

## **Suicide Ideation, Suicide Planning, and Suicide Attempts Among High School Students in the Philippines: Trends and Insights from Four Nationally Representative Datasets**

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**Mark Anthony M. Quintos**  
*University of the Philippines Manila*

**Abstract:** This study looked into the prevalence of suicide risk in its three forms, (1) suicide ideation, (2) suicide planning, and (3) suicide attempt, among high school students in the Philippine during four timeframes: 2003, 2007, 2011, and 2015. Using four datasets obtained from the World Health Organization's Global School-based Student Health Survey (GSHS) for the Philippines, the study aimed to observe the trends of the three suicide indicators over the four timeframes. Results of the study showed that the rates of suicide ideation and suicide planning have decreased among the high school student population in the country. However, despite the general decrease among the population of the study, suicide attempt has increased among those who exhibit suicide risk. This increase of suicide attempters was also accompanied by an increase in the frequency of suicide attempts per person from 2011 to 2015. The converse trends between ideation and planning on one hand and suicide attempts on the other, and the fact that the latter years showed that the proportion of high school students who made suicide attempts are even higher than the proportion who underwent suicide ideation and suicide planning, suggests the possibility of what is commonly known as "impulsive suicides". The implications of this and other findings are discussed in the paper.

**Keywords:** Suicide, Suicide Ideation, Suicide Planning, Suicide Attempt, Filipino Youth, Philippines

### **INTRODUCTION**

Despite the growing awareness of mental health - including suicide - in the country, there is a dearth of nationwide data that focuses on this particular social problem. Researchers, policy-makers, and laymen who wish to get a glimpse of the suicide situation in the country would usually have to rely on the annual reports in the Philippine Health Statistics (PHS) and Field Health Service Information System (FHSIS) published by the Department of Health (DOH). The data from these reports come from the vital registries of the country. Such data, however, are generally ambiguous owing to the fact that suicide cases are simply lumped together in mortality cases caused by "accidents" instead of being specifically identified as deliberate self-harm leading to death. Such a limitation may perhaps be unavoidable in a predominantly Christian and pro-life country where suicide carries a stigma not only for the victim but also the bereaved family, necessitating some families to present suicide cases as accidents, not to

mention the cases where it is difficult to ascertain if the death was intentional or not. That is not to say that such data are no longer usable. Redaniel et. al's study (2011), which is perhaps the most known suicide study in the Philippines, made use of data from the PHS to make an estimate of the suicide prevalence in the country over time. Due to the nature of data source, the study had to operate by taking reports of accident-caused death rates with a grain of salt, careful to note the cases which may imply suicide. A different approach that would provide greater accuracy would be that done by Nepomuceno, Leynes, and Paras (2009). In their study, chart records of emergency rooms were reviewed to determine the characteristics and circumstances of suicide attempters. While this provides greater accuracy, it is difficult to commit at a large-scale scenario due to financial, manpower, and bureaucratic constraints. This aforesaid study, for example, was only able to make use of 56 charts as the data source of their study.

The difficulty of relying on statistics culled from death certificates, and the financial, manpower, and bureaucratic constraints of large-scale reviews of emergency room records, necessitates the use of an alternative approach to gauging the prevalence of suicide in the country. This alternative comes in the form of survey research. Instead of relying on actual cases of death by suicide, survey research casts a net on the target population and relies on self-reports of suicide attempts among those who survived. Such an approach, of course, would have its trade-offs. In particular, this approach will only be able to take into account those who are still alive, unless, perhaps, if the respondents are asked to report the cases of suicide they know of that actually succeeded – a method that has yet to be done in the country perhaps because of its own risks of under- and over-reporting (the method of asking others to report deaths for statistical purposes is something that by some other nationally-representative survey, particularly the Demographic Health Survey when trying to get statistics from the field on variables like perinatal, infant, and child mortality). In lieu of this limitation, ascertaining suicide prevalence through self-reports in survey research promises its own benefits, such as being able to inquire further into the suicide phenomenon by asking not only about their engagement in suicide attempts but also their methods and reasons. This is the method utilized by the suicide statistics provided by the Demographic Research and Development Foundation and the University of the Philippines Population Institute's Young Adult Fertility and Sexuality surveys (YAFS) (2014). Though the YAFS is focused primarily on sexuality and reproductive health, it also allotted space for other risky behaviors such as suicide. There have been four YAFS surveys thus far, the first being done in 1982 and the latest being in 2013, for an interval of roughly a decade in-between the surveys. Out of the four surveys, only the 2002 and the 2013 iterations included questions on suicide. These questions inquired into the prevalence of suicide ideation, suicide attempt, methods used in the suicide attempt, and reasons for engaging in the suicide attempt. It is through the YAFS that researchers such as Manalastas (2013; 2016) and Quintos (2017a; 2017b; 2018; 2019) were able to make their respective inquiries into the phenomenon. However, though the YAFS data are helpful by themselves, they only account from the young adult population in the country: YAFS 3 included only those ages 15 to 27, and YAFS 4 included only those ages 15 to 24. In a characteristically young population such as the Philippines where 61% of the population are under 30 years old as of the 2010 census and where 34% of the population are below 15 years old (Philippine Statistics Authority, n.d.), the net cast by the YAFS surveys failed to include the sizable population of adolescents – a limitation that is understandable given the primary focus of the YAFS.

