit myself on the head, got so angry and even cut my hand with sharp object each time I got low marks then what I expected. Luckily I made a wise move by talking to my lecturer about my situation. He referred me to a Psychologist and constantly monitoring me. I'm getting better now"* (Student 24); *"I always watched a porno with my friends and I made a very big mistake when I couldn't control myself that I had sex intercourse with a prostitute (from China). One day, I got really sick and I thought I had a normal fever and was very shocked when the doctor informed me that I am HIV positive. To cut my story short, actually I tried to kill myself a few times. Talking and meeting my friends (HIV positive patients) from time to time is the only thing that keeps me breathing by now. I keep this secret from my classmates, best friends and family members. That's why, I share my story with you over the phone"* (Student 38)

a Intervening from the unexpected person was also one of the things that stopped the students when they were nearly or almost harm themselves (7 students). Here are some of their comments: *"Actually, I attempted suicide 2 times last year. My first attempt was when I was trying to get myself drowned in a swimming pool and I was stopped by other peoples when they dragged me out of the water and saved me. They thought that, it was just an accident. The second one was when I was trying to cut my wrist and stopped by a cleaner and she then brought me to see the warden and the warden brought me to see the Dean and the Dean brought to see a counsellor. So many parties involved and even thought I am still struggling, I started to see my purpose in life now"* (Student 5); *"My family is very rich and both my parents, my brothers and sisters kind like pressured/forced me to take up this course and excel because most of our family members are.....One day, I really feel like exploding and couldn't take it anymore and because I was too emotional and acted aggressively that I knocked my head on the table until my forehead was bleeding (at a cafe) and out of no where a middle aged woman came and grabbed me. She hugs me so tight that I could not move my hands. I'm still seeing a student counsellor until now"* (Student 41); *"The only thing inside myhead at that moment was 'you deserved to die and you are useless' and without second thought I took a knife from a kitchen (student hostel) and wanted to cut my wrist and at the same time someone grabbed my hand (the one holding the knife), took the knife and threw it away. He then slapped my face a few times and scolded me. He was my senior and thanks to him"* (Student 15). *"I think, a lot of people around me must have noticed my behaviour as well as my weird and gave up life kind of attitude, and I'm sure they sensed that I will commit suicide because of what happened to me. One day, I finally decided that, that's the only way (commit suicide) and when I was on my way going up to the highest level of the building (I planned*

*to jump from there), a group of other students stopped me half way, surrounded me and I have no other choice that I just followed them down. It was quite embarrassed actually. But their 'busy body attitude' saved me from doing stupid thing" (Student 22).*

## Discussion

As suicidal ideation and suicidal attempt in a university setting around the world tend to be common nowadays, hence, it is something that should be taken seriously and therefore be prevented. Suicidal ideation among university students should be a major concern by all parties, especially the health services of universities (Mackenzie et al., 2011). Based on the analysis done in this study, it was shown that 22.1 % of the present sample had suicidal ideation within the past twelve months. Compared to similar studies done a few years back (10.7% obtained by Perreira & Cardoso in 2015, 12.0 % obtained by Eskin et al. in 2011 and Wilcox et. al in 2010, 14.3% obtained by Fridner et al. in 2009, and 14.0% obtained by Tyssen et al., 2001; Parhoon et al., 2014) percentage obtained from the present study is slightly higher. In the present study, female students (14.9%) reported to have a higher number of students compared to male students(7.2%) as having suicidal ideation. In terms of suicidal attempts, female students (1.2%) were also reported to have higher number compared to male students (0.4%). Even though some studies also revealed that female students had a higher number of suicidal ideation than male students ( Arria et al., 2009; Goncalves et al., 2014; Schaffer et al., 2008; Pereira & Cardoso, 2015) however, their report concluded that there was no significant relationship between gender and suicidal ideation. Based on the chi-square analysis of the present study, gender has no impact on suicidal ideation among university students for the twelve months.

a Looking at each program separately, especially from the Science major students, the result of the present study showed that the majority of the students having suicidal ideation as well as attempted suicide were from those enrolled in the Doctor of Medicine program. Even though the number in the present study is not that alarming, suicidal ideation prevalence data that were extracted from 24 cross-sectional studies involving 21 002 medical students from 15 countries, with the overall pooled crude prevalence of suicidal ideation at 11.1% (Rotenstein et al., 2016) indicates that further research is needed to identify ways or strategies in order to deal with this problem.

