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Schools for Hope: Implementation with Late Elementary Students at the Fifth Grade Level

International Foundation for Research and Education on Depression

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Abstract

Suicide is a tremendous and growing concern in today's society, with as many as 800,000 deaths being attributed to self-inflicted harm (Sher, 2004). Increasing research has found that an important risk factor for suicide and depression is hopelessness. The International Foundation for Research and Education on Depression created a randomized-control study called the Schools for Hope Curriculum aimed at improving hope among fifth grade students. Total number of participants recruited was 251. Data was sourced from pre and post hope curriculum questionnaires that evaluated the participant's overall understanding of the concept of hope. The hypothesis was groups receiving the hope curriculum would show a higher average in their answers supporting a greater level of student understanding and comprehension on hope. In the comparison, there were several responses in both the fall and spring data supporting the hypothesis with a significance of $p < 0.05$, shown in Tables 1, 2, & 3.

Introduction

Suicide is a growing public health issue. According to the World Health Organization, the global rate for suicides in 2012 was 11.4 per 100,000 persons. Specifically in children, research suggests that approximately one in nine children have attempted suicide prior to their high school graduation, with 40% of those attempts being in grade school (Journal of Adolescent Health via Family Matters, 2011). Suicide is an alarming concern in many of today's populations. In 2001, the World Health Organization reported that self-inflicting injuries such as suicide accounted for greater than 800,000 deaths (Sher, 2004). Specifically, in adolescents the point prevalence of suicide ideation is approximately 15-25% (Bridge, Goldstein, & Brent, 2006). Relevant research studies that have been performed to determine the risk factors of suicide, indicate that hopelessness is a primary predictor of suicide. Hopelessness is associated with suicide attempts, although the factor may be confounded by the presence of depression (Wilkinson et al, 2010).

Fortunately, research suggests that hope is a teachable skill (Rand & Cheavens, 2008). It has also been found that a greater level of hope results in greater well-being, and the fact that hope is vital to success (Scioli, 2009). Through development of a new hope curriculum, iFred, the International Foundation for Research and Education on Depression aims to lower rates of suicide by teaching hope and equipping adolescents with the social and emotional learning tools necessary to have and maintain hope throughout life, as well as providing a resource for suicide prevention. Thus, the aim of this study is to determine whether the curriculum is effective in teaching hope to children.

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This is a two part within subjects study, with a randomized control group. Each sample group is being compared for both their fall and spring scores on the surveys. The hypothesis was that after teaching the hope curriculum, comprehension levels of the concept of hope would increase. Specifically, it is hypothesized that the hope curriculum would provide adolescents with a better understanding of the concept of hope and allow them to stay hopeful throughout the most difficult times.

Methods**Participants**

Participants for this study were recruited from one school district in the Chicago area, Woodland Intermediate School, District 50 located in Gurnee, Illinois. Both male and female children randomly mixed into 5th grade classes from Woodland, (n=107 for fall, n=144 for spring), were recruited for study. Participants were all treated in accordance with the ethical guidelines published by the American Psychological Association (2002).

Materials

Each classroom used a curriculum set of five lessons each for fall and spring implementation. iFred provided a kit that included a curriculum booklet (contains ten core lesson plans, resources, and student worksheets), a sunflower seed packet for each class, one Schools for Hope yard sign, Pre/Post Surveys with instructions and a manila envelope for collection, consent forms, "I Planted Hope" stickers, and note cards for hope messages. Microsoft Excel was used to collect the data and run analysis.

