# RACE4LIFE

**Empowering people in SUD recovery** 



**Capacity Building Program** 

A Capacity Building program for sport trainers and health professionals on how to deliver tailored sport-based interventions for SUD recovery





# The role of Sport in Addiction Recovery

Play, feel, meet, live





# Deliverable # 3.2 RACE4LIFE Capacity Building program

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**Substance use disorder:** is the persistent use of drugs (including alcohol) despite substantial harm and adverse consequences. Substance use disorders are characterized by an array of mental, physical, and behavioral symptoms that may cause problems related to loss of control, strain on one's interpersonal life, hazardous use, tolerance, and withdrawal.

Addiction: is a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences.

**Behavior:** an organism's activities in response to external or internal stimuli, including objectively observable activities, introspectively observable activities, and nonconscious processes.

Behavior change: any alteration or adjustment of behavior that affects an individual's functioning, brought about by psychotherapeutic or other interventions or occurring spontaneously.

**Tailored sport-based intervention**: is defined as a targeted action or process that affects the functioning and/or performance of a person through changes in their thinking and behavior

**Sport:** All forms of physical activity which, through casual or organized participation, aims at expressing or improving physical fitness and mental well-being, forming social relationships, or obtaining results in competition at all levels.

Physical Activity (PA): Any bodily movement produced by skeletal muscles that results in energy expenditure above resting level.

**Exercise:** is a subcategory of physical activity that is planned, structured, repetitive, and aims at improving or maintaining one or more components of physical fitness.

Life skills: Life skills are abilities for adaptive and positive behavior that enable humans to deal effectively with the demands and challenges of life.

Motivation: the impetus that gives purpose or direction to behavior and operates in humans at a conscious or unconscious level. Motives are frequently divided into (a) physiological, primary, or organic motives, such as hunger, thirst, and need for sleep; and (b) personal, social, or secondary motives, such as affiliation, competition, and individual interests and goals. An important distinction must also be drawn between internal motivating forces and external factors, such as rewards or punishments, that can encourage or discourage certain behaviors

**Experiential Learning:** Experiential learning is a learning method through experience, involving active engagement with real-world situations, reflection, and applying insights for future actions or situations.

PAR-Q: is a self-screening tool for individuals planning to start an exercise program, assessing safety and risk based on health history responses.

**SMART:** The acronym outlines setting specific, measurable, achievable, relevant, and time-related goals.

**Self-efficacy:** refers to a person's belief in their ability to succeed in a specific situation or complete a task.



# LIST OF ACRONYMS

**SUD** - Substance use disorder

**BCTs** - Behavioral change teachings

**MI** - Motivational Interviewing

PA - Physical Activity

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SUD recovery organizations are increasingly incorporating sports-based interventions into their recovery programs, but there is a need for evidence-based practices to ensure the effectiveness of these interventions. There are no research studies on sports-based interventions for behavior change in SUD recovery, and health professionals working in SUD recovery often lack the necessary knowledge for designing and implementing these interventions. Research conducted on the RTS+ project supports the lack of knowledge in this area, indicating the need for specialized training. The RACE4LIFE Capacity Building program aims to equip health professionals with the skills to develop and implement personalized behavioral change interventions utilizing sports in SUD recovery.

The RACE4LIFE e-platform is a training tool designed to enhance skills, knowledge, and effectiveness in mental health and sports trainers working in the SUD recovery process, aiming to provide capacity-building resources.

The e-platform's first part explores a theoretical framework for substance use disorder recovery and behavioral change interventions. It identifies models, strategies, and techniques used in sports and physical exercise contexts, synthesizes evidence of intervention effectiveness, and applies theories for designing interventions in sports. The guide also emphasizes the benefits of sports participation in promoting physical, mental, and social well-being, life skills, and personal development, using an experiential learning approach.

The RACE4LIFE Sport-based behavior change protocol for people with SUD aims to provide tailored sport-based interventions for SUD recovery. The e-platform's second part presents and analyzes this protocol, aiming to help mental health and sport professionals deliver effective interventions to this vulnerable population.



# Part One

Theory
Guide

# **Chapter 1: Understanding Addiction**

#### 1.1. Introduction

The World Report on Drugs (2023) reports that over 5% of individuals worldwide have used psychoactive drugs at least once in their lifetime, a 20% increase over the past decade. Opioids, particularly heroin, have the greatest negative impact on users' health, with 28 million years of "healthy life" lost due to early mortality and disability. Substance use disorders (SUD) are characterized by various theories, including psychological, biological, sociological, economic, and sociocultural factors. Addiction is the most serious SUD, characterized by uncontrolled and repeated use, leading to poor physical and emotional state.

# 1.2: Modelling Addictions

<u>Modelling Addictions</u> is a multifaceted task involving understanding biological, psychological, and social factors. Researchers from psychology, neuroscience, sociology, and public health collaborate to develop comprehensive models to explain addiction's development and maintenance.

# 1.3. The role of motivation

SUD recovery is a behavioral change process that helps individuals cope with addiction, restore physical and psychological health, and regain social functioning. Motivation plays a crucial role in successful SUD recovery, as it acts as a "mediator" of therapeutic results. Overcoming SUD requires commitment, perseverance, and a strong sense of motivation, as it is a challenging journey that requires a combination of both positive and negative factors.

# 1.4. The recovery capital

Recovery capital refers to the internal and external resources that an individual can draw upon to initiate and sustain their recovery from SUD. It encompasses a wide range of factors that contribute to a person's ability to overcome substance use disorder and maintain long-term sobriety.

#### 1.5. The recovery stages

The recovery process from SUD is often described as a journey that unfolds through various stages, each characterized by unique challenges, opportunities, and milestones.

#### 1.6. Desired new behavior

A set of cognitive, socio-psychological, interpersonal, and behavioral abilities together referred to as "life skills" support an individual's choice of an active, healthy lifestyle as well as its ability to make informed decisions and communicate successfully. Life skills, which include self-awareness, empathy, assertiveness, equanimity, resilience, and general coping skills, are abilities that help individuals living with SUD adopt a positive attitude and successfully deal with the demands and problems of daily life.



