

# Mental Health is More than Psychopathology

*Afton L. Hassett, Psy.D.*

*Associate Research Scientist*

*Department of Anesthesiology*

*Chronic Pain and Fatigue Research Center*

*Director of Clinical Pain Research, Back & Pain Center*

*University of Michigan*

**Premeeting Courses:** November 8-9

**Scientific Sessions:** November 9-13

ACR|ARP  
ANNUAL MEETING

# Disclosures

- No relevant disclosures to report.

# Evidence-Based Medicine

Bolier et al. Positive psychology interventions: a meta-analysis of randomized controlled studies. BMC Public Health 2013;13:119.

Hassett et al. Affect and Low Back Pain: More to Consider Than the Influence of Negative Affect Alone. Clin J Pain 2016;32:907-14.

Hassett et al. Association Between Predeployment Optimism and Onset of Postdeployment Pain in US Army Soldiers. JAMA Network Open 2019;2(2):e188076

Seligman et al. Positive psychotherapy. Am Psychol. 2006;61(8):774-788.

Sin & Lyubomirsky Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: a practice-friendly meta-analysis. J Clin Psychol. 2009;65:467-87.

# I. Resilience

*“Was mich nicht umbringt  
macht mich stärker.”*

*“That which does not kill me will  
make me stronger”*

Friedrich Nietzsche's [\*Twilight of the Idols\*](#) (1888).



## Resilience factors

- Positive self-image (competence)
- Social support/positive relationships
- Coping/problem solving skills
- Positive emotions
- Communication skills
- Perspective -> gratitude
- Sense of purpose
- **Optimism - hope**



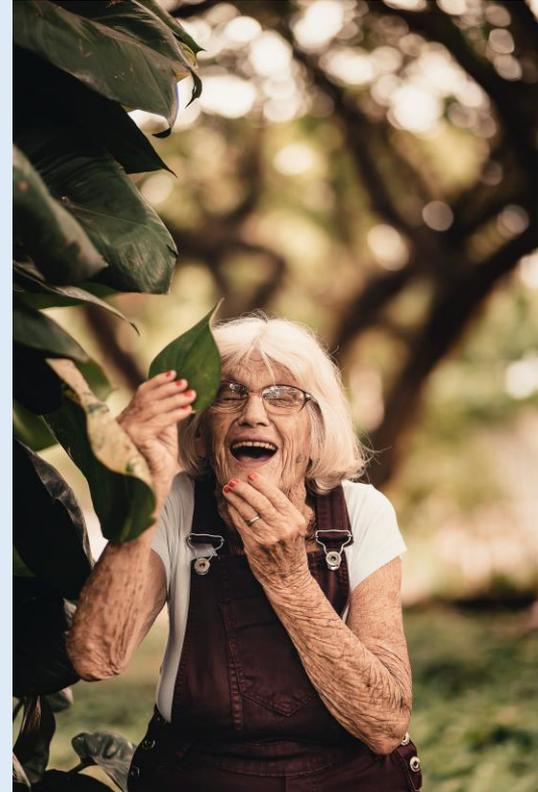
## Resilience and optimism

- 20,734 US Army soldiers assessed then followed over deployment(s)
- 37.3% reported pain in at least 1 new area of the body post-deployment.
- Tertile analysis compared to high optimism soldiers, those with low optimism had 35% greater odds of reporting new pain (odds ratio, 1.35; 95% CI, 1.21-1.50).



# Resilience in Rheumatic Patients

- Social support, hope, optimism and resilience associated with **less fatigue in RA**.<sup>1</sup>
- Patients with high resilience tended to **understand their disease and adhered to treatment better**.<sup>2</sup>
- RA patients acquire resilience by using a combination of **behavioral and emotion management strategies** to cultivate resilience.<sup>3</sup>
- Resilience did **not differ** between women with SLE and healthy women – generally resilient (older).<sup>4</sup>



## II. The role of positive emotions in rheumatic populations.



# Negative emotions or “affect”

## Negative affective states:

- Sadness (depression)
- Fear (anxiety)
- Anger
- Guilt
- Disgust
- Hatred
- Rejection



# Negative affective states are associated with chronic pain.

- Numerous studies linking negative affect to key factors in chronic pain:
  - Higher clinical pain intensity
  - Higher pain report
  - Worse weekly pain
  - Lower pain tolerance
  - Increased experimental pain sensitivity
  - Less tolerance to pain
  - Hyperalgesia
  - Greater use of pain medication
  - Worse analgesia (pentazocine)
  - Pain-related disability
  - Increased fatigue
  - More physical symptoms
  - Greater impact of pain on cognition
  - Higher levels of psychiatric comorbidity
  - Poor quality of life
  - Poor self-efficacy for pain management

Abeare et al. Clin J Pain 2010;26:683-9  
Cogan et al. J Behav Med 1987;10:139-44  
Carcoba et al. J Addict Dis 2011;30:258-70  
Fillingim et al. Biol Psychol 2005;69:97-112  
Finan et al. Psychosom Med 2009;71:474-82  
Finan et al. Health Psychol 2010;29:429-37  
Finan et al. Psychosom Med 2013; 75:463-470  
Hamilton et al., Ann Behav Med 2005;29:216-24  
Hanssen et al. Pain 2013;154:53-8  
Hassett et al., Arthritis Rheum 2008; 59:1742-9  
Hassett et al., Arthritis Rheum 2008; 59:833-40  
Hirsch et al. Qual Life Res 2012;21:18794  
Kamping et al. Pain 2013; Epub ahead of print  
Kennetner-Mabiala et al. Biol Psychol 2008;78:114-22  
Krok and Baker. J Health Psychol 2013; In Press  
Parrish et al. Health Psychol 2008;27:694-702  
Schon et al. Psychophysiology 2008;45:1064-7  
Seeback et al. Pain 2012;153:518-25  
Sibille et al. Clin J Pain 2012;28:410-7  
Smith et al. Pain 2008;138:354-61  
Staud et al. Pain 2003;105:215-22  
Staud. Curr Pain Headache 2005.9:316-21  
Stran et al. J Psychosom Res;60:477-84  
Tang et al. Pain 2008;138:392-401  
Vwesteeg et al. Qual Life Res 2009;18:953-60  
Wesler et al. J Psychosoc Oncol 2013;31:451-67  
Zautra et al. Pain 2007;128:128-35  
Zautra et al. J Consult Clin Psychol 2005;73:212-20

