The Erika's Lighthouse Program: Depression Awareness for Middle School Students

(formerly known as *Teen Depression: Stories of Hope & Health*)

An introductory depression awareness and mental health empowerment program for early adolescence

An Independent Evaluation Project Conducted by
Dr. Michael S. Kelly PhD, LCSW
Loyola University Chicago School of Social Work
in Collaboration with Erika's Lighthouse
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Why Depression Education Matters

Major depression is a common disorder for young people. According to the National Institute for Mental Health, adolescents (ages 12-17) are experiencing depression at a rate of 12.5%. Further, suicide is the second leading cause of death for individuals between the ages of 10 and 24 (Centers for Disease Control, 2015). With depression being the primary mental disorder associated with suicide, depression education can play in key role in suicide prevention. "It may not only address the most common contributing factor of adolescent suicide but also serves to reduce the morbidity associated with major depression" (Ruble et al., 2013, p. 1026). By addressing depression through school programs, a larger piece of the population is covered. The more adolescents and school communities can learn about depression, the more likely it is for the stigma around mental disorders to be reduced and, in turn, for students to seek out help from trusted adults.

Background on *The Erika's Lighthouse Program: Depression Awareness for Middle School Students*

Erika's Lighthouse (EL) was formed in June 2004 to address the issues of childhood and adolescent depression and suicide. The organization is composed of adults and teens who seek to educate school communities about childhood and adolescent depression, reduce the impact of stigma, remove the barriers to treatment and protect young lives.

The Erika's Lighthouse Program: Depression Awareness for Middle School Students (hereafter referred to as the Middle School Program) was created by EL as a universal intervention for 7th and 8th grade classroom environments (Middle School Program, 2015). It is a classroom curriculum to be taught by a health or wellness teacher and is best suited for a middle school audience. It involves three lessons that focus on understanding depression, how to get help for yourself or a friend and good mental health. The primary teaching tool is a video featuring five real and diverse teens sharing their stories of hope and resilience. Just as with other EL programs, the purpose of the Middle School Program is to increase student

knowledge about depression, reduce stigma surrounding depression and increase the likelihood that students with depression will receive help. The program content is based on evidence-based research of childhood and adolescent depression that states: depression is common amongst adolescents; it is serious and the largest risk factor for youth suicide; it is a diagnosable mental disorder with specific symptoms; it is treatable and; friends are often the first to know of a friend's depression. The tone of the program is critical to its success and is also derived from evidence-based concepts of safe and effective messaging for suicide prevention - avoiding dark, sensational and fear-based messaging and instead providing a message that is positive, honest, fact-based and inclusive. Additional sources for the Middle School Program are contained in Appendix B.

The Middle School Program has been a program at EL since 2014. To date, it has been implemented in well over 100 schools and in 18 states. However, due to the fact that the Middle School Program is available free for download on the EL website, there are likely far more schools and organizations using all or part of the program that have not been identified.

The program contains three lessons, to be facilitated in a classroom setting by a classroom teacher, and preferably, a school mental health professional co-leading the session. The first lesson ("Understanding Teen Depression") is one 45-minute core lesson that teaches basic information about depression including symptoms, treatment and strategies for mental health. The lesson starts with an introduction to the program. Next, students watch the Middle School Program video and then participate in a discussion with the facilitator about teen depression. Though schools can use the materials themselves without contracting directly with EL, it is best practice to have proper student support and school mental health infrastructure in place to handle the potential student response to Middle School Program which may include: an increase in students self-referring or referring their friends to the school mental health staff out of concerns related to depression.

The second and third lessons of the Middle School Program build on the first lesson with a focus on treatment options, treatment information, where to find help and how to help yourself or a friend (Lesson 2, "Helping Yourself or a Friend") and learning more in-depth about stress and how to maintain good mental health (Lesson 3, "Mental Health is for Everyone"). The Middle School Program is also equipped with a Facilitator's Guide, Student Workbook, a 20-minute video (the core teaching instrument), multi-media teaching materials, a mental health resource "bookmark handout" for students, an intervention tool allowing students to confidentially reach out for help in school and an appendix with other mental health resources and information. The entire program for Middle School Program can be found in Appendix C.