# Chapter 2: The role of sport in SUD recovery



#### 2.1. Introduction

Regular physical exercise has been linked to numerous benefits for substance use disorder (SUD) recovery, improving physical and mental health through psychological, behavioral, and physiological mechanisms. This leads to improved well-being and quality of life. The United Nations Office on Drugs and Crime recommends PE as an integral part of prevention and SUD recovery, citing its promise as a promising, affordable, and easily accessible complementary treatment option.

#### 2.2. Needs assessment of exercise in SUD recovery

Needs assessment of exercise in the population under SUD recovery (clients) refers to the process of systematically evaluating and identifying the specific exercise-related needs and requirements of individuals who are receiving therapy for substance use disorders. The exercise needs of clients may vary based on several factors, such as the type and severity of their substance use disorder, overall health status, and individual preferences.



# Chapter 3: Design sport-based intervention for SUD recovery

#### 3.1. Introduction

Traditional treatment methods often focus on psychological and pharmacological approaches, leaving a gap in addressing the physical and social aspects of recovery. Sport-based interventions have gained attention for their unique ability to engage individuals in a holistic manner, incorporating physical activity, team dynamics, and personal growth. This chapter aims to provide a comprehensive overview of the design and implementation of sport-based interventions for individuals undergoing SUD recovery.

### 3.2. Behavior change interventions

Behavioral change aims for long-term habit and behavior change, with studies showing that even minor changes can significantly impact health and life expectancy. While interventions can help achieve temporary behavior change, maintaining it is rare. Intentions have less impact on behavior when participants lack control. To maintain behavior, individuals need consistent motivation, such as enjoyment, satisfaction, self-determination, or alignment with values and beliefs.

#### 3.3. Sport-based intervention programs for SUD recovery

Sports and PE play a vital role in the recovery of individuals suffering from SUD. The primary aim of sports and PE professionals is to provide sports/exercise activities as an intervention program that supports SUD recovery. The goal is not to train high-performance athletes or to provide leisure activities to keep clients busy and happy. Rather, the focus is on the therapeutic benefits of sports and exercise in the context of SUD recovery.

#### 3.4. From delivery of sport activities to intervention programs

Intervention refers to a treatment or procedure designed to prevent or treat disease or improve health. Behavioral interventions, which affect individuals' actions regarding their health, can be implemented at various levels depending on the target audience and the problem being addressed. These interventions aim to increase physical activity and prevent relapses.



#### 3.5. Intervention Design Methods

Designing Behavioral Interventions Science is an interdisciplinary field that aims to create effective interventions to positively change people's behavior. It combines psychology, sociology, and economics to develop evidence-based strategies. The goal is to identify key factors influencing behavior and develop programs to effectively change those factors.

# 3.6. The three stages of Intervention design

Intervention design for SUD or behavioral health issues typically involves understanding behavior through behavioral analysis and diagnosis using COM-B, identifying intervention options, and identifying content and implementation options.

#### 3.7. Delivery Channels

To effectively implement behavior change techniques requiring communication, it is crucial to choose the delivery method, whether it's intervention content or policy implementation.





# Chapter 4: Theories of behaviour change

#### 4.1. Introduction

SUD is a complex issue involving cognitive, emotional, and physiological processes, primarily behavioral. Various behavior change theories have been applied to SUD recovery, contributing to positive treatment outcomes. These strategies, including self-efficacy, goal-setting, and self-determination, help individuals develop skills to promote change in addictive behaviors and enhance their sense of autonomy and competence.

#### 4.2. Social Cognitive Theory

Social Cognitive Theory, developed by Albert Bandura, is a psychological framework that explains how individuals acquire knowledge and behavior through social interaction, observation, and cognitive processes. It is widely used in education, psychology, and health promotion to explain how individuals learn, adapt, develop skills, and change behaviors.

# 4.3. Self-Determination Theory

Self-Determination Theory suggests that people have an innate tendency towards growth, fulfillment, and health. It emphasizes the importance of intrinsic psychological needs in shaping goals and regulatory processes. To sustain behaviors, individuals must internalize values and skills for change and experience self-determination. This is influenced by satisfying basic psychological needs of autonomy, feeling capable, and developing meaningful relationships. When these needs are met, individuals are more likely to engage in intrinsically motivated behaviors.

# 4.4. Self-efficacy

Self-efficacy is an individual's belief in their ability to control their life and events, influencing their pursuit of activities, effort, and persistence. It is influenced by personal expectations and success, with success enhancing self-efficacy and failure negatively affecting it. Personal expectations determine the effort and persistence individuals will put in, and success can lead to avoidance of potentially unsuccessful situations.

# 4.5. Goal-Setting Theory

Goal-setting theory is a crucial strategy for regulating behavior and enhancing motivation. The theory suggests that individuals need specific, challenging goals to drive high performance. Goal-setting is influenced by an individual's confidence in achieving the goal and its importance. Other factors that mediate between goals and performance include goal selection, acceptance, effort, persistence, and strategy. These factors help individuals achieve their goals and maintain motivation in various contexts.

# 4.6. Motivational interviewing

Motivational interviewing, is a client-centered, evidence-based counseling method used in various healthcare settings, including SUD recovery, mental health, healthcare, and wellness coaching, to help individuals resolve ambivalence about behavior change..





# Chapter 5: Life skill development through sport

#### 5.1. Introduction

This chapter explores the various dimensions of life skills, their definition and significance, and the transformative role sports play in their development. Sports serve as dynamic context for cultivating virtues beyond the boundaries of the game, highlighting their importance in nurturing and honing life skills.

#### 5.2. What are Life Skills

UNICEF defines life skills as transferable skills that enable individuals to succeed in school, work, and societal life. These skills consist of skills, attitudes, values, behaviors, and domain-based knowledge. They can be learned throughout life, with optimal interventions targeting specific skills at specific ages. Life skills are a behavior change approach that balances knowledge, attitude, and skills.

# 5.3. The development of life skills

The home environment significantly influences societal skills, attitudes, and values. Factors like parents' education, family relationships, poverty, and material considerations can impact the family environment. Community social norms and structures influence essential skills and behaviors. Adolescence is a universal period of physical changes, identity development, and complex social relationships, determining how young individuals react to difficult situations.