Fortunately, another survey is available in the country to account for the neglected adolescent population. The Global School-based Student Health Survey (GSHS) (World Health Organization, n.d.) is a World Health Organization-initiated survey periodically conducted in various countries with an average interval of four years in between surveys. There have been four rounds of GSHS conducted in the country in partnership with the DOH, the earliest being in 2003 and the latest being in 2015. Unlike the YAFS which focuses primarily on sexuality and reproductive health, the GSHS is a nationally representative survey designed to assess the risk factors and protective factors of high school students with regard to 10 key areas including suicide, depression, smoking, and alcohol and drug consumption. Its target population is also different, focusing on high school students instead of young adults. The questions pertaining to suicide in GSHS is also different from YAFS. While YAFS looked into suicide ideation, suicide attempt, method used in the attempt and reason for the attempt, the GSHS had foregone the inquiry regarding reasons and methods and focused on suicide ideation, suicide attempt, frequency of suicide attempt, and a variable absent in YAFS: suicide planning. What, then, is the difference between these three suicide indicators? Suicide Ideation can be regarded simply as the act of thinking, and being preoccupied, about the prospect of committing suicide (Gliatto and Rai, 1999). It is purely cognitive in nature, whereas the actual behavioral manifestation would be regarded as Suicide Attempt which can also be defined as, "a self-inflicted, potentially injurious behavior with a nonfatal outcome for which there is evidence (either explicit or implicit) of intent to die" (Silverman et al., 2007). A lesser discussed term is the Suicide Planning which may be treated as a phase in-between suicide ideation and suicide attempt. Hence, Suicide Planning can be regarded as the phase wherein the person does not merely consider suicide, but rather, the person starts to entertain scenarios on how to perform the act, i.e. where and when to commit suicide and what method to employ.

It is through the use of the GSHS datasets pertaining to the Philippines that the author aimed to contribute

another piece of the puzzle of suicide phenomenon in the country – a puzzle that is still very much lacking giving the scant number of suicide-related studies in the Philippines.

Using secondary data obtained from a randomly selected total sample of 27,046 High School students from all over the country during 2003, 2007, 2011, and 2015, this paper attempted to answer the following research questions:

- (1) How prevalent were suicide ideation, suicide planning, and suicide attempts among Filipino High School students during 2003, 2007, 2011, and 2015?;
- (2) What is the trend of suicide ideation, suicide planning, and suicide attempts among Filipino High School students during 2003, 2007, 2011, and 2015?;
- (3) How do Filipino High School students from different socio-demographic backgrounds differ in their rates of suicide ideation, suicide planning, and suicide attempts?;

## METHODS AND MATERIALS

Datasets obtained from the Global School-based Student Health Survey (GSHS) were utilized for secondary analysis in this study. Four GSHSs have been launched in the Philippines in four timeframes with an interval of four years in-between each: 2003, 2007, 2011, and 2015. The 2003 GSHS had 7338 respondents, the 2007 had 5657 respondents, the 2011 GSHS had 5290 respondents, and the 2015 GSHS had 8761 respondents - for a sum total of 27,046 respondents. All respondents were students of private or public high schools in the Philippines when the data were gathered.

Three variables served as the foci of the study: Suicide Ideation, Suicide Planning, and Suicide Attempt. Each had one question included in the GSHS questionnaire, although the question on Suicide Attempt was only included in the 2011 and 2015 surveys. The two socio-demographic characteristics available in the dataset - sex and age – were cross-tabulated with the three suicide variables in order to gain a deeper appreciation of the differences in prevalence of suicide ideation, planning, and attempts among cohorts.

Data for the three variables, Suicide ideation, Suicide planning, and Suicide attempts, from the four datasets of the study were constructed. Cross-tabulations were also made between the three aforesaid variables and the socio-demographic variables of age and sex. These were then analyzed for patterns, comparing one time-period with the others to find a pattern.

## RESULTS AND DISCUSSION

The results of each research question in this study is presented consecutively. Tabular summaries have been provided when necessary in order to ease the presentation and discussion of the results.

Table 1 shows that almost 2 out of every 10 Filipino high school students have seriously thought of committing suicide at least once during 2003 and 2007. However, the number of Filipino high school students with suicidal thoughts was reduced to just 1 out of every 10 by 2011 and 2015. When it comes to suicide planning, almost 2 out of every 10 Filipino high school students planned to commit suicide back in 2003. However, this was reduced to just 1 out of every 10 Filipino high school students in 2007, 2011, and 2015 – indicative that the rate of suicide planning, just like suicide ideation, has decreased among the high school students in the Philippines over time. When it comes to suicide attempts, the data for the study is limited to just two timeframes: 2011 and 2015. However, Table 1 shows that roughly 1 out of every 10 Filipino high school students have attempted suicide at least once before, with data indicating an upward trend. These findings are parallel with the observed statistics of suicide among young adult Filipinos (Quintos, 2017a), suggesting that suicide prevalence, at least at this level of analysis, do not substantially differ between the high school and young adult cohorts. A deeper analysis of the suicide attempt situation is shown in Table 2.

Table 1's data showed that the rate of suicide attempt is in an upward direction. The supplementary data provided in Table 2 fleshes out the rate of suicide attempts by giving details on how frequent these suicide attempts were. What can be observed from the data is that the increase of suicide attempts from 2011 to 2015 attempted suicide once to three times, while the rate of suicide attempters who have done the act four times or more remained relatively the same.

This raises an element of suicide prevalence in the country that would prudently be put under surveillance: not

Table 1. Prevalence of suicide ideation, suicide planning, and suicide attempt among the Filipino High School Students in 2003, 2007, 2011, and 2015 .

| Datasets                  | SUICIDE IDEATION |      |       | SUICIDE PLANNING |      |       | SUICIDE ATTEMPT |      |       |
|---------------------------|------------------|------|-------|------------------|------|-------|-----------------|------|-------|
|                           | YES              | NO   | TOTAL | YES              | NO   | TOTAL | YES             | NO   | TOTAL |
| <i>GSHS 2003</i> (n=7338) | 17.1             | 82.9 | 100   | 16.7             | 83.3 | 100   | ---             | ---  | ---   |
| <i>GSHS 2007</i> (n=5657) | 17.7             | 82.3 | 100   | 9.0              | 91.0 | 100   | ---             | ---  | ---   |
| <i>GSHS 2011</i> (n=5290) | 11.6             | 88.4 | 100   | 11.5             | 88.5 | 100   | 12.8            | 87.2 | 100   |
| <i>GSHS 2015</i> (n=8761) | 11.3             | 88.7 | 100   | 10.6             | 89.4 | 100   | 16.2            | 83.8 | 100   |

