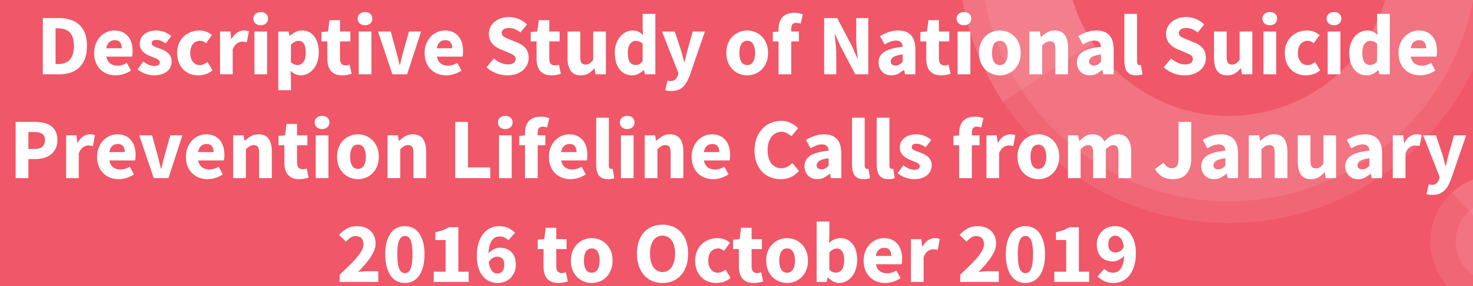

# Descriptive Study of National Suicide Prevention Lifeline Calls from January 2016 to October 2019


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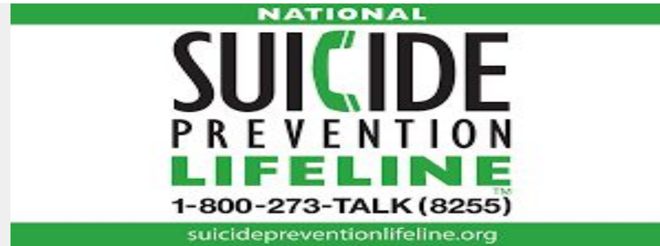
# INTRODUCTION




- According to the American Foundation for Suicide Prevention, suicide was the tenth leading cause of death in the United States in 2017 ("Suicide Statistics"), with 47,173 suicide deaths that year ("Suicide Statistics")
- It was estimated that same year that 1.4 million suicide attempts made by Americans. The number of suicide deaths and attempts has grown since 2009 ("Suicide Statistics")
- The National Suicide Prevention Lifeline (NSPL) is the most well-known and widespread suicide prevention strategy in the United States (Aldrich & Cerel, 2009)
- Although it has been providing help and support nationwide since 1958 (Spencer-Thomas & Jahn, 2012), little research has examined the utility and efficacy of the hotline in supporting suicidal individuals

# INTRODUCTION

- The national network of 180 local- and state-funded crisis centers across the country all operate under the same standards and guidelines
- A majority of these centers are non-profit and both mental health professionals as well as trained volunteers provide the service free of charge
- Though every center provides its own different variant of training and has its own unique methods to vet and recruit volunteers, these centers all provide nationally accredited training for their volunteers, educating them on the best and most up-to-date protocols and practices ("Our Crisis Centers")
- Given this consistency nationwide, being able to identify areas for improvement in even one branch of this network, can drive change and improvement across the organization as a whole

# INTRODUCTION

- Training for the volunteers include how to communicate with someone in crisis, including crisis resulting from traumatic experiences, grief, and mental health problems
- The function of the hotline is to act as a resource that anyone can utilize at any time to talk about anything
- The Lifeline is by no means a permanent solution to mental illness, nor is it a treatment option in any capacity
- However, the Lifeline offers callers a friendly voice to talk to, and for some, it might make the difference between life and death

# INTRODUCTION

*Currently no studies exist that explore data from the NSPL to identify patterns, statistics, and areas for improvement in this service.*

*The study conducted here is the first of its kind and hopes to target demographic data to identify areas where service may currently be lacking, and to use this information for targeted improvement.*

# HYPOTHESES

- We hypothesized that call length on the National Suicide Prevention Lifeline with women would be longer than with men
- We hypothesized the age group with the longest call length would be that of 13-17 year olds

# METHODS: PARTICIPANTS

- Participants for this study included all people who contacted the National Suicide Prevention Lifeline (Mercer County Extension), the CONTACT of Mercer County Crisis Line, or the Lifeline Crisis Chat (Mercer County Extension) from January 1, 2016 to October 20, 2019
- A total of 26,112 data points were collected, which included callers to the crisis line and national hotline, as well as those who were contacted to this organization via the crisis chat.
- Of the 26,112 data points registered during this time frame, 10,031 were for individual calls received and 16,081 were for individual chats received.
- Of the 10,031 calls received, 1,820 were to the suicide line, 7,091 calls were to the regular CONTACT line, and 1,120 calls were unreported for which line the call came in to.
- Identifying information of participants was removed before data was provided by CONTACT of Mercer County.