a Even though the results of the present study revealed that there were differences in terms of percentage between the two majors, between genders, between the four races and between the three types of accommodation, there is no evidence of a statistically significant relationship between all these variables with suicidal ideation, as shown by chi-square test. Maybe other variables such as student's mood, anger, mental status, social support and academic achievement should be included as all these variables are considered as independent factors predicting suicidal ideation and suicide attempt (Abdu et al, 2019).

a Contrary to the slightly high percentage of suicidal ideation reported in the present study, a very small percentage of the students indicated suicide attempts (1.6%), whereby all the programs except 1 program, has at least one student attempted suicide but stopped due to certain factors. Even though the prevalence suicide attempts in the present study are considered lower compared to some studies done in China, 19% (Chai et al., 2015), Brazil, 12.5% (Mortier, et al., 2017), Morocco, 6.5% (Ayele et al., 2016), Australia (Rey, 2012) and American, 4.1% (Malakouti et al., 2015), still, the result of the present study is quite scary and cause for a serious concern. This is because, even though the students stopped committing suicide due to certain reason, there is no guarantee that they won't do

it again in future. A previous suicide attempt is one of the best predictors of eventual completed suicide (Ribeiro et al., 2016; Shaffer et al., 1996; Wroblewski, 2002). Bear in mind that even one student managed to commit suicide were it inside or outside the university, it will certainly become a crisis and the university personnel (lecturers, counsellors, administrators, etc.), both parents as well as family members need to be alert to such possibilities among the students. Parents, administrators, and lecturers should consider working together or partnering with front-line workers, along with the students themselves (those who failed to commit suicide) so that they know and understand better what are actually the issues following a suicide attempt.

aBased on the semi-structured interview sessions (face to face or through a cell phone) carried out with those who nearly committed suicide, but stopped their attempts, there were five common reasons revealed in the present study and of all these reasons, the most common reason why the students stopped or cancelled their suicide attempts was, support and help from a professional such as student counsellor, psychologist, family doctor, and a psychiatrist (49%). This indirectly tells us that, it is very important to let the students and parents know and be aware at all time about all the service providers available (outside or inside the institution) related to mental health or psychological problem. The university administrators, lecturers, parents as well as students must know what to do, how to reach, how to contact, and where they can easily get in touch with counsellors, psychologists, psychiatrist and non-governmental organization (NGO) that deals with people's emotional or psychological health. Besides that, skills related to students' self awareness or self consciousness and their ability to understand their emotional state or reaction should be nurtured or taught among the students. This could be important for example, students may be able to slow down or down-regulate their intense emotions related to increased risk of suicide attempts. Based on the interview sessions done with the students in the present study, it seemed that the majority of them failed or cancelled their suicide attempts because they were not alone in one way or another. The students could have completed their suicide attempts if they were alone or no people or animal around them. As loneliness is a significant predictor of both suicidal ideation and suicide attempt (Lamis, et al., 2014; McClelland et al., 2020; Stickley & Koyanagi, 2016), therefore, it is very important to make sure those who have the symptoms of committing suicide are not alone and efforts to reduce or alleviate loneliness should be carried out the students in order to avoid suicide attempt.

## Conclusion

Prevalence rates of suicidal ideation found in the present study were similar compared with other studies from different countries. The result obtained indicated that field of study, gender, race, and type of accommodation has no impact on suicidal ideation among university students for the past twelve months. Even though with a higher percentage of female students in the suicidal ideation as well as the attempted suicide category, there was no statistically association between all these three variables. In terms of suicide attempts among students for the past twelve months, with at least one attempt in each program from both fields of study (Social Science major and Science major), demonstrates the need of serious attention and more efforts from all parties involved as well as the stakeholders. Based on the sharing during semi-structured interviews with some students whom actually attempted suicide, but stopped their attempts due to some reasons, indirectly tells us that no one is self-sufficient and everyone relies on others especially when you are emotionally unavailable and have self destructive behaviours and thoughts. Last but not least, the present study

found that the prevalence of suicidal ideation and suicidal attempts is actually quite worrying and is a distressing phenomenon among university students and should not be taken for granted. Every life matters.