Table 2. Percentage distribution of frequency of suicide attempts among the Filipino High School Students in 2011 and 2015.

| Frequency             | GSHS 2011<br>(n=5290) | GSHS 2015<br>(n=8761) |
|-----------------------|-----------------------|-----------------------|
| <i>0 times</i>        | 87.2                  | 83.8                  |
| <i>1 time</i>         | 8.6                   | 10.0                  |
| <i>2 to 3 times</i>   | 2.6                   | 4.5                   |
| <i>4 to 5 times</i>   | 1.1                   | 1.0                   |
| <i>6 or more time</i> | 0.6                   | 0.7                   |

only is the prevalence of suicide attempts indicating an upward trend, the average frequency of attempts per suicide-prone Filipino youth is also showing an increase.

Tables 3, 4 and 5 shows a more detailed differentiation of the suicide-prone high school students over the four timeframes of the study. Previous studies on suicide have given importance to various socio-demographic characteristics as viable predictors to suicide due, in large part, to the social statuses and roles ascribed and/or achieved by persons who possess those characteristics. The variable of gender or sexual orientation, for example, is often given emphasis in Sociological Suicidology because of the marginalized status that certain gender groups often possess. For example, being part of the LGBT has been found to be associated with higher threat of suicide. In a review of studies on homosexuality and suicide, McDaniel et al. (2001) arrived at the conclusion that the lack of social integration and bullying experienced by homosexuals lead to greater threats of maladaptive behaviours including suicide. Baiocco et al. (2015) also arrived at similar findings with regard to sexual orientation after analyzing data obtained from 320 gay and bisexual men, 396 heterosexual men, 281 lesbians and bisexual women, and 835 heterosexual women. In the Philippine setting, Manalastas (2013) found that the threat of suicide in male homosexuals is two times greater than male heterosexuals, and that this is partially accounted for by depression and experiences of threat and victimization. The connection between gender minority status and suicide risk was also found in another of his studies (2016). These findings are further supported by Reyes et. al (2017) who found that those who perceive that the majority of society hold a negative opinion of themselves because of their homosexuality, and those who have a negative opinion of themselves because of their homosexuality have higher risks of suicide, and the author's own study (Quintos, 2017a) which found that members of the LGBT among young adults have higher rates of suicide ideation and suicide attempt than heterosexuals, and that this increased suicide risk is due to their strained family relationships and difficulties in establishing and/or maintaining romantic relationships.

In the case of the datasets utilized in this study, however, the research instrument opted to obtain the respondents' biological sex rather than their gender or sexual orientation. While possibly not as informative as gender, sex as a variable still has its merits – given that certain social statuses and roles are still highly differentiated between the dichotomy of maleness and femaleness. Indeed, previous Suicidology studies have noted the sex-suicide risk connection. In Lester's study (2000) of English-speaking countries, for example, males showed higher rates of completed suicide rates, though females showed significantly higher rates of both suicide ideation and attempts. Stack (2000) provided a possible explanation for this. According to him, this might be because there is a greater pressure for men to project an impression of being strong, decisive, and competitive. Due to this higher expectation from society, men are affected more than women by actual or perceived failure. In fact, Stack noted that in English-speaking Western societies male suicide is frequently regarded as a decisive, strong and calculated response to im-

personal stressors, whereas female suicide is construed as a weak, ambivalent and emotional response to personal relationship problems. Stack also noted that being female is correlated with several other factors that reduce the chances of suicide. These are higher levels of religiosity, lower alcohol abuse, higher rates of reported depression (which, though a positive correlate of suicide, is recognizable and therefore potentially treatable), more negative attitudes to completed suicide, more flexible coping skills, more extensive social support networks to draw on, and less access to lethal suicide methods such as firearms.

Stack's idea of the pressure of the expectations on masculinity as a predisposing factor to suicide is agreed to by Coleman (2015), whose own study using data from 2431 young adults yielded the result that traditional masculinity is second only to depression in the strength of association with higher suicide chances. Aside from the effect of the role expectations of masculinity, Anestis et al. (2001), in their analysis involving 200 undergraduate participants, found that males tend to exhibit higher levels of acquired capability of suicide than females, and this acquired capability for suicide is the defining factor between suicide ideation and actual suicide attempt. On the other hand, Chia et al.'s study (2010) of the suicide trends in Singapore from 1955 to 2004 gave indications that the female rate of suicide was on an upward trend, though they were quick to note that this increase in female suicide rates is only slight, and is limited to the Malay subpopulation of the area. Coskun et al.'s study (2012) on Turkish suicide rates as obtained from public records also found a higher rate of female suicide than male, especially on the age cohort of 24 and below – accounting for 50% of all suicide cases amongst the female population of the country. Given the context of Turkey, this high suicide rate, especially amongst the female youth, were explained by the authors as a by-product of (a) negative social status of females (forced marriage, young marriage age, low literacy, honor killings); (b) substantial rural to urban migration which disrupts ties and exposes migrants to a less traditional cultural system; (c) shortage of mental health services; (d) and, possibly, reduced religious education enrollment may be an additional factor.

