

## Introduction

- ❖ According to a 2018 survey, 45% of high school students report feeling stressed “all the time”
- ❖ High levels of chronic stress impedes academic success, compromises mental health functioning, and fosters risk behavior, and if not addressed, can lead to physical & mental health issues in emerging adults

How often are you stressed?		
Response	Total	Percentage
All the time	16,101	44.88%
Sometimes	13,146	36.64%
Rarely	4,370	12.18%
Never	2,261	6.30%

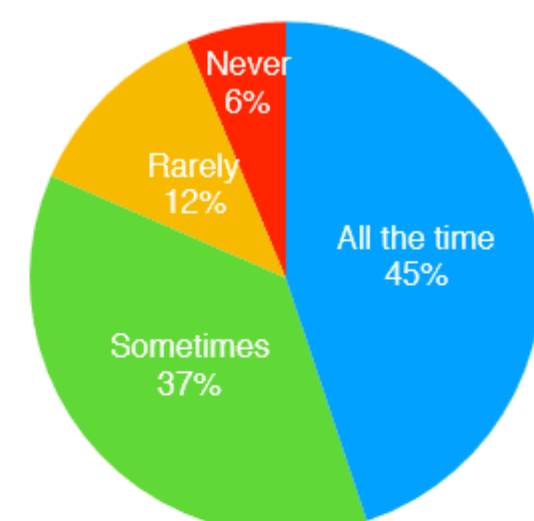
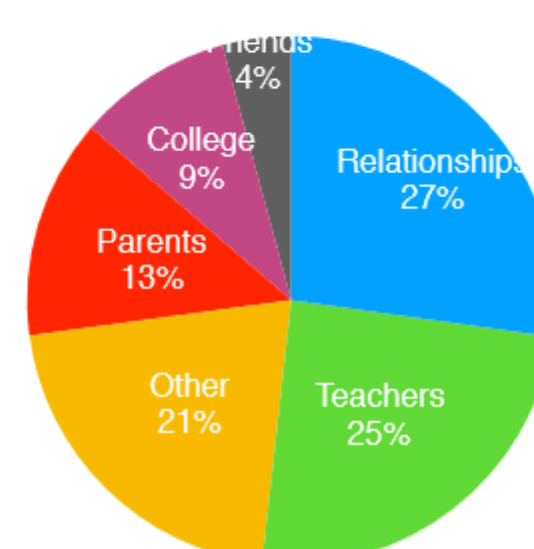


Fig 1. Teens were asked four questions in the stress and mental health poll<sup>2</sup>. Questions included "How often are you stressed?" and "what stresses you out the most?"

What stresses you out the most?		
Response	Total	Percentage
Relationships	9,494	27.22%
Teachers	8,562	24.55%
Other	7,358	21.09%
Parents	4,695	13.46%
College	3,302	9.47%
Friends	1,470	4.21%



- ❖ Strong emotional health has been found to contribute to work success, relationships and overall health
- ❖ Some schools are working to provide holistic environments where emotional, social & physical health are priority for staff and students.

- ❖ The biophilia hypothesis suggests that humans have an innately emotional affiliation to other living organisms



Fig. 2. A spider plant named “Martha” located in one of the classrooms

- ❖ When people are exposed to scenes of natural environments, productivity can increase and perceived mental stress can decrease
- ❖ The presence of plants has a positive impact on the human mind, both consciously and subconsciously

## Objective

The purpose of this project is to help reduce the overall feelings of stress in students at Joel Barlow High School by introducing green plants into the school community

## Benefits of Nature

- ❖ Reduces stress
- ❖ Improves mood
- ❖ Improves attention
- ❖ Boosts immune function
- ❖ Promotes longevity
- ❖ Increases productivity