# Positive emotions or “affect”

- Happiness
- Love
- Calm
- Enthusiasm
- Interest
- Empathy
- Determination
- Passion
- Inspiration
- Gratitude



# More important than negative affect?

- Solid prospective and experimental studies found PA related to:
  - Lower overall pain ratings
  - Lower pain intensity scores
  - Decreased same day pain report
  - Decreased subsequent day pain report
  - Decreased subsequent week pain report
  - Increased induced pain tolerance
  - Decreased induced pain sensitivity
  - Longer tolerance to pain
  - Evoked potential moderation
  - Decreased use of pain medication
  - Lower post-op pain ratings
  - Greater walking times post-surgery
  - Length of stay in colorectal cancer surgery

Alden et al. Appl Psychophysiol Biofeedback 2001;26:117-26  
Avia et al. Cognit Ther Res 1980;4:73-81  
Bruel et al. Pain 1993;54:29-36.  
Chaves et al., J Abnorm Psychol 1974;83:356-63  
Clum et al. Pain 1982;12:175-83  
Cogan et al. J Behav Med 1987;10:139-44  
Connelly et al., 2007;131:162-70  
Finan et al. Psychosom Med 2009;71:474-82  
Finan et al. Health Psychol 2010;29:429-37  
Finan et al. Psychosom Med 2013; 75:463-470  
Gil et al., Health Psychol 2004;23:267-74  
Hamilton et al., Ann Behav Med 2005;29:216-24  
Hanssen et al. Pain 2013;154:53-8  
Hertel et al. Psychol Rec 1994;33:207-20  
Horan et al. Percept Mot Skills 1974;39:359-62  
Hudak et al. Psychol Rep 1991;69:779-86  
Kamping et al. Pain 2013; Epub ahead of print  
Kennetner-Mabiala et al., Biol Psychol 2008;78:114-22  
Meagher et al., Psychosom Med 2001;63:79-90  
Meulders et al. J Pain 2014;15:632-44  
Morgan et al. Percept Mot Skills 1978;47:27-39  
Pickett et al. J Consult Clin Psychol 1982;50:439-41  
Powell et al., Rehabil Psychol 2009;54:83-90  
Rosenbaum et al. J Abnorm Psychol 1980;89:581-90  
Sharma et al., Colorectal Dis 2008;10:151-6  
Stevens et al. Psychol Rep 1989;64:284-6  
Strand et al., J Psychosom Res 2006;60:477-84  
Tang et al., Pain 2008;138:292-401  
Weaver et al. Percept Mot Skills 1994;78:632-4  
Weisenberg et al. Pain 1998;76:365-75  
Worthington et al. J Couns Psychol 1981;28:1-6  
Zautra et al. J Consult Clin Psychol 2005;73:212-20  
Zelman et al. Pain 1991;36:105-11

# Affect and Patients with Rheumatic Conditions

	<b>Negative affect</b> (high is bad)	<b>Positive affect</b> (high is good)
Healthy individuals <sup>1</sup>	18.1 (5.9)	35.0 (6.4)
Osteoarthritis <sup>2</sup>	16.6 (4.7)	31.6 (5.5)
Systemic lupus erythematosus <sup>3</sup>	22.6 (7.3)	33.8 (6.4)
Rheumatoid arthritis <sup>4</sup>	15.3 (5.8)	29.6 (7.4)
Fibromyalgia <sup>5</sup>	23.2 (8.9)	29.1 (8.9)
Chronic low back pain <sup>5</sup>	24.4 (9.9)	26.0 (8.9)

Watson et al. J Pers Soc Psych 1988;6:1063-1070. 2. Finan et al. J Consult Clin Psychol. 2005 Apr; 73(2): 212–220. 3. Hassett et al. Arthritis Care Res 2012;64:1341-8. 4. Smith & Christensen. Annals Behav Med. 1996;18:15-78. 5. Hassett et al. Arthritis Care Res 2008;59:833-40. 6. Hassett et al. Clin J Pain 2016;32:907-14.

## Valued life activities



Many people with chronic pain tend to give up the very things they love and value most in order to attend to the things they MUST do.

The joy in life gets lost.

Some even forget how to seek joy.

*Give them the permission and tools to help them find the joy again.*

### III. Positive emotions and resilience – interventions.



# Resilience Building Plan

- Enhance Optimism.
- Identify and Use Character Strengths.
- Increase Positive Emotions on a Daily Basis.
- Improve Social Support.
- Engage in Meaningful Activities.



# Positive Activity Interventions

Capitalize, grow, thrive



- Gratitude exercises
- Acts of kindness
- Savoring
- Pleasant activities
- Visualizing success
- Creating meaning in life
- Positive service
- Forgiveness
- Character strengths

# Positive Activity Interventions

Capitalize, grow, thrive

## Evidence:

- RCTs in diverse populations enhancement of SWB and PWB; reduce depressive symptoms.

Bolier et al. BMC Public Health 2013;13:119

- 51 studies of diverse populations PAI less depression and enhanced well-being.

Sin & Lyubomirsky. J Clin Psychol 2009;65:467-87



# Positive Activity Interventions

Capitalize, grow, thrive

## Evidence of PAIs for chronic pain:

- Similar improvement in depression compared to CBT. Benefits persisted 6 months. Patients with higher levels of education benefitted more from PAIs than CBT.

Peters et al. Clin J Pain 2017;33(11):962-75.

