Suicide Potential and Depression: Risk and Protective Factors among College Students in the Philippines

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Abstract  The study evaluated the level of suicide potential and depression among college students including the risk and protective factors for suicide. Descriptive correlational method was used where 915 respondents participated in this study. Three standardized tests were used to test the level of suicide potential, level of depression, and the importance of the risk and protective factors. Results showed that suicide potential among students was moderate to high and the level of depression was average. It also revealed that family alliance and self-acceptance were among the significant risks and protective factors to the respondents and that depression was significantly associated with suicide potential. The results implied that there are substantial number of students with high level of depression and high level of suicide potential that may need clinical intervention. This study suggests that the guidance, counseling, and psychological services should include not only the guidance counselors but also the psychologists and psychiatrists to cater to those who need thorough psychological intervention.

Keywords: Depression, student depression, suicide, suicide potential, student suicide
Introduction

Depression is the fourth leading cause of death among 15-29 years old worldwide according to the World Health Organization, 2019 and that by 2020, it was predicted that it would be in the second rank (World Federation for Mental Health, 2012). In the Philippines, there are reports of its observed increase in different forms such as jumping from the building (Manila Bulletin, 2013) and use of a gun (PHnews, 2013). The National Center for Mental Health confirmed that there is at least one referral per day among the youth (Tomacruz, 2018). Commentaries from the Philippine media argue that these problems can be attributed to both social and academic factors, and that addressing such problems require help from various social institutions such as the family, the school administrations, and the government (Cruz, 2013; Salaverria, 2013; Sauler, 2013; Tomacruz, 2018 as cited in Cleofas, 2020).

There are over 800,000 who die due to suicide every year worldwide (WHO 2021). Depression became the second leading cause of death among 15 to 29 years old, and 75% of global suicide occurred in low and middle income countries. On the average, there is one person committing suicide every forty seconds somewhere around the world (WHO, 2019). In the Philippines, though suicide rate remains low, there is a perceived increase in the trend, and that a problem in reporting the actual number of suicide cases was observed (Nadera, 2015 cited in Tomacruz, 2018).

In Hongkong, according to the report of Zhang (2019), pupils within 10-14 years old were at risk of suicide. She found out that among 1,500 youngsters surveyed, children who feel hopeless, isolated, and see themselves as a burden are more likely to commit suicide. The common symptoms of depression include feeling of helplessness and hopelessness, loss of interest in daily activities, increased or decreased
appetite, changes in sleep pattern, anger or irritability, loss of energy, self-loathing, and reckless behavior including suicidal ideation (Diagnostic and Statistical Manual for mental disorders 5th Edition, 2013).

At school institutions, there must be a deep understanding of depression and suicide due to the several reasons. First, suicide and depression cases among students are observed to be increasing, and that a single case of suicide especially when exposed to the media may affect the credibility of a school to produce productive and socially effective graduates. Second, a school is not a mental health institution, but makes sure that students’ mental condition is well taken care of and one of its tasks is to produce quality graduates. This means that students are vulnerable populations for depression and suicide, the reason why educational managers should know or even create preventive programs in order to manage the aforementioned problem. Fourth, there are many unreported cases of suicide in schools, but many remain silent about it due to stigma associated with depression and suicide. Fifth, higher education students are exposed to different risky situations such as bullying, discrimination, financial difficulties, even other school-related stresses such as personal, social, and financial issues while studying.

There are many gaps in the previously mentioned literature and studies. First, many studies mention successful suicide acts but not suicide potential and the importance of protective factors. Second, studies do not mention or focus on the protective factors that make people resilient to personal or social problems in schools. Third, schools do not regularly update their guidance and counseling system, hindering them to address the increasing number of suicide cases. Fourth, by studying suicide potential, predictability of the tendencies of students’ potential to commit suicide may be evident.
Framework of the Study