Though the program has been well-received thus far, to date no formal evaluation of the Middle School Program has been conducted. The EL team asked Dr. Michael Kelly of Loyola University Chicago's School of Social Work to help them construct a feasible and rigorous effectiveness study of the Middle School Program to examine the impacts of the program.

Background to Evaluation

In Summer of 2015, the team at EL engaged Dr. Kelly to explore the possibility of doing an evaluation of the Middle School Program, based on a successful evaluation he helped them conduct for the *Real Teenagers Talking about Adolescent Depression* (RTTAAD) program in 2013-15. As with the RTTAAD study, the goal of this evaluation included doing a quasi-experimental design testing the impact of the Middle School Program program.

Purpose of the Evaluation

The main objectives of the proposed evaluation are to examine the effects of the Middle School Program on middle school health students in the areas of

knowledge about depression, willingness to seek help from adults and belief that adults can help.

Hypotheses: Specifically, the evaluation sought to test the following hypotheses:
•Students in the Middle School Program classrooms will show ***increased knowledge about depression,*** compared to students in the control group condition.
•Students receiving the the Middle School Program intervention will show ***higher scores on willingness to seek help from trusted adults for depression and suicidal ideation*** compared to students in the control group condition.
•Students receiving the Middle School Program will show an ***increase in their belief that adults could help them or their friends with depression and suicidal behavior*** compared to students in the control group condition.
•Students receiving the Middle School Program will show positive gains ***in terms of students demonstrating knowledge about positive ways to enhance their own mental health, the impact of stigma on help-seeking for people who have depression, and warning signs of fellow students who may be suicidal,*** compared to students in the control group condition.

Evaluation Procedures

In Fall 2015, two Chicago suburban middle schools agreed to be part of the Middle School Program intervention study. Both schools (referred hereafter as MS 1 and MS 2) agreed to have the program delivered to 7th and 8th grade students via their school health classes in accordance with the team's research design goals. In both schools, a pre/post-test wait-list control quasi-experimental design was used. The pre-test was delivered to both the Middle School Program groups and the control students at the same time and each condition received the post-test at 6 weeks after the Middle School Program intervention. Students in both MS 1 and MS 2 control conditions received the Middle School Program in the Winter 2015 semester. Each student in the study (total N=223) completed a questionnaire that

incorporated a depression knowledge scale created by the EL team and two additional standardized scales, the Help-Seeking Acceptability at School Scale (Wyman et al., 2008) and the Adult Help for Suicidal Youth Scale (Schmeelk-Cone et al., 2012). Finally, the EL team in collaboration with Dr. Kelly created several open-ended questions to evaluate the extent that students understood depression symptoms; strategies students could use to improve their mental health; the impact of stigma on help-seeking for depression and suicidal ideation; and warning signs indicating a teen might be considering suicide. The final study instrument is included with the program in Appendix C.

Dr. Kelly (with assistance from his research assistant, Ms. Anne Wildman, MSW) ran repeated-measure t-tests on the knowledge, help-seeking, and adult-trusting scales. In addition, the EL team coded 6 open-ended questions on depression knowledge, stigma and suicide awareness. Two EL team members coded a sub-sample of responses to attain sufficient inter-rater reliability (IRR) of .8 or above. All remaining responses were coded and all responses (both IRR and the two separate coders' work) were shared with Dr. Kelly along with the hard copies of all the scale questionnaires.

Findings

Demographics

Table 1 shares descriptive data on the two school samples and the two conditions of the study.

Table 1. Study Demographics

	Age (average)	Gender	Health Class (Middle School Program)	Gym Class (Control)
Overall Sample	12.6	115 F 102 M 3 Prefer not to say 3 n/a	105	118
MS1	12.2	69 M	76	65

		68 F 1Prefer not to say 3 n/a		
MS2	13.1	47 F 33 M 2 Prefer not to say	29	53

The two middle schools are both in suburbs of Chicago and were chosen because they matched fairly well on school characteristics (class size, college readiness, graduation rates, percentage of low-income students, percentage of students who are English learners, and overall instructional spending per student). Their results were combined for this analysis. A pre-post/test wait-list control group design was employed to test the study hypotheses, and results are summarized below.