- Higher happiness, optimism, positive expectancies, positive affect, self-compassion and ability to live a desired life despite pain, and lower pain catastrophizing, depression and anxiety compared to WLC.

Boselie et al. Eur J Pain 2018;22(7):1268-80.



# Positive Activity Interventions

Capitalize, grow, thrive

## Evidence of PAIs for chronic pain:

- 6-week series of PAIs (gratitude and kindness).
- Control program comprised similarly structured neutral activities.
- N=360, RCT did not support the use of positive psychological interventions as a stand-alone treatment for pain in older populations of veterans with knee osteoarthritis.



Hausmann et al. JAMA Network Open 2018;1(5):e182533.

Hassett et al. JAMA Network Open 2018;1(5):e182531.

# Resilience Building Plan

- Enhance Optimism.
- Identify and Use Character Strengths.
- Increase Positive Emotions on a Daily Basis.
- Improve Social Support.
- Engage in Meaningful Activities.



# Positive Activity Interventions

## Enhancing optimism

### Best Possible Self

Take a few minutes to select a future time period (e.g., 1 year, 5 or 10 years from now) and imagine that at that time you are expressing your best possible self. Imagine it in close details where you have worked hard and succeeded at accomplishing your life goals. You might think of this as reaching your full potential, hitting an important milestone, or realizing one of your life dreams. The point is not to think of unrealistic fantasies, rather, think about things that are positive and attainable within reason.

After you have a fairly clear image, write about the details.



# Resilience Building Plan

- Enhance Optimism
- Identify and Use Character Strengths.
- Increase Positive Emotions on a Daily Basis.
- Improve Social Support.
- Engage in Meaningful Activities.



# Positive Activity Interventions

Capitalize, grow, thrive



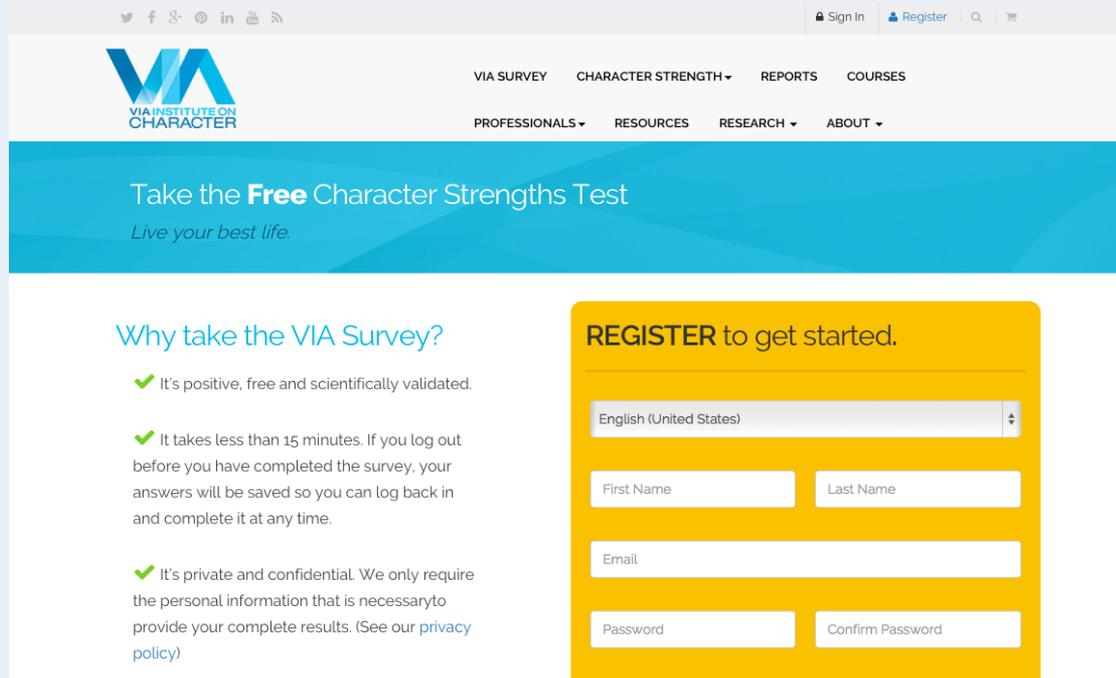
We all have Character Strengths and these are our secret super powers.