Procedure

All participants were given consent forms to be signed by both participant and parent/guardian. Participants included 107 students in the fall treatment group and 128 students

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in the spring treatment group. Control group consisted of sixteen fifth grade students who completed both pre and post tests, but did not receive the hope curriculum. Students from experimental group were recruited from homerooms of seven different teachers, while students from the control group were recruited from one classroom at Woodland Intermediate School. All 107 students enrolled at the beginning of the study completed both pre and post-hope curriculum surveys. The curriculum consisted of thirty minute lesson plans that were taught for five consecutive days. Data was sourced from hope curriculum surveys that were administered prior to the start of the curriculum and immediately following completion of the semester hope curriculum. Data was input into Microsoft Excel 2010 and responses were placed accordingly to pre and post hope curriculum sections and matched on student ID numbers. Administration of the hope curriculum and surveys contained no information about drugs or therapeutic methods related to depression treatment, nor did it ask participants whether they are currently depressed or have had thoughts of suicide.

Results

Statistical analysis was performed in Microsoft Excel 2010. A t-test: Paired sample of two means was utilized on each individual question in order to compare the average answer choice value between pre-test and post-test for all students. Surveys that contained missing/incomplete data were discarded from data analysis. Tests of significance were two-tailed and utilized an alpha threshold of 0.05.

Table 1 below shows the results obtained for the experimental group, including a breakdown of mean pre-test score, mean post-test score, difference between mean pre and post test scores, degrees of freedom, t-stat, and p values. A two-tailed test was utilized because our hypothesis states that the second mean score would be higher than the initial mean score.

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Overall, the hope curriculum proved to be an effective means of teaching the concept of hope. For the Fall group there is statistical evidence showing a significant difference between the mean scores of pre-test and post-test data ($p < 0.05$) for 5 out of 10 questions. Questions 4, 5, 7, 8, and 9 have p values greater than 0.05, thus supporting the null hypothesis that there is no significant difference between the pre-and post-test scores for those questions.

The spring experimental group had 6 out of 10 questions with $p < 0.05$. Questions 4, 5, 7 and 8 did not support the hypothesis. These results can be seen in Table 2. For the control group, there were only six usable questions and none of them had a significant p value, (see Table 3). Compared to the groups that received the treatment this would support our hypothesis that the hope curriculum does make a positive difference in the lives of students.

Discussion

Findings from this study suggest that the hope curriculum administered to students is effective, and shows comprehension and better understanding of the concept of hope. Statistical data outlined in Table 1 provides evidence of significant difference in the means between pre-test and post-test scores for five out of the ten survey questions for the Fall, and Table 2 displays the six questions with a significant difference for the Spring. This ultimately shows that implementation of the hope curriculum through the experimental group is mostly effective and increases the understanding of the concept of hope. Various activities and questions during each lesson plan may attribute to this increase in comprehension. Additionally, student and teacher feedback has been positive and has indicated reports of overall satisfaction, support, and a desire to continue forward with the program.

This current study investigated the effectiveness of a new curriculum created by iFred, the International Foundation for Research and Education on Depression, in order to teach and

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equip adolescents with the necessary tools to maintain hope throughout life. Although initial results provided positive feedback and success of the program, further research studies should focus on studying a larger cohort. Preliminary information obtained from this research study can be used to expand and further develop the hope curriculum. It is important to continue exploring the impact of hope on all age groups, and to use this curriculum as a suicide prevention tool.

Limitations

There are a few limitations to be noted for this study. Only experimental group surveys were utilized for statistical analysis. Initially, Woodland Intermediate School had two control groups prior to launch of the experiment, however due to incomplete consent forms; only one control group was adequate to be used, and no viable data was able to be utilized after removing missing/incomplete surveys. Subsequent research studies should utilize a larger control group that contains usable data by minimizing the amount of data that is missing or incomplete.

It is important that participants note down their participant ID numbers in order to ensure accuracy in matching up pre-test and post-test data. In the next study, administrators of the survey should place emphasis on correctly and completely filling out the required information located on each survey.

Participants from other school districts and geographical areas should be utilized as well in order to determine the reproducibility of the hope curriculum. It is important to show that the hope curriculum can be effective in teaching hope both nationally and internationally.

Additionally, changes to the survey questions should be considered. Future studies should employ fewer answer choices that are both concise and appropriate to the reading level of the participants. For example, we decided that Question 8, (see Survey 2), could be interpreted multiple ways and needs to be revised.