This research is based on the interpersonal-psychological theory of suicidal behavior by Dr. Thomas Joiner. This theory proposes that an individual will not die by suicide unless the three factors are present. First, perceived burdensomeness which is the view that one’s existence burdens family, friends and/or the society. Second is low belonging and or social isolation. In this theory, this is when there is a low sense of belongingness and that the experience that one is alienated from others, not an integral part of a family, circle of friends, or other valued groups and lastly, the acquired ability to enact lethal self injury. While feelings of burdensomeness and low belongingness may motivate a person to commit suicide, they are not sufficient enough to ensure that the desire will lead to a suicide attempt. This theory suggests that the third component should be present which is the ability for lethal self injury which has different sub elements, that includes repeated exposure to affective stimulus and the reaction to that stimulus shifts over time such that the stimulus loses its ability to preserve oneself, instead the opposite response is strengthened. In light of these background, it is hypothesized that the capability for suicide is largely through repeated exposure to painful or fearsome experiences that results in higher tolerance to pain and a sense of fearlessness in the face of death. Another is the past suicidal behavior, a history of suicide attempts has been found to be a strong predictor of future suicidal behavior including death by suicide (Joiner et al., 2005). Joiner also found that individuals with past suicide attempts experience more serious forms of future suicidality as compared to those without history of suicide attempt. Capacity for suicide is not limited to prior suicidal behavior, it can also be acquired through repeated experience of other pain and fear inducing behaviors such as non-suicidal self injury, self starvation, physical abuse, etc. Aside from direct exposure, even exposure to others’ pain and injury may
produce the capacity to commit suicide. This theory was studied with the inmates. In Dr. Mandracchia’s study in 2014, and the three associated factors—thwarted belongingness, perceived burden, capability for suicidal behavior—have been tested in many groups and in many places, but until his work in 2014, the theory had yet to be studied in the prison population. Testing theories across multiple demographics and settings is critical to refining the theory and determining its applicability, and since suicide risk is high in prisoners, understanding the underlying dynamics could inform suicide interventions. In this study, many of these theories may be used but mainly, the interpersonal-psychological model by Joiner (2005) will be followed. This theory proposed that suicidal desire is caused by high level of burdensomeness, and thwarted belongingness; desire is probably translated into suicidal behavior when capability is high as discussed above.

**Purposes of the Research**

This study evaluated the students’ level of suicide potential, depression, and risk and protective factors for suicide. The study also provided answers to the following specific questions:

1. What is the level of depression of the respondents?
2. What is the level of suicide potential of the respondents?
3. What is the level of importance of the risk and protective factors among the respondents of this study?
4. Is there a significant relationship between suicide potential, depression and risk and protective factors?
Methodology

Research Design

The study utilized a descriptive correlational design in which categorical variables were gathered, reflected upon, and discussed. The descriptive part in this study included frequencies and averages, which are nonparametric test that described the relationship between the variables used. Suicide potential served as the dependent variable while depression, and risk and protective factors served as the independent variable in this study.

Participants

Table 1. The Distribution of Respondents per School

<table>
<thead>
<tr>
<th>Gender</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>122</td>
<td>68</td>
<td>53</td>
<td>243</td>
</tr>
<tr>
<td>Female</td>
<td>276</td>
<td>200</td>
<td>196</td>
<td>672</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>268</td>
<td>249</td>
<td>915</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Level</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>28</td>
<td>25</td>
<td>27</td>
<td>80</td>
</tr>
<tr>
<td>Second Year</td>
<td>129</td>
<td>72</td>
<td>80</td>
<td>281</td>
</tr>
<tr>
<td>Third Year</td>
<td>160</td>
<td>79</td>
<td>78</td>
<td>317</td>
</tr>
<tr>
<td>Fourth Year</td>
<td>81</td>
<td>92</td>
<td>64</td>
<td>237</td>
</tr>
</tbody>
</table>

There were seven state universities and colleges in the National Capital Region, only three SUCs are with psychology program courses that make these SUCs qualify as respondents. Stratified random sampling was implemented to get the sample from the population. Slovin’s formula
was used to calculate the sample size which depended on the number of students in a selected higher education institution. The participants in this study were the higher education students from first year up to fourth year students from selected State Universities and Colleges (SUCs) in the national capital region regardless of the course they are enrolled in and gender preference.

**Instrumentation**

The *Suicide Potential Inventory for Filipinos (SPIF)* developed by Dr. Susan Estanislao (2001) was used to measure suicide risk among Filipino youth ages 15 to 24 years old. The instrument is made up of 87 statements that the respondents used to describe their thoughts, feelings, and behaviors. SPIF has five scales: hopelessness (*pagkawala ng pag-asa*), negative self-evaluation (*negatibong pag susuri sa sarili*), suicide ideation (*pag iisip ng pagpapatiwakal*), helplessness (*pagkawala ng magagawa*) and hostility (*pagkapalaaway*). The test is self-administered and it takes about 25 minutes to administer. There are six scoring templates, one for the reverse scoring of negatively stated items and one for each factor provided in scoring the answer sheet. The internal consistency coefficients of the five factors of SPIF are found at .001 level (.87 to .98) indicating that all the items are highly homogenous to measure the factors consistently, factor scale inter correlation values between the subscales and total scale scores are obtained (.71 to .96). The construct validity of the scales is demonstrated by the significant mean score differences between the suicidal group and evidence of convergence between SPIF and suicide probability scale subscales and total scale scores (.51 to .77).