In terms of age and suicide, Stack (1991) noted that there has been an observable neglect of age-specific analysis in Sociological work on suicide. Statistical reports from the WHO indicate that in 2016, the number of suicide deaths globally amounted to 817,000 (Lee et al., 2018). Out of this number, the 15-49 age cohort accounted for approximately 60% of the deaths. The aforesaid data, however, only accounts for successful suicides. Unfortunately, there are no global data from WHO on suicide attempts because countries do not generally send, or even collect, such information from their constituents regularly. As far as the US population is concerned, however, is was reported that there are generally 25 suicide attempts for every suicide death. The only outlier in this pattern are the young adults aged 15-24 where there are approximately 100-200 suicide attempts per suicide death. It is worth noting that suicide prevalence is slow to change in rate. In the case of the United States, for example, Rosenberg et al. (1987) made an epidemiologic analysis using death certificate data and observed that from the decades of 1950 to 1980, the rate of suicide prevalence remained constant. Despite this state of constancy, however, the age and sex differentials of suicide victims underwent significant changes. During this timeframe, suicide rates among the older persons decreased, but this decrease was accompanied by a marked increase among young persons, especially among white males aged 15 to 19 whose suicide rate increased by 305% and among white males aged 20 to 24 whose suicide rate increased by 196% - an increase correlated with the percentage of firearms use in suicide. In recent years, however, the older age groups have regained their lead in suicide rates. In 2012, it was observed that the highest suicide rate was among the 45 to 59 age group, accounting for 20 deaths per 100,000 members of the population. This was followed by the 75 years and older (17/100,000) while the adolescents and young adults only accounted for 11 suicide deaths per 100,000 members of the population. The report noted that the general pattern of suicide in the US is that suicide rates increase with age, with middle-aged and older adults consistently having higher suicide rates than younger groups, albeit there is a major spike of suicide rate during the adolescent and young adult years. The youth, however, prevails when it comes to rates of suicide attempts (Kulbarsh, 2014). A similar trend was found during a similar timeframe in Australia, highlighting the need to revisit the potential "causative influences" that specifically influence adolescents and young adults (Silburn and Zubrick, 1992).

Notable in the aforementioned studies is the absence of focus on suicides among ages below 15 years old. This is not to say that suicides among the very young are non-existent. In the US, the country's Center for Disease Control and Prevention reported that from 1999 through 2015, 1,309 children ages 5 to 12 took their own lives, or an average of one child dying from suicide every five days during that time period (Hannah, 2017). The report noted further that the frequency of suicide among the very young was higher during 2013 to 2015 where the average became one child dying of suicide every 3.4 days. This was largely because of a 54% increase in the suicide rate of 11- and 12-year-olds, necessitating the CDC to warn of the rise in suicide rates in ages 10-14. The report also found that suicide victims are most often boys, though they are outnumbered by the opposite sex when it comes to frequency of suicide attempts. Another study, this time using hospital records of 49 children's hospitals, found that children ages 5 to 17 visited children's hospitals for suicidal thoughts or attempts about twice as often in 2015 as in 2008 (Plemmons et al., 2018). According to the study, older teens were more likely to end up in the hospital for suicide attempt-related reasons, with half of the visits recorded during the timeframe of the study being from teens

ages to 15 to 17, followed by 12- to 14-year olds accounting for 37% of the visits, and those ages 5 to 11 accounting for the remainder. It also became salient in the study is that many of the suicide attempts transpired during school season, raising the idea of school pressure – along with other social pressures that teens have to contend with nowadays, such as self-presentation and management in social media and sexting, and the onset and challenges of puberty – as the main risk factors. On the other hand, another study which utilized two nationally representative surveys of U.S. adolescents in grades 8 through 12 (N = 506,820) and national statistics on suicide deaths for those ages 13 to 18 found that adolescents who spent more time on new media such as social networking sites (e.g. Facebook and Twitter) and in front of computer or smartphone screens were more likely to exhibit mental health problems. Conversely, adolescents who spent more time on non-screen-based activities such as face-to-face interactions, sports, reading print media and other traditional activities were found to be less likely to exhibit mental health problems like suicide risk (Twenge et al., 2017).

A point also has to be made with regard to the aforementioned school season and suicide risk connection (Plemmons et al., 2018). While the US situation is such that school season becomes especially problematic in terms of suicide – presumably because of the academic pressure that comes along with it, the opposite was found to be the case in the Philippines. In the case of the Philippines, a study involving 300 cases collected from the records of hospitals and the police in 2008 and 2009 revealed that suicide incidences were more often during the Lenten season, when the youth is alone at home while the parents are away at work or in religious activities and when the youth is removed from the usual company of peers that characterizes a typical school season (Uy, 2012). The study, however, was quick to note the lack of generalizability of its findings.

One final note that relates to age and suicide is the finding that a diagnosis of ADD (Attention Deficit Disorder) or ADHD (Attention Deficit Hyperactivity Disorder) is more common in children who died by suicide compared to early adolescents, who were more likely to be affected by depression or dysthymia (Sheftall et al., 2016). This implies that tackling suicide among young adolescents could be a different ball game as compared to when the focus are young adults. The presence of this disorder could lead to an impulsivity in suicidal behavior, especially for children whose mental maturity might not be sufficient enough to know the implications, and permanence, of a successful suicide.

The discussion now moves to the results of the study on suicide ideation, suicide planning, and suicide attempts as mediated by sex and age. The data in Table 3 shows that there is a continuous decline in the rates of suicide ideation among males, while the female rate of suicide ideation follows an inverted “U” shape. Further, males and females had a relatively similar proportion of suicide ideators back in 2003 with a slight lead among the male high school population. However, the difference in the prevalence of suicide ideation among the two sex groups grew in 2007, with more females self-reporting suicide ideation than males. This sex difference in suicide ideation became more pronounced by 2011, with approximately 2 out of every 10 suicide ideators among females compared to just 1 out of every 10 suicide ideators among the males. By 2015, the general decline in the rate of suicide ideation among the high school students is observable in both the male and female groups. However, despite the decline, the females still maintained the lead in terms of higher suicide ideation, albeit the margin became substantially smaller than in the previous two timeframes, 2007 and 2011.