# 5.4. Why life skills are important

Life skills are skills for adaptive and positive behavior, which allow individuals to translate knowledge, attitudes, and values into actual abilities to effectively meet the demands and challenges of everyday life. Effectively acquiring and applying life skills can affect the way we feel about ourselves and others and will equally affect the way others perceive us. Life skills contribute to our perceptions of self-efficacy, self-confidence, and self-esteem

#### 5.5. Life skills components

The World Health Organization identifies life skills as critical thinking, interpersonal/communication skills, and coping and self-management skills. Critical thinking skills involve problem-solving and analyzing the influence of one's values. Interpersonal skills involve verbal and non-verbal communication, active listening, and empathy. Self-management skills involve increasing one's internal locus of control, dealing with anger, grief, and anxiety, and setting goals.

# 5.6. Life skills and positive health behavior

Life skills play an important role in promoting mental well-being. However, life skills are not the only factors influencing behavior as there are other factors associated with our motivation and ability to behave positively in preventing health problems, such as social support and cultural and environmental factors

# 5.7. Training to develop life skills

Life skills training is a comprehensive method that focuses on developing values, skills, and knowledge in learners. It can be applied in various settings and aims to enhance psychosocial skills, promote personal and social development, prevent health and social issues, and protect human rights. It provides opportunities for practice and reinforcement of these skills.

# 5.8. Life skills development through sport and physical exercise

Physical exercise and sports are effective for learning life skills, promoting their transferability to other life domains, with certain life skills positively linked to participation in these activities.

# 5.9. Measuring life skills

The effectiveness of a life skills program can be measured in the short term after 3-6 months by examining specific learning objectives and factors like self-esteem, self-efficacy, and behavioral intentions. Evaluation should involve a combination of quantitative and qualitative assessment. However, not all life skills can be easily measured due to the lack of available methodologies and tools for the purpose.

# 5.10. The role of life skills in SUD recovery

SUD recovery is a multifaceted process requiring emotional, psychological, and practical strategies, with life skills playing a vital role in promoting sobriety and fostering a fulfilling life in recovery.





# Chapter 6: Experiential learning

#### 6.1. Introduction

Experience is essential for learning contact with the environment, involving emotional, behavioral, socio-relational, cognitive, and spiritual aspects. Experiential learning is an active method used in educational programs for both children and adults, involving philosophical, theoretical, and practical models to expand learning capacities, develop cognitions, impact emotions and attitudes, and facilitate consistent behavior with insights.

# 6.2. What is experiential learning

Experiential learning is an educational method that emphasizes hands-on experiences to gain knowledge, develop skills, and promote personal growth, unlike traditional classroom-based learning that relies on lectures and textbooks. It encourages active engagement and practical application of concepts.

# 6.3. Kolb's Learning Cycle

David Kolb's four-stage Cycle of Experiential Learning is a fundamental approach used in adult education, which can be applied to incorporate sport activities into the SUD recovery process.

# 6.4. Experiential learning elements

**Frontloading** introduces rules, goals, and structure, inviting participation. **Experiences** can range from individual activities to complex group interactions. Sport/exercise-related activities activate kinaesthetic participation, engaging learners intellectually, emotionally, socially, and physically. The **debriefing** process involves participants and facilitators reflecting on the learning task.

# 6.5. Comfort-stretch-panic model

The Comfort-Stretch-Panic model is a framework used in counseling, therapy, and personal development to understand the process of change and adaptation in individuals facing challenging situations or transitions, describing three main stages of change or stress.

# Part Two

Sport-based behavior change protocol for people under SUD recovery



The RACE4LIFE Sport-based behavior change protocol for people under SUD recovery aims to contribute to the delivery of tailored sport-based interventions for SUD recovery by providing evidence that will hopefully be useful to both exercise and mental health professionals. Exercise professionals can meet the challenges posed by working with this vulnerable population of individuals with SUD. However, we realize that just ensuring that exercise professionals have the confidence and skills to deliver exercise to the target population properly is only half the picture.

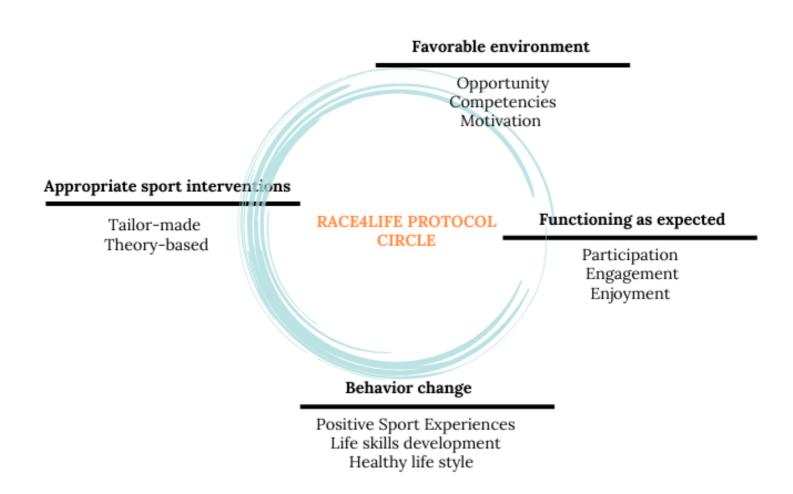
Ongoing support should also target mental health professionals who, until recent years, may not have collaborated significantly with exercise professionals who are part of the multidisciplinary mental health team. Such an organizational cultural change in the fundamental makeup of a mental health service undoubtedly takes time to achieve, and just as exercise professionals need training in mental health, for a truly interdisciplinary approach, mental health professionals need training and exposure to the fundamentals of physical exercise.

In the above context, the design and creation of the protocol aims to change professional behavior based on theoretical models, empirical data, and evidence-based behavior change techniques.

