Bridge to Health

A program TO INCORPORATE EXERCISE INTO TREATMENT FOR COLLEGE STUDENTS WITH MENTAL HEALTH ISSUES

Bridging barriers to healthier behaviors

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Bridge to Health is a collaboration between the Counseling Center and Health Center at Framingham State University

BTH is a program that includes exercise as part of treatment for students with mental health and health issues.

Students are connected with a personal exercise trainer who partners with the treatment team. The trainer works with clients to identify barriers, determine ways to overcome them, and to support ongoing mental and physical health.

Goals of presentation

• Become familiar with the research on physical activity and its effects on mental health symptoms
• Understand Social Cognitive theory related to behavior change, including the concept of Exercise Self-efficacy
• Identify barriers to utilizing exercise in our population, clients at a College Counseling Center
• Describe the creation and implementation of the Bridge to Health program at our University

How did our program begin?

• Presentation at ACHA in 2013 by California State University at Chico, WelICAT Fit
• Applied for grant money from NECHA and received grant to pilot
• Engaged with the coach/trainer and clinicians to create our program

Research on exercise and health

There has been a great deal of research about the effects of exercise on health. The health benefits of regular exercise are well established.

For the past 10 years, there has been more research examining the effects of exercise on mental health symptoms.

The actual mechanism of exercise's effects on symptoms isn’t clearly understood. There is likely a combination of physiological, biochemical and psychosocial factors associated with beneficial changes.

Dr. John Ratey, author of SPARK, states that it provides distraction, reduces tension, strengthens brain circuits pathways, improves resilience, as well as causing changes on a cellular level.

Newly Released Data

A brand new study was reported this month in the Journal, CELL. The study focused on the enzyme Kynurenine.

Kynurenine is shown to cause damaging inflammation in the brain, leading, it is thought, to depression.

Kynurenine levels rise in the blood after stress.

Another enzyme, PGC-1 attacks Kynurenine and breaks it down before it can get to the brain. This enzyme increases in the muscle after exercise.

More research is underway to study further the connection between this cellular process and disease.

(Aqudelo, 2014, Cell)
Why we think exercise helps

In 2013 ACHA National college health assessment of 43,499 college students aged 18 to 25 concluded that those who engaged in some physical activity each week demonstrated a reduced risk of hopelessness, depression and suicidal behavior compared with their inactive counterparts.

In a study by Saxena & Ommeren, those with regular physical activity were less likely to meet criteria in the previous year for a diagnosis of major depression and anxiety disorders.

Research suggests that physical activity is moderately effective treatment for anxiety and depression. Exercise has stronger anxiolytic effects than not doing anything, is as effective as medicine, and adds to physical health. (Petruzello, 2012, Handbook of Exercise Psychology)

Mental health issues in college students

- 45% of students in the 2013 ACHA yearly college health assessment indicated they “felt things were hopeless”; 31% felt “it was very difficult to function”; 35% felt overwhelmed and anxious. (At least once in the past 12 months)

- Mental health concerns can significantly impact success in academic, social, relational arenas. Students reported their academic performance was negatively affected by depression (13%), anxiety (19.7%), and stress (28%).

- In the past 12 months, 13% of students report they were diagnosed with anxiety, and 11% were diagnosed with depression

If it is healthy? Why don’t we all do it?

- Despite evidence that exercise contributes to physical health and likely to improved mental health, studies say that between 30 and 40% of adults engage in moderate exercise regularly

- Knowledge about healthy behaviors (which not everyone has) does not always translate into action

- Behavior change is very complex and there is a significant amount of research on the multiple variables involved

Bandura’s Social cognitive model

- Reciprocal determinism. The idea that Behavior, Environment, and Personal factors all impact each other and have a reciprocal effect. All act as mutual causes of each other

- Vicarious learning. The idea that observing others behaviors, particularly success, contributes to behavior change

- Self-efficacy. The perceived capability that one can complete an action. This concept has been studied particularly related to exercise behavior. (Hager, 2012 Oxford Handbook of Exercise Psychology)

Self Efficacy

This represents the strongest, most consistent psychological correlate of exercise behavior.

Self efficacy is described as an individual’s perception of their own capability to complete an action. Exercise self efficacy is the belief that one is capable of exercising on a regular basis.

Barrier self efficacy describes the confidence one has to exercise in the face of common barriers. Exercise self efficacy is thought to be important in adopting behavior change, while the barrier self efficacy is thought to help in longer term maintenance of change behavior.

Whether an individual will attempt a behavior is also influenced by their outcome expectations. The expected costs and benefits of performing the behavior.