In terms of age, the data from 2003 suggests that the risk of suicide ideation increases with age. However, this pattern seems to be contradicted by the data from 2007, 2011 and 2015 which suggests that the relationship between suicide ideation and age follows a U-shaped pattern, with suicide ideation being relatively high during the younger years (11 years old and below) then decreasing during the middle of adolescence and peaking once again when they reach 16 years of age or older. The data in Table 3 yielded the finding that females have a lead over males when it comes to suicide ideation. In terms of suicide planning, Table 4 shows the same trend in sex differences: the two sex cohorts were relatively similar in prevalence in 2003, but the sex difference becomes defined in 2007, 2011, and 2015 with a higher prevalence among the females. It was also observed in Table 4 that the prevalence of suicide planning was highest regardless of sex in 2003 and was lowest in 2007 before increasing once again for both sex cohorts in 2011 and showing a slight decline once again in 2015.

Similar to the pattern observed in sex differences in suicide planning, the trend of suicide planning in terms of age follow the trend of age differences observed in suicide ideation prevalence: suicide planning is most prevalent among the youngest cohort in the study (11 years old or younger) then follows a U-shaped trend. Another notable observation is that there is a noticeable decrease in the prevalence of suicide planning among all age cohorts from 2003 to 2015 most notably for the 11 years old or younger cohort where roughly 3 out of every 10 Filipino high school students self-reported having planned their suicide at least once in 2003, 2007, and 2011 but was reduced to just roughly 2 out of every 10 Filipino high school students in 2015.

The socio-demographic differences among the Filipino high school students in terms of suicide attempt in 2011

Table 3. Percentage distribution of suicide ideation among the Filipino High School Students by sex and age in 2003, 2007, 2011, and 2015.

| SUICIDE IDEATION |                       |      |       |                       |      |       |                       |      |       |                       |      |       |
|------------------|-----------------------|------|-------|-----------------------|------|-------|-----------------------|------|-------|-----------------------|------|-------|
|                  | GSHS 2003<br>(n=7338) |      |       | GSHS 2007<br>(n=5657) |      |       | GSHS 2011<br>(n=5290) |      |       | GSHS 2015<br>(n=8761) |      |       |
|                  | YES                   | NO   | Total |
| <b>Sex</b>       |                       |      |       |                       |      |       |                       |      |       |                       |      |       |
| Male             | 18.4                  | 81.6 | 100   | 14.1                  | 85.9 | 100   | 11.9                  | 88.1 | 100   | 8.7                   | 91.3 | 100   |
| Female           | 16.2                  | 83.8 | 100   | 20.9                  | 79.1 | 100   | 20.1                  | 79.9 | 100   | 11.9                  | 88.1 | 100   |
| <b>Age</b>       |                       |      |       |                       |      |       |                       |      |       |                       |      |       |
| ≤ 11 years old   | 9.2                   | 90.8 | 100   | 35.4                  | 64.6 | 100   | 27.8                  | 72.2 | 100   | 12.1                  | 87.9 | 100   |
| 12 years old     | 9.0                   | 91.0 | 100   | 22.9                  | 77.1 | 100   | 12.4                  | 87.6 | 100   | 6.5                   | 93.5 | 100   |
| 13 years old     | 14.2                  | 85.8 | 100   | 15.9                  | 84.1 | 100   | 12.0                  | 88.0 | 100   | 9.2                   | 90.8 | 100   |
| 14 years old     | 16.6                  | 83.4 | 100   | 15.4                  | 84.6 | 100   | 16.0                  | 84.0 | 100   | 10.2                  | 89.8 | 100   |
| 15 years old     | 16.7                  | 83.3 | 100   | 17.9                  | 82.1 | 100   | 18.5                  | 81.5 | 100   | 11.8                  | 88.2 | 100   |
| ≥ 16 years old   | 19.7                  | 90.3 | 100   | 18.8                  | 81.2 | 100   | 19.6                  | 81.4 | 100   | 11.4                  | 88.6 | 100   |

and 2015 shown in Table 5 shows that more females attempt suicide than males. This is consistent with the higher prevalence of suicide risk in terms of suicide ideation and suicide planning among females observed in previous discussions. In terms of age, it was observed that similar to the findings in suicide ideation and suicide planning, the youngest age cohort has the highest proportion within their cohort who have attempted suicide before in 2011. After the outlying statistical findings in the 11 years old or younger age cohort, the rest of the age cohorts show an increasing trend as the high school students advance in age. This pattern, however, was not the case in 2015. Instead, a U-shaped pattern is once again apparent, similar to the observation in Tables 3 and 4.

Synthesis of the trends in Suicide Prevalence found in the study

The results presented in Tables 1 to 5 highlights several points of discussion:

*1. Suicide ideation and planning rates are decreasing, but suicide attempt rates are increasing – evidence of impulsive suicide attempts?*

The data presented in Table 3 pointed to the general decline of the rates of both suicide ideation and suicide planning. In other words, lesser proportions of Filipino high school students are considering, and making concrete plans for self-harm with the ultimate intent to end their lives. Despite this decrease, there is an increase in the number of students who, despite the lack of prior consideration and planning, proceeds to try and kill themselves. This presence of “impulsive suicide” attempts – or acts of deliberate self-harm with the intent of cessation of one’s life without prior deliberation and preparation – is contrary to the findings on suicide prevalence involving Filipino young adults (Quintos, 2017a) where all suicide attempts were preceded by deliberation or suicide ideation or what is regarded as “premeditated suicides”. This is not to say that impulsive suicides are a totally unaccounted phenomenon in Suicidology. As Anderson (2008) put it, scholarly appreciation of the phenomenon of suicide can be divided into the “premeditation-versus-passion dichotomy”. While some of the experts who dabble with suicidology

Table 4. Percentage distribution of suicide planning among the Filipino High School Students by sex and age in 2003, 2007, 2011, and 2015.