Findings from the Middle School Program Questionnaire Data

Based on independent sample t-test analysis of the pre-and post-tests for the Middle School Program and Comparison classrooms, the following preliminary conclusions can be drawn from the data:

1) ***The Middle School Program increased student knowledge of depression based on the depression knowledge scale created from EL's expertise.***

The participants in the health condition showed a ***statistically significant*** increase in their scores on the knowledge scale (questions 1-10 on the survey) from pre- to post-test. This increase in score ($M = 1.77$, $SD = 1.80$) was significantly greater than the change in score of the students in the control condition, which was effectively zero ($M = .00$, $SD = 1.57$); t-test score= 6.888, $p < .0005$. This difference between the health/Middle School Program condition was ***highly statistically significant*** compared to the control group classes. Students who had the Middle School Program at 6 weeks post-test had retained a significant amount of new information

about depression, stigma, and signs of suicide, and also how to deal with depression that was affecting either a friend or themselves.

2) ***The Middle School Program increased students' willingness to seek help from trusted adults at school with depression and other mental health problems.***

The participants in the health Middle School Program condition showed a ***statistically significant*** increase in their ratings on the help scale (questions 13-15). For the help scale, t-test critical value= -4.300, $p < .0005$. Students who had the Middle School Program at 6 weeks post-test were likely to report seeing adults in the school as people they could seek help from if they were upset. However, the help scale scores for the control group also increased, making it difficult to assess how impactful the Middle School Program program was with these two school samples.

3) ***The Middle School Program increased students' belief that adults could help one of their friends who was suicidal.***

The participants in the health Middle School Program condition showed a statistically significant increase in their ratings on the adult scale (questions 16, 19-21) from pre- to post-test. For the adult scale, t-test critical value = -5.132, $p < .0005$, indicating a ***highly statistically significant*** difference between the health/Middle School Program condition and the control group classes. Students who had the Middle School Program were much more likely to view adults as helpful resources for a fellow adolescent friend who was suicidal.

4) ***The Middle School Program produced highly significant change in terms of students' learning about symptoms of depression, positive ways to enhance their own mental health, the impact of stigma on help-seeking for people who have depression, and warning signs of fellow students***

who may be suicidal, all cornerstones of the Middle School Program and depression awareness/suicide prevention curriculum nationwide.

For ***every one*** of the 6 open-ended questions on the questionnaire, Middle School Program reported ***highly statistically significant*** change from pre-to post-test compared to the control gym condition students, t=3.2247, p-value: .0013. This means that compared to a control group, a statistically significant portion of students in the Middle School Program condition could:

1) Identify up to 5 symptoms of depression
2) Accurately recount how long someone needs to be depressed to be diagnosed with depression
3) Identify up to 3 healthy ways that youth can take care of their mental health
4) Explain how stigma might prevent people from seeking help for their depression
5) List two warning signs of someone considering suicide
6) Identify strategies to help a friend who is suicidal

The Middle School Program had a clear impact on key areas of depression awareness/suicide prevention for middle school students in the Middle School Program condition compared to the control group classrooms. These findings as well as the earlier ones noted above were found for both school populations, further bolstering this preliminary evidence for the Middle School Program intervention.

Discussion of Findings and Implications for Additional Research and Practice

This evaluation locates the Middle School Program within the depression awareness/suicide prevention literature as a promising intervention that certainly merits further investigation, particularly for early adolescents (Klimes-Dougan, Klingbeil, & Meller, 2013; Petrova et al., 2015; Whitlock, Wyman, & Moore, 2014). With a focus on creating a consistent, safe and interactive space for young people, the Middle School Program has built on the longstanding expertise of the intervention developers and this evaluation clearly shows that those efforts to

develop the Middle School Program, a further elaboration of their work with high school-age youth, has been time well-spent. Based on the data described here, the Middle School Program demonstrates strong potential as an intervention that builds an awareness of what depression in teenagers looks like, how teens can recognize symptoms in themselves and/or their friends, and how they can identify and eventually turn to trusted adults at school to help themselves or a friend.