## References

- Abdu, Z., Hajure, M., & Desalegn, D. (2019). Suicidal behaviour and associated factors among students in Mettu University, South West Ethiopia : An institutional based cross-sectional study. *Psychology Research and Behavior Management*, 2020(13), 233-243.
- Arria, A. M., O'Grady, K. E., Caldeira, K. M., Vincent, K. B., Wilcox, H. C., & Wish, E. D. (2009). Suicide ideation among college students: A multivariate analysis. *Archives of Suicide Research*, 13(3), 230-246. doi:10.1080/13811110903044351
- Ayele, T. A., Azale, T., Alemu, K., & Abdissa, Z. (2016). Prevalence and associated factors of antenatal depression among women attending antenatal care service at Gondar University Hospital. *Northeast Ethiopia*, 11(5), 1–12.
- Curran, T. A., Gawley, E., Casey, P., Gill, M., & Crumlish, N. (2009). Depression, suicidality and alcohol abuse among medical and business students. *Irish Medical Journal*, 102(8), 249-252.
- Eskin, M., Voracek, M., Stieger, S., & Altinyazar, V. (2011). A cross-cultural investigation of suicidal behavior and attitudes in Austrian and Turkish medical students. *Social Psychiatry and Psychiatric Epidemiology*, 46(9), 813-823. doi:10.1007/s00127-010-0254-7
- Ferreira, J., & Castela, M. (1999). Questionário de Ideação Suicida (Q.I.S.) [Suicidal Ideation Questionnaire (S.I.Q.)]. In M. R. Simões, M. M. Gonçalves, & L. S. Almeida (Eds.), *Testes e provas psicológicas em Portugal [Psychological tests in Portugal]* (Vol. 2, pp. 123-130). Braga, Portugal: APPORT/SHO.
- Fridner, A., Belkic, K., Marini, M., Minucci, D., Pavan, L., & Schenck-Gustafsson, K. (2009). Survey on recent suicidal ideation among female university hospital physicians in Sweden and Italy (the HOUPE Study): Cross-sectional associations with work stressors. *Gender Medicine*, 6(1), 314-328. doi:10.1016/j.genm.2009.04.006
- Gonçalves, A. M., Sequeira, C., Duarte, J. C., & Freitas, P. P. (2014). Suicidal ideation on higher education students: influence of some social demographic, academic and behavioural variables. *Millennium*, 47(1), 191-203.
- Mackenzie, S., Wiegel, J. R., Mundt, M., Brown, D., Saewyc, E., Heiligenstein, E., . . . Fleming, M. (2011). Depression and suicide ideation among students accessing campus health care. *American Orthopsychiatric Association*, 81(1), 101-107. doi:10.1111/j.1939-0025.2010.01077
- Lamis, D. A., Ballard, E. D. & Patel, A. B. (2014). Loneliness and suicidal ideation in drug-using college students. *Suicide and Life-Threatening Behavior*, 44(6), 629-640. doi.org/10.1111/sltb.12095
- Malakouti, S.K., Davoudi, F., Khalid, S., & Asl, M.A. (2015). The epidemiology of suicide behaviours among the countries of the eastern Mediterranean region of WHO: a systematic review. *Acta Med Iran*, 53(5), 257–265.
- Mazza, J. J., & Reynolds, W. M. (2001). An investigation of psychopathology in nonreferred suicidal and nonsuicidal adolescents. *Suicide and Life-Threatening Behavior*, 31(3), 282-302. doi:10.1521/suli.31.3.282.24245