<p><b>WISDOM</b></p>	<p><b>CREATIVITY</b></p> <ul style="list-style-type: none"> <li>• Originality</li> <li>• Adaptive</li> <li>• Ingenuity</li> </ul>	<p><b>CURIOSITY</b></p> <ul style="list-style-type: none"> <li>• Interest</li> <li>• Novelty-Seeking</li> <li>• Exploration</li> <li>• Openness</li> </ul>	<p><b>JUDGMENT</b></p> <ul style="list-style-type: none"> <li>• Critical Thinking</li> <li>• Thinking Things Through</li> <li>• Open-mindedness</li> </ul>	<p><b>LOVE OF LEARNING</b></p> <ul style="list-style-type: none"> <li>• Mastering New Skills &amp; Topics</li> <li>• Systematically Adding to Knowledge</li> </ul>	<p><b>PERSPECTIVE</b></p> <ul style="list-style-type: none"> <li>• Wisdom</li> <li>• Providing Wise Counsel</li> <li>• Taking the Big Picture View</li> </ul>
<p><b>COURAGE</b></p>	<p><b>BRAVERY</b></p> <ul style="list-style-type: none"> <li>• Valor</li> <li>• Not Shrinking from Fear</li> <li>• Speaking Up for What's Right</li> </ul>	<p><b>PERSEVERANCE</b></p> <ul style="list-style-type: none"> <li>• Persistence</li> <li>• Industry</li> <li>• Finishing What One Starts</li> </ul>	<p><b>HONESTY</b></p> <ul style="list-style-type: none"> <li>• Authenticity</li> <li>• Integrity</li> </ul>	<p><b>ZEST</b></p> <ul style="list-style-type: none"> <li>• Vitality</li> <li>• Enthusiasm</li> <li>• Vigor</li> <li>• Energy</li> <li>• Feeling Alive</li> </ul>	
<p><b>HUMANITY</b></p>	<p><b>LOVE</b></p> <ul style="list-style-type: none"> <li>• Both Loving and Being Loved</li> <li>• Valuing Close Relations with Others</li> </ul>	<p><b>KINDNESS</b></p> <ul style="list-style-type: none"> <li>• Generosity</li> <li>• Nurturance</li> <li>• Care &amp; Compassion</li> <li>• Altruism</li> <li>• "Niceness"</li> </ul>			<p><b>SOCIAL INTELLIGENCE</b></p> <ul style="list-style-type: none"> <li>• Aware of the Motives/Feelings of Self/Others</li> <li>• Knowing what Makes Other People Tick</li> </ul>
<p><b>JUSTICE</b></p>	<p><b>TEAMWORK</b></p> <ul style="list-style-type: none"> <li>• Citizenship</li> <li>• Social Responsibility</li> <li>• Loyalty</li> </ul>			<p><b>FAIRNESS</b></p> <ul style="list-style-type: none"> <li>• Just</li> <li>• Not Letting Feelings Bias Decisions About Others</li> </ul>	<p><b>LEADERSHIP</b></p> <ul style="list-style-type: none"> <li>• Organizing Group Activities</li> <li>• Encouraging a Group to Get Things Done</li> </ul>
<p><b>TEMPERANCE</b></p>		<p><b>FORGIVENESS</b></p> <ul style="list-style-type: none"> <li>• Mercy</li> <li>• Accepting Others' Shortcomings</li> <li>• Giving People a Second Chance</li> </ul>	<p><b>HUMILITY</b></p> <ul style="list-style-type: none"> <li>• Modesty</li> <li>• Letting One's Accomplishments Speak for Themselves</li> </ul>	<p><b>PRUDENCE</b></p> <ul style="list-style-type: none"> <li>• Careful</li> <li>• Cautious</li> <li>• Not Taking Undue Risks</li> </ul>	<p><b>SELF-REGULATION</b></p> <ul style="list-style-type: none"> <li>• Self-Control</li> <li>• Disciplined</li> <li>• Managing Impulses &amp; Emotions</li> </ul>
<p><b>TRANSCENDENCE</b></p>	<p><b>APPRECIATION OF BEAUTY &amp; EXCELLENCE</b></p> <ul style="list-style-type: none"> <li>• Awe</li> <li>• Wonder</li> <li>• Elevation</li> </ul>	<p><b>GRATITUDE</b></p> <ul style="list-style-type: none"> <li>• Thankful for the Good</li> <li>• Expressing Thanks</li> <li>• Feeling Blessed</li> </ul>	<p><b>HOPE</b></p> <ul style="list-style-type: none"> <li>• Optimism</li> <li>• Future-Mindedness</li> <li>• Future Orientation</li> </ul>	<p><b>HUMOR</b></p> <ul style="list-style-type: none"> <li>• Playfulness</li> <li>• Bringing Smiles to Others</li> <li>• Lighthearted</li> </ul>	<p><b>SPIRITUALITY</b></p> <ul style="list-style-type: none"> <li>• Religiousness</li> <li>• Faith</li> <li>• Purpose</li> <li>• Meaning</li> </ul>

# Identify your character strengths

## Capitalize, grow, thrive



The screenshot shows the VIA Institute on Character website. At the top, there are social media icons and links for Sign In and Register. The navigation menu includes VIA SURVEY, CHARACTER STRENGTH, REPORTS, COURSES, PROFESSIONALS, RESOURCES, RESEARCH, and ABOUT. A blue banner features the text "Take the Free Character Strengths Test" and "Live your best life." Below this, a section titled "Why take the VIA Survey?" lists three benefits: it's positive and scientifically validated, it takes less than 15 minutes, and it's private and confidential. To the right, a yellow registration form titled "REGISTER to get started." includes a dropdown menu for language (set to English (United States)), input fields for First Name and Last Name, an Email field, and input fields for Password and Confirm Password.

VIA INSTITUTE ON CHARACTER

VIA SURVEY CHARACTER STRENGTH REPORTS COURSES

PROFESSIONALS RESOURCES RESEARCH ABOUT

Take the **Free** Character Strengths Test

*Live your best life.*

### Why take the VIA Survey?

- ✔ It's positive, free and scientifically validated.
- ✔ It takes less than 15 minutes. If you log out before you have completed the survey, your answers will be saved so you can log back in and complete it at any time.
- ✔ It's private and confidential. We only require the personal information that is necessary to provide your complete results. (See our [privacy policy](#))

### REGISTER to get started.

English (United States)

First Name Last Name

Email

Password Confirm Password

<http://www.viacharacter.org/www/Character-Strengths-Survey>

# Use your character strengths

## Capitalize, grow, thrive

### Signature Strengths:

- Based on the your Strengths Test, write down your top seven strengths. Every day for the next week, use one of these strengths in a way that you have not before. Each night, write down how you used one of your strengths that day, including what strength you used, how you felt before, during, and after the activity, and whether you plan to repeat it in the future.