| SUICIDE PLANNING      |                       |      |       |                       |      |       |                       |      |       |                       |      |       |
|-----------------------|-----------------------|------|-------|-----------------------|------|-------|-----------------------|------|-------|-----------------------|------|-------|
|                       | GSHS 2003<br>(n=7338) |      |       | GSHS 2007<br>(n=5657) |      |       | GSHS 2011<br>(n=5290) |      |       | GSHS 2015<br>(n=8761) |      |       |
|                       | YES                   | NO   | Total |
| <b>Sex</b>            |                       |      |       |                       |      |       |                       |      |       |                       |      |       |
| <i>Male</i>           | 16.6                  | 83.4 | 100   | 7.5                   | 92.5 | 100   | 9.8                   | 90.2 | 100   | 9.1                   | 90.1 | 100   |
| <i>Female</i>         | 16.8                  | 83.2 | 100   | 10.2                  | 89.8 | 100   | 12.7                  | 87.3 | 100   | 11.0                  | 89.0 | 100   |
| <b>Age</b>            |                       |      |       |                       |      |       |                       |      |       |                       |      |       |
| <i>≤ 11 years old</i> | 35.4                  | 64.6 | 100   | 38.2                  | 67.8 | 100   | 33.3                  | 66.7 | 100   | 17.9                  | 82.1 | 100   |
| <i>12 years old</i>   | 31.1                  | 68.9 | 100   | 9.7                   | 90.3 | 100   | 9.0                   | 91.0 | 100   | 6.8                   | 93.2 | 100   |
| <i>13 years old</i>   | 12.8                  | 87.2 | 100   | 4.9                   | 95.1 | 100   | 10.8                  | 89.2 | 100   | 8.4                   | 91.6 | 100   |
| <i>14 years old</i>   | 15.4                  | 84.6 | 100   | 7.7                   | 92.3 | 100   | 9.7                   | 90.3 | 100   | 10.0                  | 90.0 | 100   |
| <i>15 years old</i>   | 16.2                  | 83.8 | 100   | 8.7                   | 91.3 | 100   | 12.3                  | 87.7 | 100   | 12.5                  | 87.5 | 100   |
| <i>≥ 16 years old</i> | 19.7                  | 80.3 | 100   | 10.5                  | 89.5 | 100   | 13                    | 87   | 100   | 10.3                  | 89.7 | 100   |

would often regard suicide as a non-spontaneous activity and discount the potential for impulsivity in the event under the rationale that suicide survivors, when asked why they tried to commit suicide, simply does not want to divulge any information and opts for saying that there is no reason behind the act (Ramsland, 2013), the opposing camp would argue that the availability and general ease in accessing potential tools to facilitate suicide such as knives, poisonous substances, or even guns are powerful violence cues that can predispose people to aggressive behavior without much forethought, with the aggressive behavior being manifested toward one's self. In other words, it is the availability of means that is at play rather than the presence of predisposing reasons toward suicidal behavior (Anderson, 2008). Furthermore, a history of mental disorders as well as drug and alcohol use can result in a lack of inhibition in a person and an impulsivity toward high-risk behavior such as suicide without the presence of either deliberation or premeditation (American Addition Centers, n.d.).

Support for the existence of impulsive or spontaneous suicide has also been documented in a number of studies. This includes a study of 1003 suicide attempters in South Korea wherein it was found that almost 9 out of every 10 of the suicide attempts accounted for in the study were impulsive in nature (Kim et al., 2015). Compared to the impulsive suicide attempters, planned or premeditated suicide attempters are the ones who are from older age cohorts and more often exhibit symptoms of depression. Further, planned suicide attempts are more often due to financial and physical/health problems, whereas impulsive suicide attempts are more often due to interpersonal conflicts. Similar to the aforesaid study, another study also found that roughly 55% of suicide attempts are impulsive (Baca-Garcia et al., 2001) while another found that impulsive suicide attempters tend to be less depressed, are motivated by the desire to reduce tension in their life, are more likely to consider that they would survive, and to report that someone saw them perform the act (Williams et al., 1980).

A study of coroner's records in England (Hawton et al., 2005) also found that suicide attempters with low levels of intent tend to be young – a finding that fits with the aforesaid findings of older age and planned suicides. The adolescence-impulsive suicide connection is further pronounced in a study of 86 suicide attempters where it was found

Table 5. Percentage distribution of suicide attempt among the Filipino High School Students by sex and age in 2011 (n=5290) and 2015 (n=8761).

|                | SUICIDE ATTEMPT |           |           |           |           |           |                 |           |                |           |           |           |
|----------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------------|-----------|----------------|-----------|-----------|-----------|
|                | 1 time          |           | 2-3 times |           | 4-5 times |           | 6 or more times |           | Total Attempts |           | NO        |           |
|                | GSHS 2011       | GSHS 2015 | GSHS 2011 | GSHS 2015 | GSHS 2011 | GSHS 2015 | GSHS 2011       | GSHS 2015 | GSHS 2011      | GSHS 2015 | GSHS 2011 | GSHS 2015 |
| <b>Sex</b>     |                 |           |           |           |           |           |                 |           |                |           |           |           |
| Male           | 7.2             | 8.8       | 2.4       | 3.4       | 0.9       | 0.9       | 0.8             | 0.6       | 11.3           | 13.8      | 88.7      | 86.2      |
| Female         | 9.6             | 9.7       | 2.8       | 4.4       | 1.2       | 1.1       | 0.4             | 0.7       | 14             | 15.9      | 86        | 84.1      |
| <b>Age</b>     |                 |           |           |           |           |           |                 |           |                |           |           |           |
| ≤ 11 years old | 15.0            | 10.3      | 15.0      | 0.0       | 10.0      | 2.6       | 5.0             | 0.0       | 45.0           | 12.8      | 55.0      | 87.2      |
| 12 years old   | 6.4             | 7.3       | 2.5       | 1.5       | 0.5       | 1.0       | 0.5             | 0.0       | 9.8            | 9.8       | 90.2      | 90.2      |
| 13 years old   | 7.9             | 7.5       | 3.0       | 3.0       | 0.4       | 0.8       | 0.4             | 0.9       | 11.6           | 12.2      | 88.4      | 87.8      |
| 14 years old   | 7.1             | 9.31      | 2.5       | 5.1       | 1.0       | 1.0       | 0.6             | 0.7       | 11.3           | 16.0      | 88.7      | 84.0      |
| 15 years old   | 9.3             | 11.0      | 2.6       | 4.6       | 1.4       | 1.1       | 0.8             | 0.7       | 14.2           | 17.3      | 85.8      | 82.7      |
| ≥ 16 years old | 10.0            | 9.7       | 2.4       | 3.8       | 1.2       | 1.1       | 0.4             | 0.7       | 14.0           | 15.4      | 86.0      | 84.6      |