- McClelland, H., Evans, J. J., Nowland, R., Ferguson, E. & O'Connor, R. (2020). Loneliness a predictor of suicidal ideation and behaviour: A system review and meta-analysis of prospective studies. *Journal of Affective Disorders*, 274(1),880-896. doi.org/10.1016/j.jad.2020.05.004
- Mortier, P., Cuijpers, P., Amsterdam, V.U., Kiekens, G., & Auerbach, R.P. (2017). The prevalence of suicidal thoughts and behaviours among college students: a meta-analysis. *Psychol Med.*, 48(4), 554–565.
- Gurkan, B., & Dirik, G. (2009). Factors associated with suicidal ideation and behaviors among university students: causes of survival and ways to cope with. *Turk Psychol Articl*, 2009 (12), 58-69.
- Turecki, G., & Brent, D. A. (2016). Suicide and suicidal behaviour. *Lancet*, 387(1), 1227–1239.
- Thompson, A. H., Dewa, C. S., & Phare, S. (2012). The suicidal process: Age of onset and severity of suicidal behaviour. *Social Psychiatry and Psychiatric Epidemiology*, 47(8), 1263-1269. doi:10.1007/s00127-011-0434-0
- Rey, J. M. (2012). *IACAPAP Textbook of Child and Adolescent Mental Health Editor*. International Association for Child and Adolescent Psychiatry and Allied Professions. Geneva, (Chapter E.4).
- Ribeiro, J. D., Franklin, J. C., Fox, K. R., Bentley, K. H., & Kleiman, E. M. (2016). Self-injurious thoughts and behaviours as risk factors for future suicide ideation, attempts, and death: a meta-analysis of longitudinal studies. *Psychol. Med.*, 46(2), 225–236.
- Shaffer, D., Fisher, P., Dulcan, M., & Davies, M. (1996). The NIMH diagnostic interview schedule for children (DISC 2.3): description, acceptability, prevalences, and performance in the MECA study. *J. Am. Acad. Child Adolesc. Psychiatry*, 35(1), 865- 877.
- Stickley, A., & Koyanagi, A. (2016). Loneliness, common mental disorders and suicidal behaviour: Findings from a general population survey. *Journal of Affective Disorders*, 197(1), 81-87. doi.org/10.1016/j.jad.2016.02.054
- Strunk, W. Jr. & White, E. B. (1979). *The elements of style*. (3rd ed.). New York: Macmillan, (Chapter 4).
- Rotenstein, L. S., Ramos, M. A., Torre, M., Segal, B., Peluso, M. J., Guille, C., Sen, S., & Mata, D. A. (2016). Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: A systematic review and meta-analysis. *Journal of the American Medical Association*, 316(31), 2215-2236.
- Tekani, A. G., Missaoui, S., Kalai, W., Gaddour, N., & Gaha, L. (2019). Suicidal ideation and suicide attempts among Tunisian adolescents: prevalence and associated factors. *Pan African Medical Journal*, 105(34), 1-13. doi:10.11604/pamj.2019.34.105.19920
- Tyssen, R., Vaglum, P., Grønvold, N. T., & Ekeberg, Ø. (2001). Suicidal ideation among medical students and young physicians: A nationwide and prospective study of prevalence and predictors. *Journal of Affective Disorders*, 64(1), 69-79. doi:10.1016/S0165-0327(00)00205-6
- Gencoz, T., & Or, P. (2006). Associated factors of suicide among university students: importance of family environment. *Contemp Fam Ther*, 28(2), 261–268.
- Parhoon, K., Parhoon, H., & Movallali, G. (2014). Effectiveness of Training Sensory Stimulation on Gross Motor Skills of 5-7 Years Old Children with Down Syndrome. *International Journal of Academic Research in Psychology*, 1(1), 22–31.



- Pereira, A. & Cardoso, F. (2015). Suicidal ideation in university students: Prevalence and association with school and gender. *Paidéia*, 62(25), 299 – 306.
- Schaffer, M., Jeglic, E. L., & Stanley, B. (2008). The relationship between suicidal behavior, ideation, and binge drinking among college students. *Archives of Suicide Research*, 12(2), 124-132. doi:10.1080/13811110701857111
- Wilcox, H. C., Arria, A. M., Caldeira, K. M., Vincent, K. B., Pinchevsky, G. M., & O'Grady, K. E. (2010). Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *Journal of Affective Disorders*, 127(1-3), 287-294. doi:10.1016/j.jad.2010.04.017
- Wroblewski, A. (2002). *Suicide: Survivors: A guide for those left behind*. Minneapolis: Suicide Awareness Voices of Education.
- World Health Organization (WHO). (2010). *Towards evidence-based suicide prevention programmes*. Manila, Western Pacific Region: WHO Press
- Zhai, H., Bai, B., Chen, L., Han, D., Wang, L., Qiao, Z., Qiu, Z., Yang, X., & Yang, Y. (2015). Correlation between family environment and suicidal ideation in university students in China. *Int. J. Environ Res Public Health*. 12(2), 1412–1424. doi:10.3390/ijerph120201412