<b>WISDOM</b>	<b>CREATIVITY</b> <ul style="list-style-type: none"> <li>Originality</li> <li>Adaptive</li> <li>Ingenuity</li> </ul>	<b>CURIOSITY</b> <ul style="list-style-type: none"> <li>Interest</li> <li>Novelty-Seeking</li> <li>Exploration</li> <li>Openness</li> </ul>	<b>JUDGMENT</b> <ul style="list-style-type: none"> <li>Critical Thinking</li> <li>Thinking Things Through</li> <li>Open-mindedness</li> </ul>	<b>LOVE OF LEARNING</b> <ul style="list-style-type: none"> <li>Mastering New Skills &amp; Topics</li> <li>Systematically Adding to Knowledge</li> </ul>	<b>PERSPECTIVE</b> <ul style="list-style-type: none"> <li>Wisdom</li> <li>Providing Wise Counsel</li> <li>Taking the Big Picture View</li> </ul>
<b>COURAGE</b>	<b>BRAVERY</b> <ul style="list-style-type: none"> <li>Valor</li> <li>Not Shrinking from Fear</li> <li>Speaking Up for What's Right</li> </ul>	<b>PERSEVERANCE</b> <ul style="list-style-type: none"> <li>Persistence</li> <li>Industry</li> <li>Finishing What One Starts</li> </ul>	<b>HONESTY</b> <ul style="list-style-type: none"> <li>Authenticity</li> <li>Integrity</li> </ul>	<b>ZEST</b> <ul style="list-style-type: none"> <li>Vitality</li> <li>Enthusiasm</li> <li>Vigor</li> <li>Energy</li> <li>Feeling Alive</li> </ul>	
<b>HUMANITY</b>	<b>LOVE</b> <ul style="list-style-type: none"> <li>Both Loving and Being Loved</li> <li>Valuing Close Relations with Others</li> </ul>	<b>KINDNESS</b> <ul style="list-style-type: none"> <li>Generosity</li> <li>Nurturance</li> <li>Care &amp; Compassion</li> <li>Altruism</li> <li>"Niceness"</li> </ul>			<b>SOCIAL INTELLIGENCE</b> <ul style="list-style-type: none"> <li>Aware of the Motives/Feelings of Self/Others</li> <li>Knowing what Makes Other People Tick</li> </ul>
<b>JUSTICE</b>	<b>TEAMWORK</b> <ul style="list-style-type: none"> <li>Citizenship</li> <li>Social Responsibility</li> <li>Loyalty</li> </ul>			<b>FAIRNESS</b> <ul style="list-style-type: none"> <li>Just</li> <li>Not Letting Feelings Bias Decisions About Others</li> </ul>	<b>LEADERSHIP</b> <ul style="list-style-type: none"> <li>Organizing Group Activities</li> <li>Encouraging a Group to Get Things Done</li> </ul>
<b>TEMPERANCE</b>		<b>FORGIVENESS</b> <ul style="list-style-type: none"> <li>Mercy</li> <li>Accepting Others' Shortcomings</li> <li>Giving People a Second Chance</li> </ul>	<b>HUMILITY</b> <ul style="list-style-type: none"> <li>Modesty</li> <li>Letting One's Accomplishments Speak for Themselves</li> </ul>	<b>PRUDENCE</b> <ul style="list-style-type: none"> <li>Careful</li> <li>Cautious</li> <li>Not Taking Undue Risks</li> </ul>	<b>SELF-REGULATION</b> <ul style="list-style-type: none"> <li>Self-Control</li> <li>Disciplined</li> <li>Managing Impulses &amp; Emotions</li> </ul>
<b>TRANSCENDENCE</b>	<b>APPRECIATION OF BEAUTY &amp; EXCELLENCE</b> <ul style="list-style-type: none"> <li>Awe</li> <li>Wonder</li> <li>Elevation</li> </ul>	<b>GRATITUDE</b> <ul style="list-style-type: none"> <li>Thankful for the Good</li> <li>Expressing Thanks</li> <li>Feeling Blessed</li> </ul>	<b>HOPE</b> <ul style="list-style-type: none"> <li>Optimism</li> <li>Future-Mindedness</li> <li>Future Orientation</li> </ul>	<b>HUMOR</b> <ul style="list-style-type: none"> <li>Playfulness</li> <li>Bringing Smiles to Others</li> <li>Lighthearted</li> </ul>	<b>SPIRITUALITY</b> <ul style="list-style-type: none"> <li>Religiousness</li> <li>Faith</li> <li>Purpose</li> <li>Meaning</li> </ul>

# Resilience Building Plan

- Enhance Optimism.
- Identify and Use Character Strengths.
- **Increase Positive Emotions on a Daily Basis.**
- Improve Social Support.
- Engage in Meaningful Activities.



# Positive Activity Interventions

Increase positive emotions

## Keeping a Gratitude Diary

Piglet noticed that even though he had a very small heart, it could hold a rather large amount of gratitude.



A. A. Milne, Winnie-the-Pooh

1. Every day, write down 3 things for which you are grateful. It can be anything - feeling the sunshine on your face, happy that a friend phoned, receiving a present, being able to take a walk, anything. Work out a time to do this. Ideally, around the same time every day works best.
2. Make a commitment to yourself that you will write down 3 things every day - this is very important.
3. The 3 things MUST be DIFFERENT each time. Never repeat anything.
4. Smile as you write them down. This will help you to feel grateful.
5. You can write a lot about each thing, get really detailed, write why you are grateful for it. Or if you don't have time, just write one line.

# Happiness and Pigs

Notice, savor, recall

## Positive Piggy Bank:

- Piggy Bank
- Slips of paper and a pen
- Positive reflection instruction card



# Happiness and Pigs

Notice, savor, recall

*“Every evening think about the people, things or events that made you happy that day. You may make a list if you like. Pick one of these and spend a moment savoring it. What made it so special to you? Now, write down this moment on a “currency” slip. Use enough detail that you can immediately recall what happened later. Next, add the date, fold up your happy memory “currency,” and drop it in the piggy bank. You will make these happy memory “deposits” in the same way every evening for the next 30 days.”*



# Happiness and Pigs

Notice, savor, recall

*“At the end of 30 days, you will “close your account.” This means that you will withdraw all of the “currency” from your piggy bank and read each and every one of the deposited happy memories. As you read them, try to recall details of the happy event and what made it so special to you at the time. Enjoy!”*



# Happiness and Pigs

Notice, savor, recall

## RCT Pilot Trials:

General population, N=120: PPB or WLC

- Improved life satisfaction

Breast Cancer Surgery, N=20: PPB or TAU [presurgical]