These preliminary results are very encouraging for several reasons. First of all, this is the first trial of the Middle School Program since its inception, and the results indicate that the anecdotal and intuitive appeal of this program is bolstered now by empirical support. Secondly, this trial showed statistically-significant change in a real-world setting of two suburban Chicago middle schools, two schools that are very similar to other schools that have been working with EL and the RTTAAD intervention for years. In terms of the actual findings, each of the key indicators (increased knowledge of depression, increased willingness to seek help from school adults, increased belief in the ability of adults to provide real help to a suicidal friend) is considered essential to effective depression awareness and suicide prevention programs. It is clear from this data that the Middle School Program impacts <u>all of these</u> indicators, and does so even after a 6-week follow-up period. It is also important to note that all of this is being accomplished by a fairly brief and efficient intervention model and that it takes very little time to conduct relative to other evidence-based depression awareness/suicide prevention curriculum. From this initial pilot study, there is preliminary evidence to support the notion that Middle School Program "works," and does so largely in the ways that the creators intended it to work.

Limitations

While this study certainly shows some positive initial outcomes, there are, as always, important limitations to bear in mind when interpreting these results. The most important one is the one area where the change in the Middle School Program

was not statistically significant compared to the wait-list control group classrooms - the Help-Seeking Acceptability at School Scale. While statistically significant change was shown with the Middle School Program condition from pre-to post-test, these changes were also shown in the gym class control condition. This indicates several possible areas to explore in a future evaluation, most directly whether the creators might add more content to the Middle School Program to more clearly impact willingness to seek help for this early adolescent population. The sampling plan and wait-list control design, while more rigorous than a simple pre/post-test design, was not a randomized trial, as both the Middle School Program and comparison group youth represented a convenience sample of schools who were willing to participate. Furthermore, though the two middle schools used for this study shared many demographic and SES similarities, the specific youth themselves were not precisely matched on all demographic variables for the evaluation (this could also have impacted the help-seeking scores). Further, because the Middle School Program was facilitated by Erika's Lighthouse staff and not the school's own teachers, future studies would benefit from assessing the program's impact when taught by health teachers or other teaching faculty.

Conclusion

These preliminary results discussed here represent encouraging findings that invite additional investigation into the potential scope and reach of the Middle School Program to impact depression awareness/suicide prevention outcomes for early adolescent youth in 7th and 8th grade. This work represents exemplary collaboration from a dedicated group of practitioners and researchers, and follows a collective process built on the wisdom of several years of building the Middle School Program. Future work would do well to further investigate the ways by which the Middle School Program can be feasibly and effectively translated to more diverse adolescent populations e.g. rural youth, inner-city youth, as well as ways that the materials might be refined by future study to be more fully disseminated to others

in the field via scholarly publications and possible work with evidence-based clearinghouses such as SAMHSA, What Works Clearinghouse, and Blueprints for Healthy Youth Development.

Appendix A: References

Klimes-Dougan, B., Klingbeil, D. A., & Meller, S. J. (2013). The impact of universal suicide-prevention programs on the help-seeking attitudes and behaviors of youths. *Crisis*, *34*(2), 82-97.

Petrova, M., Wyman, P. A., Schmeelk-Cone, K., & Pisani, A. R. (2015). Positive-Themed Suicide Prevention Messages Delivered by Adolescent Peer Leaders: Proximal Impact on Classmates' Coping Attitudes and Perceptions of Adult Support. *Suicide and life-threatening behavior*.

Schmeelk-Cone, K., Pisani, A. R., Petrova, M., & Wyman, P. A. (2012). Three scales assessing high school students' attitudes and perceived norms about seeking adult help for distress and suicide concerns. *Suicide and life-threatening behavior*, *42*(2), 157-172.

Middle School Program. (2015). Teen Depression: Stories of Hope and Health (Middle School Program). Retrieved from http://www.erikaslighthouse.org/schools

Whitlock, J., Wyman, P. A., & Moore, S. R. (2014). Connectedness and suicide prevention in adolescents: Pathways and implications. *Suicide and life-threatening behavior*, *44*(3), 246-272.