Integrating theory enables the selection of appropriate behavior change techniques to support the initial uptake, adoption, retention, and relapse management of exercise interventions. Health professionals should establish routines so that exercise becomes part of their client's daily life and allow for negotiation so that the exercise interventions improve clients' lives. The ultimate message is to aim for sport and exercise adherence sufficient to achieve the maximum therapeutic benefits. This requires clients and professionals to be clear about the benefits they expect.

# RACE4LIFE PROTOCOL CIRCLE

The scientific literature and studies suggest that targeted interventions in an exercise and sport environment can be effective in SUD recovery. Exercise can serve as a favorable environment for training individuals in developing life skills and behavior change strategies, aiming to improve other areas of their lives. The RACE4LIFE protocol, a suggested framework for implementing exercise interventions, aims to improve the quality of these interventions by continuously improving the existing framework. The protocol aims to promote sports engagement in SUD recovery and lifelong engagement in exercise that enhances mental and physical health, as well as training in behavioral change strategies and motivational enhancement. The protocol emphasizes the importance of tailor-made interventions considering the physical, cognitive, emotional, and moral aspects of participants, and the use of theories or models as guides to develop effective sport-based interventions. This approach is expected to enhance the role of exercise and sport as complementary therapeutic tools for behavioral change.







# **RACE4LIFE sport-based protocol framework**





A rousal: It feels good



C ompetencies: What have I learned?"



**Experiential Learning** 

E ngagement: What will be my next sport experience?

# Stage #1: Readiness "Let's get started is connected with the early stage of recovery

Behavior Change Techniques (BCT) Taxonomy is a framework used to promote engagement in sports and physical activities. It is often used in sports psychology and coaching to help individuals adopt and maintain a more active lifestyle. BCTs can be customized to an individual's preferences and needs, making them more likely to adopt and maintain a sports-oriented lifestyle. Combining several BCTs may be particularly effective in promoting lasting behavior change in sports initiation.

BCTs are crucial for physical exercise initiation as they help individuals overcome barriers and adopt healthier lifestyles. They help individuals identify their motivations for exercising, such as health improvement, weight loss, appearance enhancement, or stress reduction. Setting specific, achievable, and time-bound goals provides a clear roadmap for their exercise journey, making it easier to measure progress and stay motivated. BCTs also teach problem-solving skills to address common barriers to exercise, such as time constraints, lack of equipment, or low energy levels.

BCTs often involve strategies for seeking social support from friends, family, or exercise partners, providing encouragement, motivation, and accountability. They also consider the stages of the change model, tailoring interventions to meet individuals' needs on their journey to exercise initiation.

#### List of BCTs

#### BCT: Information about health consequences

**Definition:** Provide information (e.g written, verbal, visual) about the health consequences of performing the behavior

#### Transferability to sport-based interventions in SUD recovery

The exercise pre-participation health screening process aims to identify clients who need medical clearance before starting an exercise program, those with clinically significant diseases that may benefit from medically supervised exercise, and those with medical conditions that may require exclusion from exercise programs until they are better controlled. This process involves thorough assessments of each client's fitness level, health history, and personal goals.

# **Motivational Interviewing**

# **Engaging stage**

# **BCT: Social support (unspecified)**

**Definition:** Advice on, arrange, or provide social support (eg from friends, relatives, colleagues,' buddies' or staff) or non-contingent praise or reward for the performance of the behavior. It includes encouragement and counseling, but only when it is directed at the behavior

#### Transferability to sport-based interventions in SUD recovery

The combination of group formation strategies and motivational interviewing techniques fosters a supportive environment for clients to overcome obstacles and stay motivated in their exercise journey. This dynamic enhances accountability and helps individuals discover and strengthen their internal motivations for sustainable physical exercise engagement.

# **BCT: Social support (emotional)**

**Definition:** Advice on, arrange, or provide emotional social support (eg from friends, relatives, colleagues, 'buddies' or staff) for the performance of the behavior

# Transferability to sport-based interventions in SUD recovery

It is suggested to use a structured approach to help clients engage in physical exercise, starting with a discussion about the client's motivations. It also highlights the importance of reflective listening, affirmations, and encouraging group members to express their own motivations. If clients feel resistance or barriers, a non-confrontational approach is suggested, followed by collaborative exploration and discussion of possible solutions.

#### BCT: Information about health consequences

**Definition:** Provide information (eg written, verbal, visual) about the health consequences of performing the behavior

#### Transferability to sport-based interventions in SUD recovery

Promote the importance of regular exercise for overall health, highlighting its potential benefits such as reduced risk of chronic diseases and improved overall well-being. Highlight the role of physical activity in improving brain health, weight management, disease risk reduction, bone and muscle strength, and daily activity ability. Emphasize the need for specific information about exercise and its potential benefits.

<u>Here you can find resources on how to incorporate BCTs into the Stage # 1: Readiness "Let's get physically active"</u>



#### BCT: Information about emotional consequences

**Definition:** Provide information (eg written, verbal, visual) about the emotional consequences of performing the behavior

#### Transferability to sport-based interventions in SUD recovery

Provide detailed information on the potential benefits of physical activity for mental health and encourage the identification and challenge of negative thoughts and beliefs that may hinder sports participation. Regular exercise improves mental health and emotional well-being, reduces mental illness rates, and enhances mood, concentration, and alertness.

# BCT: Information about social and environmental consequences

**Definition:** Provide information (eg written, verbal, visual) about the social and environmental consequences of performing the behavior

#### Transferability to sport-based interventions in SUD recovery

Sports foster a sense of belonging and community by bringing people together and teaching valuable life skills like teamwork, leadership, communication, and discipline. These skills can be applied in various aspects of life, including work and relationships. Sports also provide opportunities for people of diverse backgrounds, abilities, and ages to participate in shared activities, promoting social inclusion and diversity.

#### **BCT: Credible source**

**Definition:** Present verbal or visual communication from a credible source in favor of or against the behavior

## Transferability to sport-based interventions in SUD recovery

Sharing success stories or providing role models who have successfully initiated and maintained an exercise routine can inspire and motivate clients

# Focus stage

#### **BCT: Focus on past success**

**Definition:** Advice to think about or list previous successes in performing the behavior (or parts of it)

#### Transferability to sport-based interventions in SUD recovery

Emphasize the importance of providing constructive feedback on past sports successes, highlighting positive behavior and outcomes, and reinforcing the belief that past efforts can be repeated.