- Lower levels of negative affect
- Less fatigue
- Improved subjective well-being

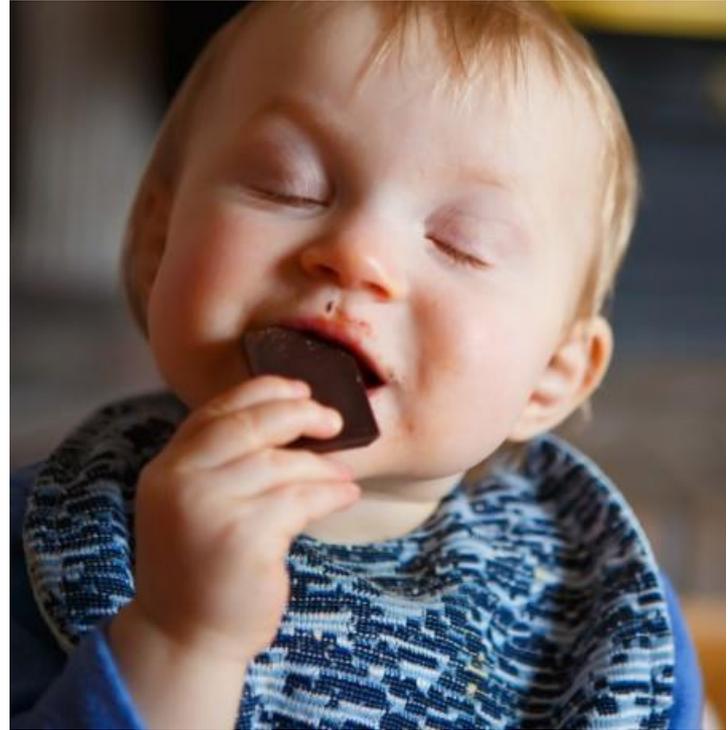


# Positive Activity Interventions

Increase positive emotions

## Savoring:

- Every day for the next week, be sure to savor at least two experiences (for example, your morning coffee, a moment with a friend, or the sun on your face as you walk to your car).
- Be sure to engage all of your senses.
- Be present, be mindful.
- Spend at least 2-3 minutes savoring each experience.



# Resilience Building Plan

- Enhance Optimism.
- Identify and Use Character Strengths.
- Increase Positive Emotions on a Daily Basis.
- **Improve Social Support.**
- Engage in Meaningful Activities.



# Positive Activity Interventions

Connect with others – improve social support

## Text to Connect

- Every day for the next week, text someone you care about, but with whom you have not spoken to for a while. Let them know you care and are thinking about them.

Bonus: Send them a photo of the two of you.



# Positive Activity Interventions

Connect with others – improve social support

## Acts of Kindness

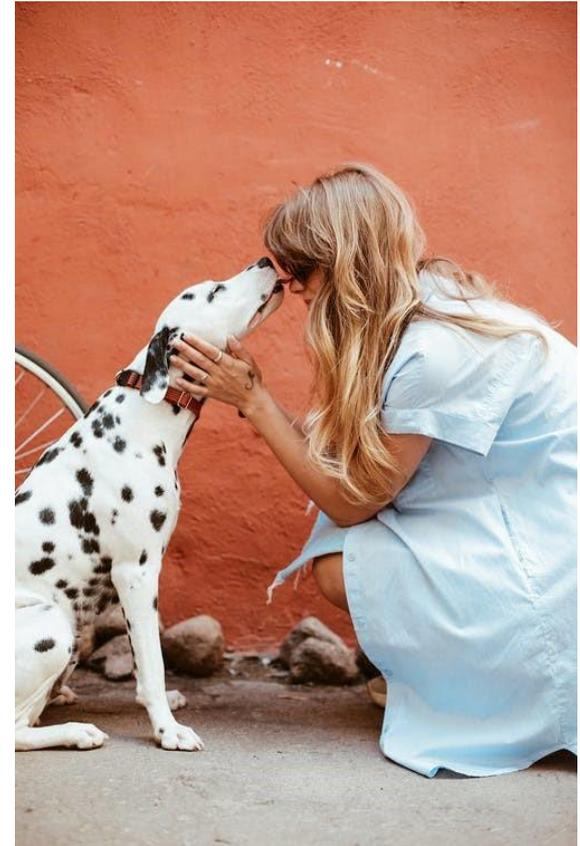
- One day this week, do five kind things for other people and one kind thing for yourself.

The people can be complete strangers or friends and family members. You can do very small acts of kindness such as holding a door open, sharing a genuine compliment or giving somebody a hug. For yourself, perhaps take a long bath, call a close friend or enjoy a book or movie.



# Acts of Kindness

- Acts of kindness have been associated with:
  - decreased levels of health-related stress,
  - less depression in patients living with diabetes,
  - lower levels of pain,
  - lower levels of cortisol,
  - lower blood pressure,
  - less anxiety and depression
  - and much more if you include *positive service/volunteering* as “act of kindness”!
  
- Curry et al. A systematic review and meta-analysis of the effects of performing acts of kindness on the well-being of the actor. <https://doi.org/10.31219/osf.io/ytj5s>
- Moskowitz JT, Hult JR, Duncan LG, et al. A positive affect intervention for people experiencing health-related stress: development and non-randomized pilot test. *Journal of health psychology*. Jul 2012;17(5):676-692.
- Cohn MA, Pietrucha ME, Saslo LR, Hult JR, Moskowitz JT. An online positive affect skills intervention reduces depression in adults with type 2 diabetes. *Journal of Positive Psychology*. In press.
- Hausmann LR, Parks A, Youk AO, Kwoh CK. Reduction of bodily pain in response to an online positive activities intervention. *The journal of pain : official journal of the American Pain Society*. May 2014;15(5):560-567.