Wyman, P. A., Brown, C. H., Inman, J., Cross, W., Schmeelk-Cone, K., Guo, J., & Pena, J. B. (2008). Randomized trial of a gatekeeper program for suicide prevention: 1-year impact on secondary school staff. *Journal of consulting and clinical psychology*, *76*(1), 104.

Appendix B: Sources for Middle School Program

SOURCES for *Teen Depression: Stories of Hope and Health*

1. **Depression is a major risk factor for suicide.** *90% of youth who take their life have a diagnosable mental disorder, the most common being depression.*

Shaffer, D., Gould, M.S., Fisher, P., Trautman, P., Moreau, D., Kleinman, M. & Flory, M. (1996). Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry, 53*(4), 339-348.

2. **Depression is common.** *Somewhere in the rage of 15-20% of youth will develop depression before adulthood.*

Birmaher, N., Williamson, B., Kaufman, D. & Perel, N. (1996). Childhood and adolescent depression: A review of the past 10 years. Part I. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*(1), 1427-1439.

3. **Depression is stigmatized.** *Only 25% of people with mental health symptoms believe that people are caring and sympathetic to persons with mental illness.*

Center for Disease Control & The Substance Abuse and Mental Health Services Administration (2010). Attitudes toward mental illness. *Morbidity & Mortality Weekly Report, 59*(20), 619-625.

4. **Depression is a mental disorder with diagnosable symptoms.** *See DSM IV-TR for major depressive disorder diagnostic criteria.*

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders, 4th edition. Washington, DC: American Psychiatric Association.

5. **Depression can be treated.** *In adolescents with moderate to severe depression, treatment with anti-depressants (fluoxetine) alone or in combination with talk therapy (CBT) accelerates responsiveness to treatment. Adding talk therapy to medication enhances the safety of the medication. Combined treatment appears superior to either monotherapy as a treatment for major depression in adolescents.*

March, J.S., Silva, S., Petrycki, S., Curry, J., Wells, K., Fairbank, J., Burns, B., Domino, M., McNulty, S. & Vitiello, B. (2007). The treatment for adolescents with depression study (TADS). *Long-term Effectiveness and Safety Outcomes of General Psychiatry, 64*(10), 1132–43.

6. **Depression can be passed through genetics.** *Between 20-50% of youth have a family history of depression, and are three times more likely to develop depression.*

Tsuang, M.T., Bar, J.L., Stone, W.S. & Faraone, S.V. (2004). Gene-environment interactions in mental disorders. *World Psychiatry, 3*(2), 73-83.

7. **Drugs and alcohol are risk factors for depression.** *30% of youth with depression have a co-occurring problem with substance abuse.*

Conway, K.P., Compton, W., Stinson, F.S. & Grant, B.F. (2006). Lifetime comorbidity of DSM-IV mood and anxiety disorders and specific drug use disorders: results from the national epidemiologic survey on alcohol and related conditions. *Journal of Clinical Psychiatry, 67*(2), 247-257.

8. **Healthy lifestyle choices can help alleviate symptoms of depression**. *Physical activity alleviates symptoms of mild to moderate depression.*

O'Neal, H.A., Dunn, A.L. & Martinsen, E.W. (2000). Depression and exercise. *International Journal of Sport Psychology, 31*(2), 110-135.

9. **There can be signs that someone may be considering suicide.** *See article for specific signs of suicide.*

American Psychiatric Association. (2003). APA practice guidelines for the assessment and treatment of patients with suicidal behaviors. *American Journal of Psychiatry, 160*(11), 1-117.

10. **Friends are often the first to know of a youth's depression.**

Prevention Division of the American Association of Suicidology. (1999). Guidelines for school based suicide prevention programs.

11. **Youth who have at least one trusted adult to talk to is a strong protective factor.**

Prevention Division of the American Association of Suicidology. (1999). Guidelines for school based suicide prevention programs.

12. **Programs that increase the opportunities for students to participate in and outside the classroom are potentially powerful interventions**.

Prevention Division of the American Association of Suicidology. (1999). Guidelines for school based suicide prevention programs.

Appendix C: Middle School Program Program and Study Guide