# **Evoking stage**

#### **BCT**: Pros and cons

**Definition:** Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behavior

#### Transferability to sport-based interventions in SUD recovery

The goal is to resolve ambivalence by boosting the client's motivation to engage in a behavior, helping them weigh the pros and cons of exercise, and helping them overcome barriers like time or motivation.

# **BCT: Problem-solving**

**Definition:** Analyze, or prompt the person to analyze, factors influencing the behavior and generate or select strategies that include overcoming barriers and/or increasing

### Transferability to sport-based interventions in SUD recovery

Developing strategies to overcome barriers and temptations that may deter sports participation.

#### **BCT: Valued self-identity**

**Definition:** Advise the person to write or complete rating scales about a cherished value or personal strength as a means of affirming the person's identity as part of a behavior change strategy

# Transferability to sport-based interventions in SUD recovery

Encouraging clients to reflect on and affirm their core values and beliefs can strengthen their self-identity, as asking them to write down their most important values or positive qualities can promote behavior change.

## BCT: Identity associated with changed behavior

**Definition:** Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behavior'

#### Transferability to sport-based interventions in SUD recovery

Showing clients that their current behavior doesn't align with the identity they desire

<u>Here you can find resources on how to incorporate BCTs into the Stage # 1: Readiness "Let's get physically active"</u>



#### BCT: Comparative imagining of future outcomes

**Definition:** Prompt or advise the imagining and comparing of future outcomes of changed versus unchanged behavior

# Transferability to sport-based interventions in SUD recovery

Encouraging clients to visualize successful sports performance to enhance motivation and confidence

# Planning stage

# **BCT: Goal setting**

**Definition:** Set or agree on a goal defined in terms of a positive outcome of wanted behavior

#### Transferability to sport-based interventions in SUD recovery

Setting SMART goals for sports participation involves breaking long-term goals into manageable steps and regularly reviewing and adjusting them as needed.

# **BCT: Action planning**

**Definition:** Prompt detailed planning of performance of the behavior (must include at least one of context, frequency, duration, and intensity).

# Transferability to sport-based interventions in SUD recovery

It is important to outline a process for implementing a change plan, scheduling regular sports sessions, prioritizing sports activities, avoiding over-commitment, designing customized exercise programs, and considering factors like age, fitness level, medical conditions, and time availability when creating exercise plans for a client. It emphasizes the importance of prioritizing sports activities and avoiding over-commitment.

# BCT: Verbal persuasion about capability

**Definition:** Tell the person that they can successfully perform the wanted behavior, arguing against self-doubts and asserting that they can and will succeed

# Transferability to sport-based interventions in SUD recovery

Verbal praise and positive feedback enhance confidence and self-efficacy, while constructive criticism and encouragement help clients identify strengths and areas for improvement.

 $\underline{\text{Here you can find resources on how to incorporate BCTs into the Stage \# 1: Readiness "Let's } \underline{\text{physically active"}}$ 



# Stage # 2: Arousal "It feels good" is connected with the early stage of recovery

Long-term substance abuse significantly impacts the well-being and quality of life of individuals, leading to dropout rates. In the early stages of recovery, exercise and sport participation can enhance physical and mental well-being and social functionality, improving the overall quality of life for those living with SUD. Exercise programs should be provided as a "here and now" intervention, supporting treatment and managing factors that may lead to premature abandonment of the treatment process.

Exercise and sport should complement and be directly related to therapeutic goals, as higher relapse rates occur within the first three months of recovery. Recovery is a priority in the early stage, and exercise and sport participation are proposed as a self-control strategy for managing withdrawal symptoms and recovering psychological and physical damage caused by drug abuse.

Arousal and motivation play crucial roles in exercise engagement, influencing an individual's willingness to initiate and sustain physical exercise. Behavior Change Techniques (BCT) are strategies designed to promote positive behavior change, such as enhancing physical exercise arousal. BCTs can help individuals find intrinsic motivation to exercise by setting goals, providing feedback, and emphasizing the benefits of exercise.

BCTs can also help identify and address barriers to exercising regularly, such as lack of time, self-doubt, or fear of injury. Social support can significantly impact exercise behavior by creating a supportive environment and fostering a sense of belonging.

BCTs allow for personalized interventions, as not every motivational strategy works for every person, so they can be adapted to an individual's specific needs and preferences.

#### List of BCTs

#### **BCT: Providing choices**

**Definition:** Providing choices refers to the act of offering alternatives or options for selection. It involves presenting individuals with a range of possibilities from which they can make a decision based on their preferences, needs, or circumstances. This concept is often associated with fostering autonomy, empowering individuals to make informed decisions, and respecting their ability to choose among different alternatives.

# Transferability to sport-based interventions in SUD recovery

Offering exercise and sport activities can boost motivation in individuals recovering from substance use disorder, fostering autonomy, engagement, and control. A positive, inclusive environment where clients feel empowered to make exercise choices aligns with their preferences enhances the experience. Modifications for different fitness levels, tailored exercises, and self-assessment of effort also enhance control and ownership.

#### BCT: Feedback on behavior

**Definition:** Monitor and provide informative or evaluative feedback on the performance of the behavior (eg form, frequency, duration, intensity)

### Transferability to sport-based interventions in SUD recovery

Feedback on behavior is crucial for enhancing arousal and motivation in exercise and sport, especially in SUD recovery. Providing positive reinforcement, and constructive feedback, and addressing individual needs can contribute to a successful and sustainable recovery journey. Regular positive feedback on progress can increase arousal and reinforce exercise behaviors, while constructive feedback can help clients feel fulfilled and excited about exercise.

#### **BCT: Self-Monitoring**

Definition: Establish a method for the person to monitor and record their behavior(s) as part of a behavior change strategy

#### Transferability to sport-based interventions in SUD recovery

Self-monitoring is a technique that enhances arousal and motivation in exercise and sports, particularly for those recovering from SUD. It involves observing and recording behavior, thoughts, and feelings related to exercise, thereby increasing self-awareness and adherence to exercise routines. Combining these strategies can help clients develop a personalized approach that enhances arousal and motivation during exercise sessions.