# Resilience Building Plan

- Enhance Optimism.
- Identify and Use Character Strengths.
- Increase Positive Emotions on a Daily Basis.
- Improve Social Support.
- **Engage in Meaningful Activities.**



# Positive Activity Interventions

Increase positive emotions

## Pleasant Activity Scheduling

- On 3 to 5 days this week, set aside time to do something you enjoy. Put it on your calendar and treat it with the same respect as you would a doctor's appointment.

- Have coffee with a friend
- Spend time on your hobby/sport
- Buy a small gift for yourself/loved one
- Take a cooking or yoga class
- Get a massage
- Binge watch a favorite show
- Take the dog on a nature hike



Cuijpers et al. Clin Psychol Rev 2007;27:318-26  
**LARGE effect size in depression = .87**

# Purpose in life

Engage in meaningful activities

Your life purpose consists of the central motivating aims of your life:

- guides life decisions,
- influences behavior,
- shapes goals,
- offers a sense of direction,
- creates meaning.

*Why you get up in the morning.*



# Purpose in life and health

## The scientific evidence

### **Purpose in life is associated with:**

- Less anxiety and depression
- Healthier aging
- Better sleep
- Better diet and nutrition
- Increased willpower
- Decreased risk of heart attack
- Decreased risk of Alzheimer's
- Improved immune system functioning
- Increased pain tolerance



# Purpose in life

## Citations

Cohen R, Bavishi C, Rozanski A. Purpose in Life and Its Relationship to All-Cause Mortality and Cardiovascular Events: A Meta-Analysis. *Psychosom Med*. 2016 Feb-Mar;78(2):122-33.

Neal Krause. Meaning in Life and Mortality. *J Gerontol B Psychol Sci Soc Sci*. 2009 Jun; 64B(4):517–527.

Hill PL, Turiano NA. Purpose in life as a predictor of mortality across adulthood. *Psychol Sci*. 2014 Jul;25(7):1482-6.

Boyle PA, Buchman AS, Barnes LL, and Bennett DA. Effect of a purpose in life on incident Alzheimer Disease and mild cognitive impairment in community-dwelling older persons. *Arch Gen Psychiatry*. 2010 Mar;67(3):304-10.

Kim ES, Sun JK, Park N, and Peterson C. Purpose in life and reduced incidence of stroke in older adults: The health and retirement study. *J Psychosom Res*. 2013 May;74(5):427-32.

Kim ES, Sun JK, Park JK, et al. Purpose in life and reduced risk of myocardial infarction among older U.S. adults with coronary heart disease: A two-year follow-up. *J Behav Med*. 2013 Apr;36(2):124-33.

Wood AM and Joseph S. The absence of positive psychological (eudaimonic) well-being as a risk factor for depression: A ten year cohort study. *J Affect Disord*. 2010 May;122(3):213-7.

Fava GA, Ruini C, Rafanelli C, et al. Six-year outcome of cognitive behavioral therapy for prevention of recurrent depression. *Am J Psychiatry*. 2004 Oct;161(10):1872-6.

Fredrickson BL, Grewen KM, Coffey KA, et al. A functional genomic perspective on human well-being. *Proc Natl Acad Sci U S A*. 2013 Aug 13;110(33):13684-9.

Ruini C, Fava GA. Well-being therapy for generalized anxiety disorder. *J Clin Psychol*. 2009 May;65(5):510-9.

Danhauer SC, Russell GB, Tedeschi RG, et al. A longitudinal investigation of posttraumatic growth in adult patients undergoing treatment for leukemia. *J Clin Psychol Med Settings*. 2013 Mar;20(1):13-24.

# Purpose in life

Engage in meaningful activities

## What makes you come alive?

*These are things bigger than you that put “a fire in your belly.” These are things that you really care about that you are willing to put yourself*

## What are your innate strengths?

*What things naturally come easy to you?*

## Where do you add the greatest value?

*In other words, what are you well placed and equipped to help solve in your workplace, career, organization, or industry? Focus on the opportunities, roles and career paths where you are most likely to succeed and therefore find the greatest sense of accomplishment and contribution.*

## How will you measure your life?

*What are your core values and how are you aligning with them?*



# Promoting Resilience with Innovative Self-Management (PRISM)

Eclectic, innovative, scalable

## PRISM Study

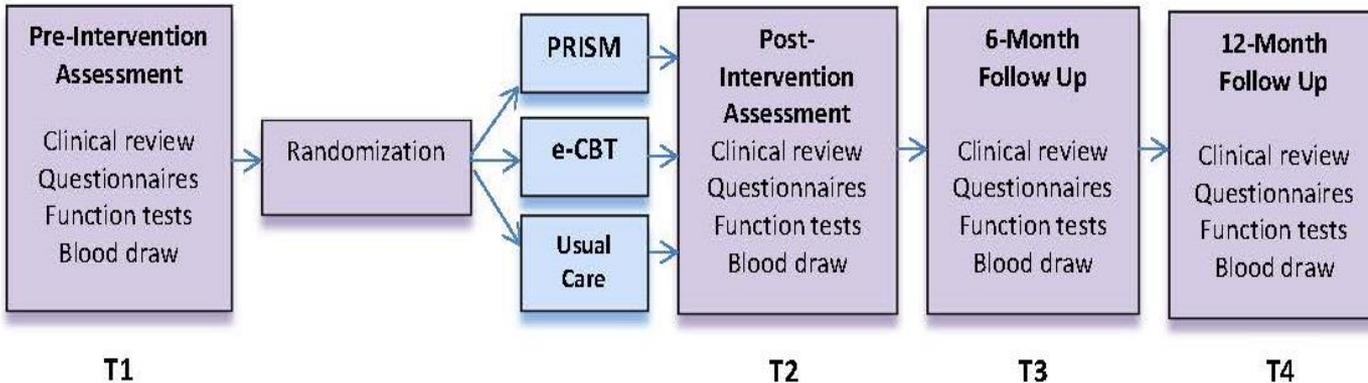
- Enhances CBT for pain with activities that promote behavioral activation, engagement, positive emotions and resilience
- Delivered using an online platform
- Coached by [medical assistants](#) by phone



# Promoting Resilience with Innovative Self-Management (PRISM)

Eclectic, innovative, scalable

## Randomized Controlled Trial



Participants: 300 spine pain patients with comorbid fibromyalgia. Randomized 2:2:1 (120:120:60)

# Promoting Resilience with Innovative Self-Management (PRISM)

Eclectic, innovative, scalable

## Treatment Arms

PRISM developed with Acacia Parks (Co-I), Positive Psychotherapy.