*Beck Depression Inventory (BDI)* was used for testing the levels of depression among the respondents. BDI is a self-report multiple choice test which is a widely used test to measure severity of depression. It is a 21-item self-
report rating inventory that measures levels of depression with no subscales. The highest score could be 63 if the respondent circled number 3 in all the test questions, and the lowest possible score is zero if the respondent circles zero in each question. The internal consistency of BDI was at around .85 which means that the items are highly correlated with each other.

The Brief Reason for Living for Adolescence (BRFL-A) which was developed by Augustine Osman in 1998 was also used. This test was intended to measure the risk and protective factors among respondents. It has 32 items which includes five scales such as family alliance, suicidal related concerns or SRC, self-acceptance or SA, peer acceptance and support scale (PAS), and future optimism scale (FO). Respondents were asked to indicate their answers on a 6-point scale (1=not at all important, 2=quite unimportant, 3 = somewhat unimportant, 4= somewhat important, 5=very important and 6=extremely important). Higher scores suggest positive reasons for living. This instrument has good internal consistency as well as construct, convergent, predictive, and discriminant validity.

Data Gathering Procedure

In order to select the respondents, the following steps were implemented. First, letters were sent to the selected institution for approval. Then, the researcher identified the target respondents from the admission and registration section of the institution in coordination with the guidance and counseling section of the selected institution. As soon as the target respondents were known, sections were selected through stratified random sampling technique. The researcher was able to get the consent of the respondents by letting the respondents fill out the informed consent form. Then, the researcher administered first the beck depression inventory, followed by suicide potential inventory for Filipinos lastly,
the risk and preventive questionnaire were administered. During the data gathering, students were observed to be of high motivation to answer the questionnaires. Surprisingly, many students immediately recognize the need to assess depression and suicide potential among them and admit that they had suicide ideation and depression at some point.

Data Analysis

Frequency distribution, mean, percentage, weighted mean, and chi-square, were used in this study. Mean and weighted mean are measures of central tendency in order to get the best representative of the sample population while the weighted mean is the combined mean of sample populations. Pearson product moment correlation was used to analyze correlation between level of suicide potential, depression and risk and protective factors. Finally, the chi-square test was used in this study to investigate distributions of categorical variables. The chi-square compares the tallies of counts of categorical responses between two or more independent groups.

Results and Discussion

Level of Depression

Table 2 shows that there were 41 (4.5%) respondents with extreme and severe depression. People with severe and extreme depression may need psychological and psychiatric intervention. It also shows that going to a doctor for assessment and intervention is not a priority for these people. Moreover, 556 (60.8%) respondents show mild to moderate depression and are labelled as a manageable group that may need guidance and counseling and some psychological intervention as well. This result supports the report of Natasha Goulborn Foundation in 2021, that although there are 4.5 million depressed Filipinos, only one out of three who suffer
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from depression will seek the help of a specialist according to WHO. Among 915 respondents, it is quite alarming that there were 128 students or 14% with borderline clinical depression, 129 or 14.1% with moderate depression, and 28 or 3.1% with extreme depression. These results imply that these respondents may need psychological intervention and some need medical or psychiatric assistance in order to deal with severe and extreme depression through medication and other clinical interventions.

Level of Suicide Potential

Table 3.