Here you can find resources on how to incorporate BCTs into the Stage #2: Arousal "It feels good"



#### **BCT: Graded Tasks**

**Definition:** Set easy-to-perform tasks, making them increasingly difficult, but achievable, until behavior is performed

#### Transferability to sport-based interventions in SUD recovery

Grading tasks are a method of breaking down larger tasks into smaller, manageable components, which can enhance motivation and arousal in exercise and sports, particularly in the context of substance use disorder recovery. This systematic approach to fitness ensures clients gradually increase the intensity and complexity of their workouts over time, making exercise more approachable and less intimidating. Grading tasks also implement progressive overload principles, allowing clients to choose the increase of task difficulty at each session beginning. This approach enables individuals to build on small successes and avoid burnout or injury. Clients typically start from a sedentary lifestyle, so they must gradually increase the intensity and duration of workouts to avoid burnout or injury.

#### BCT: Demonstration of the behavior

**Definition:** Provide an observable sample of the performance of the behavior, directly in person or indirectly eg via film, or pictures, for the person to aspire to or imitate

#### Transferability to sport-based interventions in SUD recovery

Demonstrations of positive behaviors can enhance arousal and motivation in exercise and sport for individuals recovering from substance use disorder. They provide visual examples and serve as a model for recovery. Professionals or peers can demonstrate physical exercise, provide instruction on proper techniques, and ensure clients use appropriate equipment.

#### **BCT: Social support (unspecified)**

**Definition:** Advice on, arrange, or provide social support (eg from friends, relatives, colleagues, buddies' or staff) or noncontingent praise or reward for the performance of the behavior.

#### Transferability to sport-based interventions in SUD recovery

Social support is essential in enhancing motivation and arousal in exercise and sports for individuals recovering from Substance Use Disorder. This support can help clients make lifestyle changes and maintain a sense of community. Social interaction can make exercise enjoyable, increase motivation, and help achieve collective behavior goals promptly.

<u>Here</u> you can find resources on how to incorporate BCTs into the Stage #2: Arousal "It feels good"



#### **BCT: Social support (emotional)**

**Definition:** Advise on, arrange, or provide emotional social support (eg from friends, relatives, colleagues, 'buddies' or staff) for the performance of the behavior

#### Transferability to sport-based interventions in SUD recovery

Emotional support can significantly improve motivation and arousal in exercise and sport for individuals recovering from Substance Use Disorder. It fosters a positive environment, connects individuals, and addresses emotional well-being. This can be achieved through mutual emotional support during and after training sessions, creating a supportive sport environment with coaches and teammates, and organizing group training sessions or team-building activities.

#### **BCT: Credible source**

**Definition:** Present verbal or visual communication from a credible source in favor of or against the behavior

# Transferability to sport-based interventions in SUD recovery

Using credible sources to enhance arousal and motivation in exercise and sport within SUD recovery can be crucial for several reasons. Credible information provides individuals with accurate, reliable, and evidence-based knowledge, which can contribute to a more informed and effective approach to incorporating physical activity into the recovery process.

# **BCT: Non-specific reward**

**Definition:** Arrange delivery of a reward if and only if there has been effort and/or progress in performing the behavior (includes Positive reinforcement)

# Transferability to sport-based interventions in SUD recovery

In SUD recovery, non-specific rewards can enhance motivation and arousal in exercise and sports. These non-specific rewards, such as verbal praise, certificates, or small incentives, can contribute to a positive environment. Offering rewards for reaching exercise milestones can increase arousal, and can be intrinsic (eg, workout satisfaction) or extrinsic (eg, treats or gifts). This strategy can be beneficial in promoting a positive environment in exercise and sports.

<u>Here</u> you can find resources on how to incorporate BCTs into the Stage #2: Arousal "It feels good"



#### **BCT: Social rewards**

**Definition:** Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behavior (includes 'Positive reinforcement')

#### Transferability to sport-based interventions in SUD recovery

Social rewards significantly enhance arousal and motivation in exercise and sport for SUD recovery. Social support and positive reinforcement from peers, friends, or a community contribute to a sense of belonging, accountability, and motivation. Incorporating social elements into exercise sessions can make it more enjoyable and encourage clients to stick to their routines. Highlighting social norms and offering incentives like trophies or recognition for achieving goals can also motivate individuals. A supportive and inclusive environment can create a culture that celebrates each client's progress and encourages positive interactions.

#### **BCT: Reduce negative emotions**

**Definition:** Advice on ways of reducing negative emotions to facilitate the performance of the behavior

#### Transferability to sport-based interventions in SUD recovery

Reducing negative emotions and increasing arousal and motivation in exercise and sports can aid in SUD recovery. Physical activity provides a positive outlet for emotions, contributes to overall well-being, and helps establish healthier routines. Address negative beliefs and replace negative thoughts with constructive ones.

#### **BCT: Self-talk**

**Definition:** Prompt positive self-talk (aloud or silently) before and during the behavior

#### Transferability to sport-based interventions in SUD recovery

Self-talk can be a powerful tool in enhancing arousal and motivation in exercise and sport, particularly in the context of Substance Use Disorder (SUD) recovery. Positive and motivational self-talk can help individuals build resilience, boost self-esteem, and stay focused on their fitness goals

<u>Here</u> you can find resources on how to incorporate BCTs into the Stage #2: Arousal "It feels good"



# BCT: Restructuring the physical environment

**Definition:** Change, or advise to change the physical environment to facilitate the performance of the wanted behavior or create barriers to the unwanted behavior (other than prompts/cues, rewards, and punishments)

#### Transferability to sport-based interventions in SUD recovery

Restructuring the physical environment is crucial for enhancing exercise and sport engagement in SUD recovery, focusing on creating supportive spaces, considering practical and psychological aspects, selecting accessible and enjoyable sports activities, and incorporating a variety of exercises to prevent boredom and plateaus.