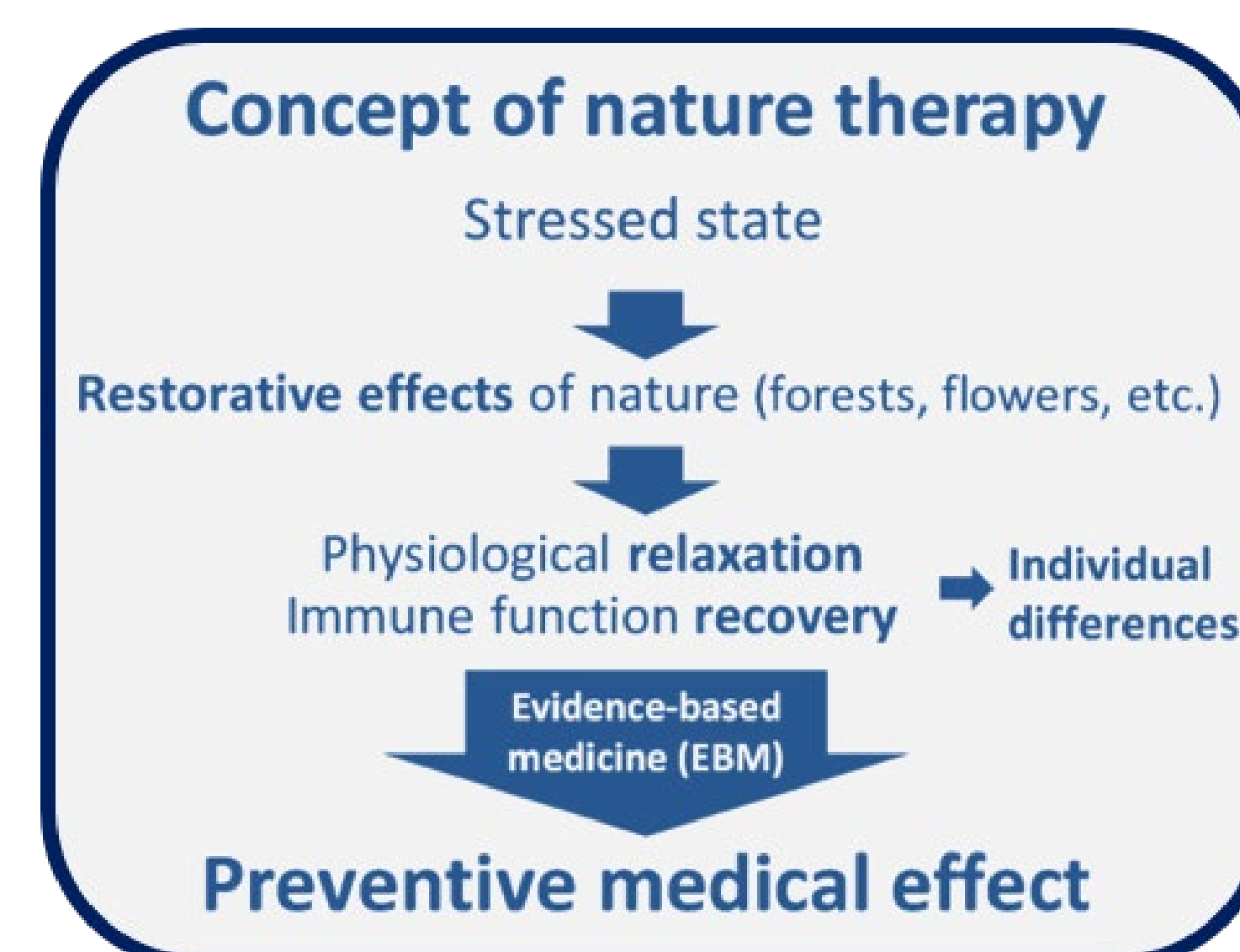


Fig. 3. Concept of nature therapy from Miyazaki et al., 2015

## Responses from educator volunteers as to why they participate:

- ❖ Home gardener and hobby interest
- ❖ Promoting healthier productive environment for students

## Improving Emotional Strength

### Regulating Thoughts

- Ignoring self-doubt
- Replacing self-criticism with self-compassion

### Managing Emotions

- Acknowledging & embracing all emotions (even the uncomfortable ones)
- Understanding how our feelings influence the way we think and behave

### Behaving Productively

- Choosing to take actions that will improve our lives
- Motivation
- Delayed gratification