The Level of Suicide Potential of the Respondents

<table>
<thead>
<tr>
<th>Level of Suicide Potential</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>39</td>
<td>4.3</td>
</tr>
<tr>
<td>Low</td>
<td>84</td>
<td>9.2</td>
</tr>
<tr>
<td>Moderate</td>
<td>731</td>
<td>79.9</td>
</tr>
<tr>
<td>High</td>
<td>51</td>
<td>5.6</td>
</tr>
<tr>
<td>Very High</td>
<td>10</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>915</td>
<td>100.0</td>
</tr>
</tbody>
</table>
In Table 3, 61 or 6.7% shows a high and a very high level of suicide potential where these respondents need immediate intervention because severe stress or problems in terms of family, academic, and so on may result in an attempt to hurt oneself and commit suicide. While those with low to moderate level of suicide potential are in some ways considered as manageable cases. However, Table 3 also shows that 731 or 79.9 percent are already within the moderate level of suicide potential which represents most of the respondents in the sample. In terms of suicide potential, those with moderate suicide potential need intervention such as counseling or therapy to decrease their moderate level of suicide potential. Such results confirm the study of Gutierrez et al. in 2008 that suicidal ideation and suicidal behavior are common among college students and that suicide ideation among college students ranged from 32 to 70% across studies. Suicide may be attributed to many factors. It may arise from exposure to stressful events especially those traumatic ones that may increase the capacity to commit suicide (Mandracchia, 2011). Such may be the reason why Senator Grace Poe in 2013 filed a resolution to address the increasing incidence of suicide and depression in the country. In fact, the resolution highlighted the importance of a focused suicide intervention program as well as proper recording and reporting of data on suicide. These findings are also in accordance with what Redaniel, et.al., 2011 found out that between the periods 1975 to 2005, suicide rates increased among ages 15-24 for both males and females.

Table 4 shows that the weighted mean interval for a family alliance is interpreted as somewhat important, suicide-related concerns with a weighted mean interval of 4.75, self-acceptance with a weighted mean interval of 4.54, peer acceptance and support with a weighted mean interval of 4.56 which is interpreted as very important, and future optimism with a weighted mean interval of 4.99 which is interpreted as
very important. Moreover, the overall weighted mean interval was 4.64 which means that all of the factors in the risk and protective factors test were considered by the respondents as a very important protective factor for not committing suicide. Though there were 170 or 18.6 percent respondents with moderate to extreme level of depression, and 792 or 86.6 percent respondents with moderate to very high level of suicide potential, the respondents protective factors were rated important to them. This means that increasing these protective factors would really help in preventing suicide. It was also mentioned in openarms.gov.au in 2019, that protective factors include staying connected to community, significant others, physical and mental health, financial security, spirituality and belief.

### Relationship between Suicide Potential, Depression, and Risk and Protective Factors

Depression is positively correlated with suicide potential ($r=.539$, $p=.000$) and suicide potential is negatively correlated with risk and protective factors ($r=-.526$, $p=.000$). The same result was also observed in a study by Donald, et al. in 2006 that protective factors included social connectedness, problem-solving confidence, and locus of control. They also mentioned that there is a trend that social connectedness is

<table>
<thead>
<tr>
<th>Risk and protective factors</th>
<th>WMI</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family alliance</td>
<td>4.36</td>
<td>Somewhat Important</td>
</tr>
<tr>
<td>Suicide related concerns</td>
<td>4.75</td>
<td>Very Important</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>4.54</td>
<td>Somewhat Important</td>
</tr>
<tr>
<td>Peer acceptance and support</td>
<td>4.56</td>
<td>Very Important</td>
</tr>
<tr>
<td>Future optimism</td>
<td>4.99</td>
<td>Very Important</td>
</tr>
<tr>
<td>Total Weighted Mean</td>
<td>4.64</td>
<td>Very Important</td>
</tr>
</tbody>
</table>
believed to be more protective among those with a high rather than a low level of symptomatology. This result shows the connection between suicide potential and two major factors such as level of depression and RPF (Donald et al., 2006).

**Table 5.**

*The Relationship between Suicide Potential, depression, Risk, and Protective Factors*

<table>
<thead>
<tr>
<th>Level of Suicide Potential vs Risk and Protective Factors</th>
<th>Pearson correlation</th>
<th>p- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Depression</td>
<td>.539</td>
<td>.000*</td>
</tr>
<tr>
<td>Risk and Protective Factors</td>
<td>-.526</td>
<td>.000*</td>
</tr>
</tbody>
</table>

*significant @ p<.05

For the risk and protective factors in general, with a chi square value of 191.131, and p-value of .000, it may be assumed that that risk and protective factors are significantly associated with suicide potential. Results also
shows that in the previous tables, Those who show lower level of importance of these factors tend to be at higher level of suicide potential. In terms of family alliance, with a chi square value of 84.022, and p-value of .000, which implies a significant association between family alliance and suicide potential. While for suicide related concerns, with a chi square value of 95.525 and p-value of .000, indicates that there is a significant association between suicide related concerns and suicide potential. For self-acceptance, with a chi square value of 136.897, and p-value of .000, it may be inferred that there is a significant relationship between self-acceptance and suicide potential. For peer acceptance and support, with a chi square value of 142.846, and p-value of .000, may be indicative of a significant relationship between peer acceptance and support and suicide potential. For future optimism, with a chi square value of 116.585, and p-value of .000, there may be a significant relationship between future optimism and suicide potential. In summary, all of the risk and protective factors significantly associated with suicide potential which means that higher importance of the risk and protective factors show lower level of suicide potential.