#### **BCT: Behavior substitution**

Definition: Prompt substitution of the unwanted behavior with a wanted or neutral behavior

# Transferability to sport-based interventions in SUD recovery

Behavior substitution is a technique that involves replacing undesirable behaviors with more desirable ones, such as promoting physical activity during SUD recovery. It redirects attention and energy from sedentary activities to activities that promote engagement. It helps clients plan for situations where they might skip exercise and maintains exercise motivation during challenging times.

#### **BCT: Imaginary reward**

**Definition:** Advice to imagine performing the wanted behavior in a real-life situation followed by imagining a pleasant consequence

#### Transferability to sport-based interventions in SUD recovery

The use of imaginary rewards in exercise and sports can boost motivation and engagement in substance use disorder recovery, especially for clients struggling with mood and overall well-being. This approach, which involves mental imagery and positive reinforcement, increases arousal and creates a mental image of success.

#### **BCT: Behavioral contract**

**Definition:** Create a written specification of the behavior to be performed, agreed on by the person, and witnessed by another

#### Transferability to sport-based interventions in SUD recovery

Establishing a behavioral contract in exercise sessions can boost arousal and motivate SUD recovery by encouraging clients to establish agreements with team members, peers, trainers, and therapists outlining exercise commitments, obligations, and rewards.



# Stage # 3: Competencies "What have I learned?" is connected with the second and third stages of recovery

Participating in exercise and sports programs is beneficial to individuals undergoing SUD recovery, not only for enjoyable leisure management but also because it can improve self-efficacy and social and other life skills, preparing them for sustainable social reintegration

Exercise and sport are both effective tools for personal development because they provide an alternative, but also a safe, learning environment for the development of skills such as control and time management skills, communication skills, social skills, collaboration, leadership, problem-solving skills , goal-setting skills, and so on, which will aid the individual in both successful social reintegration and effective management of the complexity of life's reality. Through well-tailored exercise and sport programs, which can lead to the development of these skills, combined with focused counseling (experiential learning techniques), counselors can train their clients to transfer these skills into their daily lives.

Mastery experiences refer to learning through personal experience where one achieves mastery over a difficult or previously feared task and thereby enjoys an increase in self-efficacy. The mastery of one's own experiences is the most significant way to foster a strong sense of effectiveness. Successful mastery over tasks required to engage in behavior helps the person to develop and refine skills. In addition, it fosters the development of a repertoire of coping mechanisms to deal with problems encountered. The most influential source of self-efficacy. The sense of self-efficacy grows with more tasks are accomplished successfully. Performance accomplishments attained through personal experience are the most powerful source of efficacy expectations.'

Improving competencies in sport often requires a combination of physical training and psychological strategies. Behavior Change Techniques (BCT) Taxonomy can play a significant role in enhancing an athlete's performance by targeting their mindset, motivation, and behavior.

<u>Here</u> you can find resources on how to incorporate BCTs into Stage # 3: Competencies "What have I learned?"



#### List of BCTs

#### **BCT:** Goal Setting (behavior)

**Definition:** Set or agree on a goal defined in terms of the behavior to be achieved

# Transferability to sport-based interventions in SUD recovery

Goal setting is a crucial tool in addiction recovery, providing structure, motivation, and a sense of accomplishment. It encourages engagement in positive activities, such as sports, that can replace substance use and contribute to a sense of purpose. Goals should focus on developing skills for recovery, such as stress management, communication, problem-solving, and healthy lifestyle habits. It's important to recognize that goals may need to be adapted over time, as life circumstances and clients' needs evolve. This requires examining target behavior and identifying specific aspects that require skill development. Specific behaviors should be arranged in a series, with initial tasks being easier than subsequent ones. Setting specific, measurable, achievable, relevant, and time-bound (SMART) goals is essential for improving competence.

#### **BCT:** Goal setting (outcome)

**Definition:** Set or agree on a goal defined in terms of a positive outcome of wanted behavior **Transferability to sport-based interventions in SUD recovery** 

Collaborate with clients, sports professionals, and therapists to set realistic, achievable, and meaningful goals that align with values and aspirations, establishing both short-term and long-term goals.

#### BCT: Review outcome goal(s)

**Definition:** Review outcome goal(s) jointly with the person and consider modifying goal(s) in light of achievement. This may lead to resetting the same goal, a small change in that goal, or setting a new goal instead of, or in addition to the first

### Transferability to sport-based interventions in SUD recovery

Regularly reviewing and adjusting goals based on the client's progress and changing circumstances is crucial for maintaining motivation and adapting to evolving needs. Demonstrating relative progress towards the target behavior can be done through charting progress.

<u>Here you can find resources on how to incorporate BCTs into Stage # 3: Competencies "What have I learned?"</u>



### BCT: Feedback on behavior

**Definition:** Monitor and provide informative or evaluative feedback on the performance of the behavior (eg form, frequency, duration, intensity)

# Transferability to sport-based interventions in SUD recovery

Constructive feedback is crucial for clients to identify areas for improvement and guide their efforts. It should be specific, and tailored to individual needs, and positive reinforcement is essential for motivation. A supportive environment is essential for embracing feedback as a tool for growth in physical and mental well-being. Psychoeducation on exercise benefits in substance use recovery is also essential, emphasizing its role in reducing cravings and promoting overall well-being. Overall, constructive feedback is essential for a successful recovery process.

# **BCT: Self-monitoring of behavior**

**Definition:** Establish a method for the person to monitor and record their behavior(s) as part of a behavior change strategy

# Transferability to sport-based interventions in SUD recovery

Self-monitoring of behavior can be a valuable tool in exercise and sports intervention for individuals recovering from Substance Use Disorder, enhancing awareness, accountability, and motivation through self-recording.

# **BCT: Problem-solving**

**Definition:** Analyze, or prompt the person to analyze, factors influencing the behavior and generate or select strategies that include overcoming barriers and/or increasing

## Transferability to sport-based interventions in SUD recovery

Teaching problem-solving techniques in exercise and sports interventions is crucial for individuals in SUD recovery, as it enhances skills and competencies, addressing both physical and psychological aspects of recovery. This approach helps overcome barriers and setbacks that may hinder engagement in these interventions.