that adolescents more often engage in impulsive, rather than planned suicides (Brown et al., 1991). A study of 269 medical records of suicide victims also supported the adolescent-impulsive suicide connection (Lim et al., 2016). It was also noted that usual factors associated with suicide –hopelessness, depression, and anger – are correlated only with the planned suicide attempters but are not useful when comprehending the phenomenon of impulsive suicide (Brown et al., 1991).associated with suicide –hopelessness, depression, and anger – are correlated only with the planned suicide attempters but are not useful when comprehending the phenomenon of impulsive suicide (Brown et al., 1991).

2. Female high school students are at a greater risk of suicide than male high students.

Comparing the trends observed on sex differentials of suicide ideation, planning and attempt in Tables 3 to 5 to the data on the young adult Filipinos (Quintos, 2017a), it is observable that the trend is similar: there are more suicide ideators, suicide planners, and suicide attempters among females. This is also in agreement with the prevailing knowledge on sex differentials on suicide risk where one of the most consistent findings in suicide research is that women make more suicide attempts than men, but men are more likely to die in their attempts than women (Vijayakumar, 2015), albeit there is no way for this study to ascertain if the male dominance in the prevalence of suicide deaths is also similar. Thus far, inquiries into actual suicide deaths will have to rely on Redaniel et al's study (2011) where there was a significantly higher increase in male rates of suicide from 1984 to 2005 (from 0.23 to 3.59 per 100,000 population) as compared to the female rates during the same timeframe (from 0.12 to 1.09 per 100,000 population). Furthermore, whether this finding among Filipino high school students can also be explained, partly

or wholly, by the same rationale as Coskun et al.'s (2012) aforementioned proposed explanation in their study would require qualitative explorations into the sex differentials of suicide that is beyond the scope of this research to pursue.

### *3. The onset of adolescence is a suicide-prone period.*

The presence of a U-shaped trend in suicide risk in terms of ideation, planning, and attempts was observed in this study when it comes to age differentials. The trends observed leads one to the assumption that what is being observed here is the manifestation of adolescent crisis (Levesque, 2011). According to the Encyclopedia of Adolescence, the adolescent crisis “refers to the upheaval that happens during this period, such as the changes that can take place in multiple dimensions, including emotional components, psychological factors, and physical development”. In one article, Dr. Sanders (2013) described this period as a time when,

*“[the] cognitive and psychosocial development of adolescents is variable. Asynchrony among physical, cognitive, and psychosocial development may limit the adolescents’ ability to perceive and judge risk effectively and may result in adolescent views that are incongruous with parents or guardians.”*

Indeed, Gilead and Mulaik (1983) posited that “[d]evelopmental concerns and inability to resolve problems stemming from feelings of alienation are often at the core of an adolescent’s suicide attempt”. Sands and Dixon (1986) also supported this view, positing that adolescent suicide is a product of the interplay between three factors that lead to a sense of worthlessness and rejection among adolescents that fuel their suicide risk. These three factors are the (1) crisis of adolescent development, (2) family dysfunctions, and (3) other social factors.

It is possible that an understanding of adolescent crisis and suicide risk can therefore be made here that accounts for both planned and impulsive suicides. On one hand, when it comes to planned suicides, the pressure or strain produced by the crises experienced during adolescence. This includes the physical changes that occur during the onset of adolescence that could trigger self-consciousness and anxieties on whether their changes are normal and whether they are developing the “right” way. It also includes the mental and emotional changes and the pressures that accompany it that bring about intense mood swings, sensitivity, and emotional outbursts as they cope with the socio-cultural pressures of transitioning from childhood to adulthood and its accompanying role expectations such as new, more mature responsibilities and the building of new, more complex social relationships (Teenage Development: What to Expect, 2018; Oswalt, 2010; Condor and Chira, 2011). Accompanying this building of new social relationships with peers and significant others is often a weakening of family ties, which, as a previous study on Filipino youth suicide found, is reported to be the main reason for suicide attempts (Quintos, 2017a). On the other, the impulsiveness of these adolescents toward risky behavior may be a by-product of poor, unsupervised, decision-making among the youth akin to Dr. Sanders’ aforesaid description. This poor, unsupervised, decision-making process of the youth, coupled with their search for new experiences, may inadvertently lead them to trying their hand at a suicide attempt. Unfortunately, this search for a new experience is blind to its potential for fatal harm due to their tendency, as mentioned by Williams et al. (1980), to presume that they would survive a suicide attempt.

## **CONCLUSION**

This study contributes another piece of the puzzle when it comes to suicide in the Philippines. While the previous works of the author dealt with the theory behind Sociological Suicidology and suicide among young Filipino adults, this study looked into a new cohort within the Philippine population – the adolescent high school students. As the conclusion of this study, the following insights or issues have been chosen as the most important to focus on for both educated contemplation, policy consideration, and future exploration:

### 1. Impulsive suicides – a looming threat?

One of the information that became salient in this study is the presence of the phenomenon of impulsive suicide attempts among the Filipino high school students – a phenomenon that did not manifest among the young adult population which became the subject of the author’s earlier research in suicide (Quintos, 2017a). The danger posed by the existence of these potentially impulsive suicide attempts is captured in the observation expressed in an earlier study that discussed the matter,