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References

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Survey 1: Teach Hope Fall Pre Test

Instructions: DO NOT WRITE YOUR NAME ON YOUR PAPER. Please fill in your teacher's name, student id, age, gender and ethnicity in the box below. All of your answers will be kept private. Please bring your paper to your teacher when you are finished.

Fill or darken in the circle next to the answer that fits. Please fill in only ONE answer choice for each question.

1. I can define what hope means to me.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

2. The amount of money determines if a person is hopeful.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

3. Feelings such as fear, sadness, or anger influence our ability to feel hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

4. Having a purpose in life and feeling important and valued in the world leads to hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

5. Knowing what we are grateful for and listing positive things every day give us hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

6. Activities such as meditation, deep breathing, and journaling help create hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
7. When a person is calm, he/she can think more clearly.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
8. Thoughts or feelings can change the way our body feels.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
9. When a person does activities they enjoy, it helps them have hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
10. Hopeful people have a passion or something they love doing.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time

Teacher Name: _____

Student Number: _____

Gender: Please circle M or F

Age: ____

Hispanic or Latino __ Not Hispanic or Latino __

Ethnicity: Please check one of the following:

American Indian or Alaska Native __

Asian __ Black or African American __

Native Hawaiian or Other Pacific Islander __

White __ Unknown __ Other __

Survey 2: Teach Hope Fall Post Test

Instructions: DO NOT WRITE YOUR NAME ON YOUR PAPER. . Please fill in your teacher's name, student id, age, gender and ethnicity in the box below. All of your answers will be kept private. Please bring your paper to your teacher when you are finished.

Fill or darken in the circle next to the answer that fits. Please fill in only ONE answer choice for each question.

1. I can define what hope means to me.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

2. The amount of money determines if a person is hopeful.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

3. Feelings such as fear, sadness, or anger influence our ability to feel hope.
 - a. None of the time
 - b. Some of the time
 - c. Most of the time
 - d. All of the time

4. Having a purpose in life and feeling important and valued in the world leads to hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

5. Knowing what we are grateful for and listing positive things every day give us hope.
 - None of the time
 - Some of the time

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- Most of the time
 - All of the time
6. Activities such as meditation, deep breathing, and journaling help create hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
7. When a person is calm, he/she can think more clearly.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
8. Thoughts or feelings can change the way our body feels.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
9. When a person does activities they enjoy, it helps them have hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
10. Hopeful people have a passion or something they love doing.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time

Teacher Name: _____

Student Number: _____

Gender: Please circle: M or F

Age: ____

Hispanic or Latino ___ Not Hispanic or Latino ___

Ethnicity: Please check one of the following:

American Indian or Alaska Native ___

Asian ___ Black or African American ___

Native Hawaiian or Other Pacific Islander ___

White ___ Unknown ___ Other ___

Survey 3: Teach Hope Spring Pre Test

Instructions: DO NOT WRITE YOUR NAME ON YOUR PAPER. Please fill in your teacher's name, student id, age, gender, and ethnicity in the box below. All of your answers will be kept private. Please bring your paper to your teacher when you are finished.

Fill or darken in the circle next to the answer that fits. Please fill in only ONE answer choice for each question.

1. A person can have hope no matter what is happening in life.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

2. It is important to have steps in place when setting a goal.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

3. Every person should have someone who they can ask for help and who can support their hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

4. It is important to think of challenges ahead and find possible solutions to our goals.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

5. Hope can be found when sharing it with others.
 - None of the time
 - Some of the time

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- Most of the time
 - All of the time
6. Important things we believe in help us find and keep hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
7. Helping others brings hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
8. Nothing can stop a person from having hope.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
9. If goals change, a person can remain hopeful.
- None of the time
 - Some of the time
 - Most of the time
 - All of the time
10. A person can overcome unexpected events in life by using hope s
- None of the time
 - Some of the time
 - Most of the time
 - All of the time