(Higgins et al., 2013, Journal of Health Psychology)
Mental health Barriers

- Side effects of medicine
- Focus on dealing with symptoms
- The role of existing physical co-morbidities, for example low energy, sleep difficulties, social anxiety, low self esteem and low motivation
- The very reason for needing exercise is in itself a contributing limitation. Mental health issues affect the ability to engage in health-promoting behaviors.

Socio Economic barriers

Research suggests that people who have a lower SES exercise less than their higher SES peers.

College students with significant financial stressors have limited time for exercise or access to a trainer.

People with lower SES have fewer opportunities to exert control or to influence events that affect their lives and so may have a lower sense of personal control.

In the ACHA survey, 33.3% of students reported that Finances were experienced as Traumatic or Very Difficult to Handle. (past 12 months)

Reported Barriers to Exercise in College Students (Kuklavik, Hulquist, Journal of American College Health, 2013)

- Traditional students
- Lack of time
- Social Influence
- Lack of energy
- Lack of willpower
- Non-traditional students
- Fear of Injury
- Lack of skill
- Lack of resources
- "older, work or family responsibilities"

Exercise as part of routine health and mental health assessment

Mental Health professionals, as a group, are an underused, highly valuable resource for the promotion of physical activities. At the FSU Counseling Center, we ask about exercise behavior on our intake forms. Staff talk with clients about exercise because we believe it is an effective treatment for many mental health related symptoms.

A significant predictor of increasing Exercise Self-Efficacy is to have respected providers encourage behavior.

Having the Bridge program allows clinicians to discuss and respond to specific barriers.

(Jagger, Oxford Handbook, 2013)

Our design: Bridge to Health

- Students engaged in mental health treatment at CC
- Referred by clinician for information and initial screening info
- ROI so all providers could communicate
- Screened at Health services for any contraindications to exercise
- Health advice about any health issues and attention during exercise
- Referral to Nutritionist

Pre Test Questionnaire

- Exercise History
- Past Barriers to Exercise
- Self Efficacy screens: Belief that exercise will help them feel better (scale of 1 to 5)
- Belief that they can follow through with exercise (scale of 1 to 5)
- Rating of target symptoms
Bridge to Health

- Individual assessment by the Trainer: Target goals and plan developed
- Work with Trainer 8 weeks individually along with support for outside exercise
- Group exercise sessions offered in conjunction to help manage social anxiety, self-esteem issues, and encourage vicarious learning

Goals and Intervention Techniques of the Trainer

- Increase Access
- Develop Skills
- Decrease Barriers
- Increase Belief in Ability

Demographics and data

14 students participated in the pilot program
Age range from 18 to 23
12 females, 2 males
3 Hispanic, 1 African American, 10 Caucasian
50% report working 20 hours or more; 10 of 14 work some hours weekly

Past Exercise Experience:
1/14 has used a personal exercise trainer
9/14: team sport
10/14: exercise class
7/14: exercise to feel better

Mental health and physical health issues

- All 14 students were engaged in treatment at the Counseling Center.
- 10 of 14 were on prescribed psychiatric medication.
- 7 with a diagnosis of Anxiety disorder
- 6 with a diagnosis of Depression
- 1 with a diagnosis of Bipolar illness.
- 5 with knee problems
- 2 with asthma
- 2 with joint pain
- 1 with H/O Lyme disease
- 1 with pre-diabetes

Our Students Reported Barriers

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<th>Physical</th>
<th>Mental Health</th>
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<tr>
<td>Knee problems</td>
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<tr>
<td>Low motivation</td>
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<td>Not knowing where to start</td>
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<td>Money</td>
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<td>About lack of knowledge</td>
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Points of intervention

Behavior
What if any exercise now or past? Skills and knowledge.

Environment

Personal factors
Health limitations. Mental health limitations. Emotional coping skills.

Teach clients about the health benefits of exercise.
Practice skills.
Give access to trainer.
Create social support through a small group class.
Train clients on goal directed behavior and personal regulation.
Problem solving and self-reward can be practiced.
Accountability.
Results
Change in Target Symptoms Pre and Post Test

Results
Change in Reported Self Efficacy, Pre and Post Test

Student Testimonies

Limitations and Future Goals

- All the students were already engaged in mental health treatment
- All the students had a provider who they had a relationship with and who supported this program
- All of the providers at the Center believe in exercise as a treatment for addressing mental health symptoms
- Assess longer term impact on behavior change and symptom reduction
- Increase availability of resources

Program philosophy

- Treatment team continuously communicated to relay barriers and progress
- We attempted to intervene at multiple points
- We focused on: responding to concrete barriers (socioeconomic), emotional barriers (self esteem, fear of failure, social anxiety), mental health barriers (low motivation), physical health issues (lower problems, weight issues)

Questions and Comments