# METHODS: MEASURES

- Only the data from the 1,820 suicide line calls was used
- Call detail (including which line the call was made to and whether or not suicide was an issue) and demographics (age, gender, and marital status where applicable) were used as moderating variables.
- Age group was again documented by the volunteer handling the call as one of the preset options. These options were 0-12, 13-17, 18-25, 26-54, and 55+, so the specific age of any caller is unknown.
- Call classification was subcategorized into eight components (mental health, interpersonal, suicide, physical health, abuse or violence, basic necessities, sexual issues, and other) and each of the eight subcategories was further broken down into detail

# METHODS: PROCEDURE

- Data was inputted on a call report form individually for every caller by a trained volunteer, and every call was documented and archived using the same questions, scales, and report outline.
- A presentation was made to the Executive Board of the organization to request the data and permission conduct analytical research. The goal of this research was detailed to ultimately be able to provide information back to the organization and work on implementing any improvements that were identified through this research.
- Permission was obtained from the IRB to conduct a secondary analysis of the data

# RESULTS

- No mean differences in call length between male callers (M = 18.65, *SD* = 18.761) and female callers (M = 18.08, *SD* = 17.806), $p = 0.538$

**Group Statistics**

| | Demographics - Gender | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| CallLength | Male | 713 | 18.65 | 18.761 | .703 |
| | Female | 912 | 18.08 | 17.806 | .590 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| CallLength | Equal variances assumed | 2.348 | .126 | .615 | 1623 | .538 | .561 | .911 | -1.227 | 2.348 |
| | Equal variances not assumed | | | .611 | 1490.296 | .541 | .561 | .917 | -1.238 | 2.360 |

# RESULTS

- Although the omnibus F statistics suggested significant differences across age categories, the posthoc test did not show significant differences in any pairs of age groups
- Mean call length for the age group 0-12 was 10.59 minutes (n = 27), age group 13-17 was 15.21 minutes (n = 192), age group 18-25 was 18.92 minutes (n = 482), age group 26-54 was 17.77 minutes (n = 745), and age group 55+ was 19.97 minutes (n = 215). In the analysis for mean call length for each age group, the p-value between groups was 0.012.

**Oneway**

**ANOVA**

CallLength

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 4254.721 | 4 | 1063.680 | 3.231 | .012 |
| Within Groups | 545149.267 | 1656 | 329.196 | | |
| Total | 549403.988 | 1660 | | | |

**Multiple Comparisons**

Dependent Variable: CallLength
Tukey HSD

| (I) AgeGroup | (J) AgeGroup | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1.00 | 2.00 | -4.621 | 3.729 | .728 | -14.80 | 5.56 |
| | 3.00 | -8.326 | 3.588 | .139 | -18.13 | 1.47 |
| | 4.00 | -7.175 | 3.554 | .257 | -16.88 | 2.53 |
| | 5.00 | -9.380 | 3.705 | .084 | -19.50 | .74 |
| 2.00 | 1.00 | 4.621 | 3.729 | .728 | -5.56 | 14.80 |
| | 3.00 | -3.706 | 1.548 | .118 | -7.93 | .52 |
| | 4.00 | -2.554 | 1.468 | .410 | -6.56 | 1.46 |
| | 5.00 | -4.759 | 1.802 | .064 | -9.68 | .16 |
| 3.00 | 1.00 | 8.326 | 3.588 | .139 | -1.47 | 18.13 |
| | 2.00 | 3.706 | 1.548 | .118 | -.52 | 7.93 |
| | 4.00 | 1.151 | 1.061 | .814 | -1.74 | 4.05 |
| | 5.00 | -1.053 | 1.488 | .955 | -5.12 | 3.01 |
| 4.00 | 1.00 | 7.175 | 3.554 | .257 | -2.53 | 16.88 |
| | 2.00 | 2.554 | 1.468 | .410 | -1.46 | 6.56 |
| | 3.00 | -1.151 | 1.061 | .814 | -4.05 | 1.74 |
| | 5.00 | -2.204 | 1.405 | .517 | -6.04 | 1.63 |
| 5.00 | 1.00 | 9.380 | 3.705 | .084 | -.74 | 19.50 |
| | 2.00 | 4.759 | 1.802 | .064 | -.16 | 9.68 |
| | 3.00 | 1.053 | 1.488 | .955 | -3.01 | 5.12 |
| | 4.00 | 2.204 | 1.405 | .517 | -1.63 | 6.04 |

# DISCUSSION & FUTURE STEPS

- Males ended up having a greater mean call length by 0.57 minutes, at slightly higher significance
- Results disproved the hypothesis with the age group of 55+ having the greatest average call length (19.97 minutes), and the age group of 13-17 coming in fourth out of five age groups with an average call length of only 15.21 minutes
- Much more can be done with the idea of gender and age, and variances in caller experiences around these demographic factors

QUESTIONS?

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