**Conclusion and Recommendations**

The objectives of the study were to determine the level of suicide potential, level of depression, and risk and protective factors among the respondents in this study. Two key elements of the theory of suicidal behavior were present among the respondents. The presence of one key element may further increase the risk of suicide potential. Though suicide potential and depression are quite alarming, the risk and protective factors were found to be at high levels, the level of depression among respondents was from normal to borderline level but still, there were many respondents whose level of depression is at a moderate level and may need psychological and
Suicide potential among the respondents was moderate and that there were a number of students with high and very high level of suicide potential that may need clinical intervention such as psychological and psychiatric treatment including medication. With this evidence, there is a need to address this issue among college students and that proper intervention should be done. Most of the respondents consider the protective factors as highly important, which explains that though there is a moderate level of suicide potential and that there are many who suffer from moderate to extreme depression, the respondents’ protective factors are still of high importance to them. These findings imply that the respondents are still resilient due to low levels of hostility and the high importance of protective factors. Depression and suicide may be at a moderate level, but the protective factors are still high in schools, hence, there is really a need to strengthen the protective factors in order to lessen the occurrence of suicide. Among the respondents, two out of three factors for suicidal behavior are present, and further exposure to the third factor may increase the incidence of suicide among the respondents which can be explained using the theory of Joiner (2015) who proposed that suicide may happen when a person feels that one is a burden to others and has low sense of belongingness including being isolated from others and ability to successfully injure self.

The relationship among suicide potential, level of depression, and risk and protective factors were all significant in showing that the higher level of depression is associated with a high level of suicide potential and high importance of protective factors is significantly associated with a low level of suicide potential and depression. The respondents’ level of depression was significantly related to age, sex, monthly family income, and year level.
it comes to the relationship between demographic profile and suicide potential, it was revealed that there is no significant relationship between suicide potential and age, suicide potential, and gender. Moreover, the relationship among suicide potential and monthly family income and year level was significant. These results support the report of WHO that suicide is the second cause of death among 15-29 years old worldwide (World Health Organization, 2015). In addition, a high suicide rate was also observed in the low earning countries which support the findings of WHO. In this study, most of the respondents were from the low-income group and within the above-mentioned age range showing that the respondents are at a high risk of suicide and depression.

The relationship between the risk and protective factors was not significant with age, sex, and monthly family income. However, the relationship between risk and protective factors and year level was significant. The relationship between suicide potential and level of depression was significant and the relationship between suicide potential and risk and protective factors was also significant.

Based on the findings of this study, the following are suggested to address depression, suicide, and suicide potential. First, since there are many students with deep psychological needs, needing not only guidance and counseling but psychological interventions as well, the title Guidance and Counseling Office should be transformed to something that may remove the stigma associated with the term “Guidance Office.” Even its mission and vision statement may be revised in order to address depression and suicide tendencies and other mental health issues among higher education students. It may be good to have the program more comprehensive so it may widen its scope to take care of the well-being of higher education students.
Second, the staff in the guidance, counseling, and psychological services should include not only guidance counselors but also psychologists and psychiatrists to cater to those who are in need of psychological and medical intervention. The training and experience of the staff should be enhanced especially in addressing depression and suicide in schools.

Third, although suicide potential is higher in males than in females, the program should focus on both sexes. Higher education institutions should prepare a comprehensive depression and suicide intervention program because a single case of suicide when talked about by the media would affect the reputation of the school concerned. Furthermore, that most of the students in the State Universities and Colleges (SUCs) in the higher education institutions are from the low-income groups making them to high suicide potential.

Fourth, depression and suicide intervention programs should be focused on first and second-year students as well as fifth-year students due to the higher suicide potential among them. With the current status of depression and suicide potential among higher education students, cases of suicide may be underreported or not reported at all, this may be due to the stigma associated with this problem. Going to the guidance office for counseling is also stigmatized due to the students’ view or idea about the said office because of its punitive connotation.

For future researchers, this study may be repeated to the students of the K-12 program this is because this study is limited only to higher education students, and that there are observations of the increasing number of students with depression and suicide tendencies among them.
References


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