*“Put simply, those methods that require forethought or exertion on the actor’s part (taking an overdose of pills, say, or cutting your wrists), and thus most strongly suggest premeditation, happen to be the methods with the least chance of “success.” Conversely, those methods that require the least effort or planning (shooting yourself, jumping from a precipice) happen to be the deadliest. The natural inference, then, is that the person who best fits the classic definition of “being suicidal” might actually be safer than one acting in the heat of the moment — at least 40 times safer in the case of someone opting for an overdose of pills over shooting himself.” (Anderson, 2008)*

Not only are the methods of impulsive suicide attempters more fatal more often, it was also found that impulsive suicide attempters make more attempts than planned suicide attempters (Silburn and Zubrick, 1992). It has been suggested that this is because impulsive suicides are consequences of immediate situational crises which the victim had little to no time to prepare for and cope with. In fact, it has also been found that though impulsive suicide attempts are more common, those who commit impulsive suicide attempts suffer from less severe bouts of suicide ideation than their planned suicide attempt counterparts (Lim et al., 2016). What is the implication? Unplanned acts of suicidal behavior involve little preparation or forethought, and are therefore harder to detect in would-be victims, making the prospect of suicide prevention more challenging and the need for more research on detecting distal and proximal cues of suicidal behavior more necessary. It is also worth noting that there is a silver lining in the threat of impulsive suicides: due perhaps to their lack of serious bouts of suicide ideation and suicide planning, these impulsive attempters are less dedicated to their attempt. Indeed, at least one study found that impulsive suicide attempters are more likely to stop and call for medical help midway or immediately after the attempt (Kim et al., 2015). The author has had the opportunity to know of a case of suicide attempt where the would-be victim immediately stopped and sought for medical aid after slashing her wrist apparently because “it was bloody and painful”, which presumably snapped the would-be victim to the reality and danger of what she was trying to do.

## 2. Beyond hopelessness and depression

The study, and the aforementioned existence of impulsive suicide attempts, also invites its readers and future researchers who wish to dabble with Suicidology to go beyond the appreciation of the phenomenon of suicide as a mere bivariate relationship between the twin giants of depression and hopelessness and suicide. While depression and hopelessness remain as important variables to consider in Suicidology, there is a need for further research to uncover other antecedents of the problem. This is especially true for impulsive suicides wherein it was found by researchers from the University of Pennsylvania and LaSalle University warn that focusing on depression and hopelessness as indicators of suicide risk may result in overlooking persons at high risk for making impulsive suicide attempts. This is because, compared to persons making premeditated suicide attempts, persons making impulsive attempts have lower expectations that their attempt will be fatal, less depression and hopelessness, less of a likelihood of a history of childhood sexual abuse, and a higher likelihood of an alcohol use disorder (Spokas et al., 2012). Despite having less predisposition towards depression and hopelessness, statistics on suicide found that 24% of victims took less than 5 minutes between the decision to kill themselves and the actual attempt, and 70% took less than 1 hour (Simon et al., 2001). Indeed, in one study where it was found that 13 of their sample are planned suicide attempters and the remaining 87% are impulsive attempters, the planned suicide attempters were triggered by depression, whereas the impulsive suicide attempters were more often triggered by interpersonal conflict (Kim et al., 2015). A separate study, on the other hand, also found depression as a poor predictor of impulsive suicides while “inadequate control of aggressive impulses” served as the better predictor (Simon et al., 2001).

## 3. Putting adolescent suicide in the spotlight.

There is a relative dearth of available data on suicide in the Philippine setting. This is perhaps partly due to the its stigmatized status (Tan, 2007) but also because of the general lack of updated reliable and accessible data that concern social issues such as this one (Mangahas, 2014). This has made suicide a difficult thing to understand in the Philippine context despite its increasing threat and salience in the public sphere. While there are studies in suicide from other countries wherefrom we can take our information from on roots of suicide and steps to prevent its occurrence, such studies suffer from the contextual limitation of being set in a different setting that has socio-cultural nuances different from the Philippines – what might apply there might not be the case here. As mentioned in the first part of this study, the data available, and consequently, the possible pool of knowledge available on suicide in the Philippines would be those limited to the few studies done in the country, the vital registries, and the nationwide surveys that, aside from not being focused on suicide itself but rather treating suicide as just another item to ask on the side of another topic, are too few and far in-between. The nationwide surveys from where we can cull data on suicide thus far are just the YAFS and the GSHS. The former, by its very purpose, focuses on an age cohort at least a degree higher than the adolescent population, despite the fact that suicide occurs also among adolescents. The latter, by its very design, excludes the marginalized adolescents – the out-of-school youth – from the equation, thus giving, still, an incomplete picture of the situation of Filipino adolescents.

As Mangahas said, it is time for the Philippines to have its own, regular, and neutral General Social Surveys, and when it is done, items looking into suicide among various age-groups, including adolescents, should be included in the considerations. Future researchers are also encouraged to look more into adolescent suicides. Given the pyramidal demographic structure of the country's population, these adolescents will be the backbone of the citizenry of the near future, and we cannot afford to nonchalantly lose them to self-harm fatalities.

#### 4. The need for an interdisciplinary approach to Suicidology.

In addition to the three points raised above, there is also a need to make the effort of understanding suicide in the Philippines into an interdisciplinary endeavor. This study was launched with the author's expertise in Sociology as its springboard. Consequently, the merits as well as the limitations of the discussions and insights contained herein are reflections of the author's disciplinary background. In his book, *The Savage God: A Study of Suicide*, Alvarez (1972) opined that "[n]o single theory will untangle an act as ambiguous and with such complex motives as suicide". In the same vein, it can be argued that no single discipline will be able to unveil the mysteries of this phenomenon. The complexity of suicide in terms of its web of social, cultural, psychological, and biochemical distal and proximal antecedents alone and how these may change from one temporal and spatial dimension to another invites the participation of several disciplines to untangle. It is therefore prudent that future studies of suicide approach the phenomenon from a more interdisciplinary perspective.

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