## Project Phases

### Phase 1: Plant Collection and Training



Fig. 4. Plants donated by Redding Garden Club

Fig. 5. Master gardener training



### Phase 2: Classroom Integration & Student Volunteers

- ❖ Plants were selected by students and given names to personalize their relationship
- ❖ Plant Care Guides were used to help students care for plants
- ❖ Volunteers were responsible for a 7-day cycle

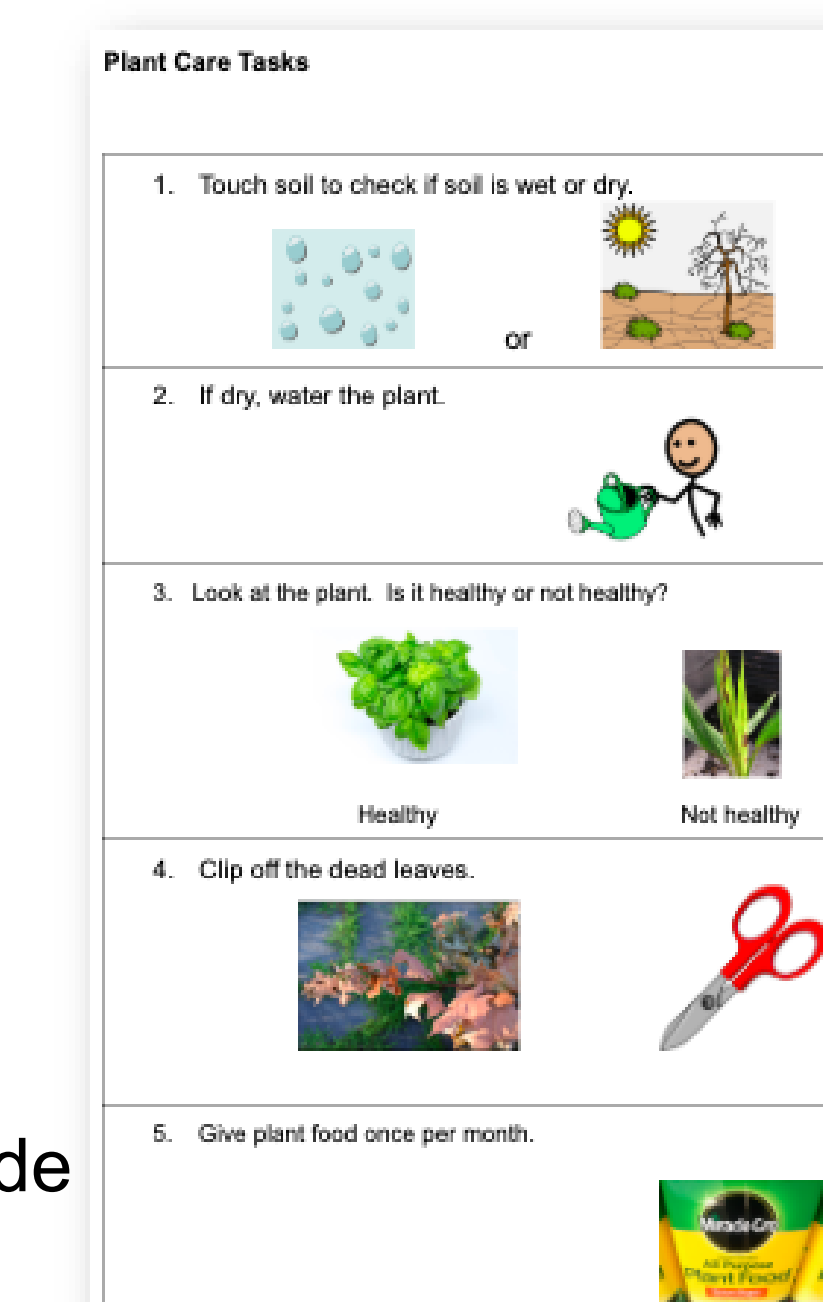


Fig. 6. Plant Care Guide

### Phase 3: Unified Wellness Gardening



Fig. 7. Classroom plants

Scan the QR code to access our references



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