



# Coping with Mental Health Disorders Through Anonymous Teen Stories on a Smartphone App

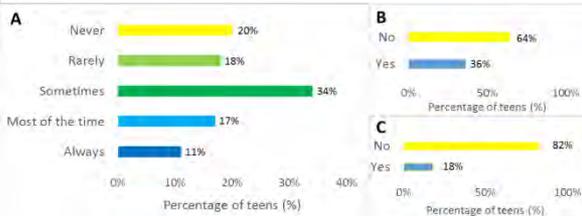


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## Introduction

Teens are more susceptible to mental health disorders due to hormonal and physical changes that occur during puberty. Suicide is the second leading cause of death in Wisconsin among ages 15-34 and the fourth leading cause among ages 10-14.<sup>1</sup> A majority of teens (61.9%) report that they struggle with depression, anxiety, and/or body image issues.<sup>2</sup>



**Figure 1: Teen responses to the Youth Risk Behavior Survey in Milwaukee Public Schools Grades 9-12, Spring 2017.**<sup>3</sup> (A) Frequency of feeling stress or pressure during the last 30 days. (B) Percentage of teens who have felt sad or hopeless for more than 2 weeks causing them to stop some usual activities within the last 12 months. (C) Percentage of teens who have seriously considered suicide within the last 12 months. N=7301

## Hypothesis

If we develop personal teen narratives regarding mental health, then we will be able to incorporate them into the app, MKE Teen, which addresses mental health topics.

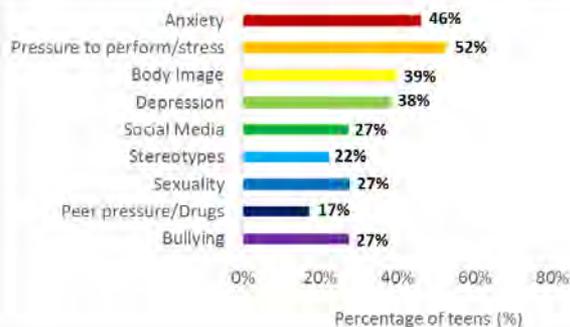
## Methods

**MKE Teen App Development** A teen designed Smartphone app named "MKE Teen" was developed to give teens access to reproductive and mental health information and resources. During app development, teens expressed interest in reading anonymous teen stories about topics that are normally difficult to talk about, in order to "get the conversation started." In response, a section of the app named "Teen Truths" was developed.

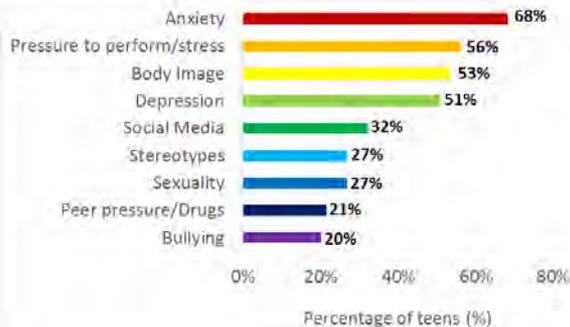
**Topic Selection** In this study, we developed the stories for the "Teen Truths" section for mental health. First, we conducted an anonymous survey with 75 teen participants ages 14-18 in order to rank mental health topics based on how much they were affected by them and how much they believed that they would benefit from learning more about them. The results of this survey led us to focus on anxiety, depression, and body image.

**Development of Proof of Concept** Then, we researched teen stories related to these topics through internet searches and reading curriculum used in teen health education. We developed a Proof of Concept design for the Teen Truths stories. The design featured short paragraphs that described what the topic felt like, thoughts and emotions related to the topic, how it progressed over time, and strategies they have found to overcome the issue. Once IRB approval is obtained, we plan to collect personalized stories from Milwaukee County Teens to develop the Teen Truths section of the MKE Teen App.

## Results

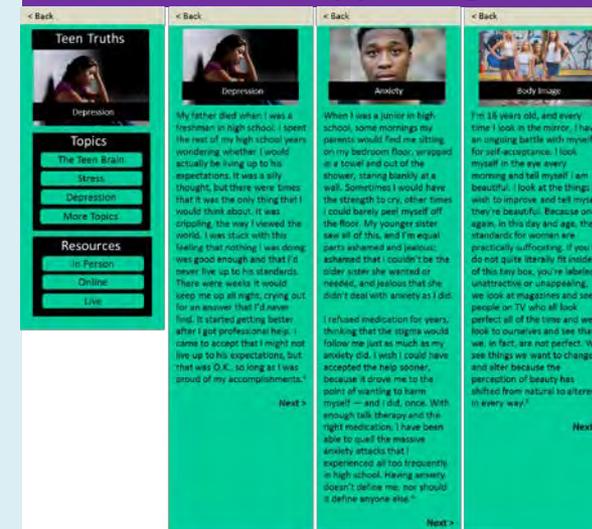


**Figure 2: Percentage of teens who ranked the topic within the top three topics that most affected their life.** In an anonymous survey, teens were asked to rank topics based on how significantly the topic affected their life. Anxiety, pressure to perform/stress, body image, and depression were the top responses. N=75



**Figure 3: Percentage of teens who believed that they would benefit from learning more about this topic.** In an anonymous survey, teens were asked to select all topics that they believed they would benefit from learning more about. Anxiety, pressure to perform/stress, body image, and depression were the top responses. N=75

## MKE Teen App Design



**Figure 4: Teen Truths Proof of Concept design.** The following stories demonstrate the design and the types of narratives we plan to develop for the Teen Truths section of the MKE Teen App. These narratives were developed by editing teen stories found on the internet.

## Conclusions

According to our data, teenagers are interested in learning more about anxiety, depression, and body image. We choose to include stories about depression over pressure to perform because pressure correlates with anxiety. Based on our Proof of Concept design, we plan to collect personalized stories from Milwaukee County teens after IRB consent is obtained. During this study, our team learned about the sensitivity and measures of protection required to discuss personal experiences with teens about mental health disorders.

## References and Acknowledgments

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<sup>3</sup>Milwaukee Public Schools. (2017). 2017 Milwaukee Public Schools Youth Risk Behavior Survey District - High School. Retrieved from <http://mhs.milwaukee.k12.wi.us/MPS-English/CIO/Research-Development/2016-17%YRBS-DistrictReport.pdf>  
<sup>4</sup>Wu, A. (2017, October 23). Coping With Teenage Anxiety: Readers Share Their Stories. Retrieved April 24, 2018, from <https://www.nytimes.com/2017/10/23/magazine/coping-with-teenage-anxiety-readers-share-their-stories.html>  
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