Teacher Name: _____

Student Number: _____

Gender: Please circle: M or F

Age: ____

Hispanic or Latino __ Not Hispanic or Latino __

Ethnicity: Please check one of the following:

American Indian or Alaska Native __

Asian __ Black or African American __

Native Hawaiian or Other Pacific Islander __

White __ Unknown __ Other__

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Teach Hope Spring Post Test

Instructions: DO NOT WRITE YOUR NAME ON YOUR PAPER. Please fill in your teacher's name, student id, age, gender, and ethnicity in the box below. All of your answers will be kept private. Please bring your paper to your teacher when you are finished.

Fill or darken in the circle next to the answer that fits. Please fill in only ONE answer choice for each question.

1. A person can have hope no matter what is happening in life.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
2. It is important to have steps in place when setting a goal.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
3. Every person should have someone who they can ask for help and who can support their hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
4. It is important to think of challenges ahead and find possible solutions to our goals.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
5. Hope can be found when sharing it with others.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

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6. Important things we believe in help us find and keep hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
7. Helping others brings hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
8. Nothing can stop a person from having hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
9. If goals change, a person can remain hopeful.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time
10. A person can overcome unexpected events in life by using hope.
 - None of the time
 - Some of the time
 - Most of the time
 - All of the time

Post Survey Only

What did you enjoy most in learning about hope?

Was there an activity that you thought was the most helpful in finding hope?

Do you have any other ideas on hope that you would like to share?

Teacher Name: _____

Student Number: _____

Gender: Please circle: M or F

Age: ____

Hispanic or Latino __ Not Hispanic or Latino __

Ethnicity: Please check one of the following:

American Indian or Alaska Native __

Asian __ Black or African American __

Native Hawaiian or Other Pacific Islander __

White __ Unknown __ Other __

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Table 1: Fall Experimental Group Table with just Woodland Teachers

Question	1	2	3	4	5	6	7	8	9	10
Pre-Test Mean	4.491	2.63	3.528	4.935	4.815	3.648	5.194	4.861	4.694	4.463
Post-Test Mean	4.815	2.306	3.991	5.056	4.824	4.815	5.185	4.972	4.685	4.787
Difference	0.324	-0.324	0.463	0.121	0.009	1.167	-0.009	0.111	-0.009	0.324
T-Statistic	-2.585	2.106	-2.42	-0.774	-0.0586	-6.935	0.068	-0.811	0.0618	-1.967
Degrees of Freedom	107	107	107	107	107	107	107	107	107	107
p-value	0.011*	0.0375*	0.0172*	0.441	0.953	3.21E-10*	0.946	0.419	0.951	0.052*

* p<0.05

Table 2: Spring Experimental Group Table with just Woodland Teachers

Question	1	2	3	4	5	6	7	8	9	10
Pre-Test Average	3.136	3.295	3.496	3.182	2.931	3.229	3.237	2.946	3.039	3.109
Post-Test Average	3.439	3.561	3.656	3.244	3.053	3.382	3.282	3.084	3.209	3.341
Difference	0.303	0.266	0.16	0.062	0.122	0.153	0.045	0.138	0.17	0.232
Degrees of Freedom	128	128	128	128	128	128	128	128	128	128
p-value	0.00015*	0.00029*	0.027*	0.48	0.102	0.039*	0.52	0.069	0.02*	0.0024*

*p<0.05

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Table 3: Spring Control Group Table with just Woodland Teachers

Question	1	2	3	4	5	6
Pre-Test Average	3.158	3.105	3.368	3.158	3.118	3.647
Post-Test Average	3.526	3.052	3.368	3.316	3.353	3.411
Difference	0.368	-0.053	0	0.158	0.235	-0.236
Degrees of Freedom	16	16	16	16	16	16
p-value	0.069	0.749	1	0.48	0.216	0.104

* $p < 0.05$