### Overview of online Cognitive Behavioral Therapy (eCBT)

<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>	<u>Week 5</u>	<u>Week 6</u>	<u>Week 7</u>	<u>Week 8</u>
Being Active	Pacing	Sleep	Goal-Setting	Communication	Relaxation	Reframing	Maintenance

### Overview of resilience-enhanced CBT (PRISM)

<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>	<u>Week 5</u>	<u>Week 6</u>	<u>Week 7</u>	<u>Week 8</u>
<b>Signature Strengths</b>	Being Active & Pacing	<b>Savoring</b>	Sleep	<b>Positive Piggy Bank</b>	Relaxation	<b>Acts of Kindness</b>	Reframing & Maintenance

# CBT Self-Management open access

**FibroGuide**

Home  
About FibroGuide  
Getting started  
Steps for me  
FibroGuide modules  
About us

**FibroGuide Modules**

Exit Program: X

**FibroGuide Menu** MINIMIZE

Tell Me How FibroGuide Works Steps for Me

STEPS

Understanding Fibromyalgia Communicating Being Active

Sleep Relaxation What Is Fibro Fog?

Setting Goals Pacing Yourself Thinking Differently

Time for You

Color Key: Step My Steps Visited Step

Back Forward

Use the **FibroGuide** menu to navigate the program. Once you make a selection, the menu will minimize to the bottom of your screen. You can always access it by clicking on the arrow in the upper corner of the menu.

CHRONIC PAIN & FATIGUE RESEARCH CENTER  
UNIVERSITY OF MICHIGAN HEALTH SYSTEM (c) 2014 The Regents of the University of Michigan

Error on page. Local intranet | Protected Mode

**FibroGuide**

Home  
About FibroGuide  
Getting started  
Steps for me  
FibroGuide modules  
About us

**Pacing Yourself**

**Feeling well and doing too much**  
Have you ever done too much when you felt well and then "paid for it" later? If so, you may have fallen into a frustrating cycle in which you overdo it and then feel worse, which then causes you to have more pain and fatigue. Overexerting yourself can cause a flare-up, which is a term that is used to describe a transient appearance or worsening in symptoms such as feeling muscle and joint pain, feeling tired, or having trouble getting the right kind of sleep.

When you get caught up in this catch-up/flare-up cycle, you may:

- Feel well and do too much
- Have a flare-up
- Fall behind in tasks while you rest and recover
- Repeat the cycle when you feel well again

Many people with fibromyalgia may find it easier to fall into this catch-up/flare-up cycle because tasks, like household chores, that used to be quick and simple may now take longer to complete. This can make it hard to accomplish everything that you need to do each day. As a result, you may feel the need to make up for bad days by playing catch-up on good days.

**Do more by pacing yourself**  
Learning how to pace yourself can help you break this catch-up/flare-up cycle. Pacing

**Inside This Step**

- Feeling well and doing too much
- It's time to pace yourself
- Put it into practice
- A note for family and friends

**Added Features:**

- Pacing Yourself Work Sheet
- Expert Advice
- Download this Step

Text Size Break Notice On

Page 1 of 4

CHRONIC PAIN & FATIGUE RESEARCH CENTER  
UNIVERSITY OF MICHIGAN HEALTH SYSTEM (c) 2014 The Regents of the University of Michigan

Error on page. Local intranet | Protected Mode

FibroGuide: <http://fibroguide.med.umich.edu/>

# Positive Activity Self-Management

open access

The screenshot shows the Happify website interface. At the top, there is a navigation bar with the Happify logo and several menu items: My Track, Explore Tracks, Happify Daily, Community, My Stats, and Science. Below the navigation bar, the main content area features a track titled "Part 1: Ponder the Positive Love Your Life Despite Chronic Pain" created by Afton Hassett, Psy.D. A progress bar indicates that the user has 7 days left to earn gold in Part 1 and has completed 0 activities. Below the track title, there is a section titled "Meet your Track Activity Board" with a photo of a woman drinking tea. To the right of this section, there is a list of benefits: "This track can help you:" followed by three bullet points: "Bring joy back into daily life", "Live a more purposeful life", and "Explore your strengths and values". At the bottom of the page, there is a grid of six activity cards: "Bank On It" (Today's Grateful Moment), "Uplift", "Pause for the Positive" (Savor the Small Stuff), "Quiz: What Can Positive Emotions Do For You?", "Sidewalk Cafe" (Savor Quest), and "A Loving-Kindness Meditation" (Loving-Kindness Meditation).

<http://happify.com>

# Acknowledgments

Daniel J. Clauw, MD  
Chad M. Brummett, MD  
Jenna Goesling, Ph.D.  
Richard E. Harris, Ph.D.  
Steven E. Harte, Ph.D.  
Jennifer Pierce, Ph.D.  
David A. Williams, Ph.D.

Alex Tsodikov, Ph.D.  
Stephanie Moser, Ph.D.  
Andrew Clauw, BA  
Emily Hogan, BA  
Joseph Long, BS  
Regina Onishchenko, BS  
Kathy Scott, BSN  
Elizabeth Seeley, BS  
Sana Shaikh, MD  
Manisha Verma, BS

## Current Funding:

NIH-National Institute of Nursing Research (NINR)  
NIH-National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)  
NIH-Nationals Institute of Child Health and Human Development (NICHD)  
Centers for Disease Control (CDC)  
University of Michigan, Department of Anesthesiology