<u>Here</u> you can find resources on how to incorporate BCTs into Stage # 3: Competencies "What have I learned?"



# **BCT: Focus on past success**

**Definition:** Advice to think about or list previous successes in performing the behavior (or parts of it)

# Transferability to sport-based interventions in SUD recovery

Integrating exercise and sports interventions into SUD recovery can be a valuable part of a holistic treatment approach. Focusing on past successes can enhance skills and competencies, but it's crucial to recognize areas for improvement and set new challenges. The goal is to use past successes as a foundation for growth, not complacency. Regular self-assessment and commitment to continuous learning are essential for sustained success in sports and exercise interventions. Reflecting on past successes builds confidence, helps identify strengths, and serves as a motivational tool. It helps clients understand what worked well and apply those lessons to current situations, setting the stage for ongoing growth and development

# BCT: Generalization of a target behavior

**Definition:** Advice performing the wanted behavior, which is already performed in a particular situation, in another situation

# Transferability to sport-based interventions in SUD recovery

Generalization of a target behavior in exercise and sport interventions involves transferring learned skills and competencies from specific training situations to broader settings or activities. This involves ensuring that improvements made in a specific context can be applied and sustained in various real-life scenarios. Engaging clients in simulated or real-life situations is essential for life skill development, and experiential learning techniques can enhance clients' confidence in their abilities. This generalization can significantly contribute to the holistic recovery of individuals with substance use disorders, empowering them to lead healthier and more fulfilling lives.

### **BCT: Biofeedback**

**Definition:** Provide feedback about the body (eg physiological or biochemical state) using an external monitoring device as part of a behavioral change strategy

### Transferability to sport-based interventions in SUD recovery

Biofeedback involves providing real-time information about physiological processes to help clients learn how to control and regulate these processes.

<u>Here you can find resources on how to incorporate BCTs into Stage # 3: Competencies "What have I learned?"</u>



# **BCT: Social support (practical)**

**Definition:** Advice on, arrange, or provide practical help (eg from friends, relatives, colleagues, 'buddies' or staff) for the performance of the behavior

# Transferability to sport-based interventions in SUD recovery

Providing clients with a supportive network can aid their competence development journey. These relationships offer motivation and guidance. Collaborating with peers working on similar competencies can provide new perspectives. Group learning and discussions offer new insights. Role models within the social network offer effective skill development strategies. Observing and interacting with skilled individuals can inspire and guide clients.

# **BCT: Social support (emotional)**

**Definition:** Advice on, arrange, or provide emotional social support (eg from friends, relatives, colleagues, 'buddies' or staff) for the performance of the behavior

# Transferability to sport-based interventions in SUD recovery

Emotional support is crucial in enhancing skills and competencies in exercise and sports interventions for SUD recovery. It helps clients build a strong foundation for long-term success by addressing both physical and emotional aspects of their well-being. Emotional support provides motivation, encouragement, and a safe space to share concerns, contributing to better emotional well-being. It boosts self-confidence, increases the likelihood of setting and achieving challenging goals, and fosters a sense of belonging and community, which is essential for overall well-being.

### **BCT: Behavioral contract**

**Definition:** Create a written specification of the behavior to be performed, agreed on by the person, and witnessed by another

# Transferability to sport-based interventions in SUD recovery

Creating a behavioral contract in exercise sessions can enhance participation and serve as a motivational tool for SUD recovery. This can be achieved by encouraging clients to establish agreements with team members, peers, and trainers, outlining their exercise commitments, obligations, and rewards for meeting them.

<u>Here you can find resources on how to incorporate BCTs into Stage # 3: Competencies "What have I learned?"</u>



# Stage # 4: Engagement "What will be my next sport experience?"

# Stage # 4: Engagement: "What will be my next sport experience?" is connected with the second and the third stage of recovery

The return of old behaviors following SUD recovery might present challenges to individual recovery and general well-being. In this framework, it might be helpful to engage in different types of aftercare, relapse prevention, and general recovery support to stay on course. The SUD recovery is a continuous process of change, which includes a variety of complementary behavioral change interventions. Adopting a healthy lifestyle is a key component of this process. Maintaining the healthy practices started in treatment is crucial to living a life of fulfillment and happiness, and one of the healthiest habits to continue is frequent exercise and sport participation.

This stage is one of the most important and perhaps the most challenging to achieve. Indeed, the exercise professional should progressively target behavioral change and prepare clients to adopt a more active lifestyle. Consequently, exercise professionals may help clients identify and explore different PA opportunities. Based on the evidence, many strategies should be considered. It is important to note that a local network between the different sport services is necessary to limit barriers and reduce the stigma associated with SUD

Enhancing engagement in sport often requires the use of various Behavior Change Techniques (BCT) to motivate clients to participate consistently and enjoy their sporting activities. These BCTs can be used individually or in combination to enhance engagement in sport and promote long-term adherence to physical activity goals. The choice of techniques should consider the client's preferences, needs, and the specific context of the sport or activity.

### List of BCTs

# **BCT: Action planning**

**Definition:** Prompt detailed planning of performance of the behavior (must include at least one of context, frequency, duration and intensity). Context may be environmental (physical or social) or internal physical, emotional or cognitive)

# Transferability to sport-based interventions in SUD recovery

Substance Use Disorder recovery involves a multifaceted approach, including physical health. Regular exercise and sports are essential components of a comprehensive recovery plan. To enhance engagement, individuals should set realistic goals, choose exercises that align with their interests, establish a routine, and form a support system with friends, family, or community groups. Consistency is crucial for long-term motivation and accountability.

# BCT: Information about health consequences

**Definition:** Provide information (eg written, verbal, visual) about the health consequences of performing the behavior

# Transferability to sport-based interventions in SUD recovery

Promoting the understanding of the health consequences of exercise and sport can encourage individuals in substance use disorder recovery to engage in these activities throughout their lives. This involves leveraging information about addiction and physical activity, providing continuous information about the benefits of regular exercise, the importance of different types, and the mental health benefits of exercise, both short-term and long-term.

# **BCT: Self-Monitoring**

**Definition:** Establish a method for the person to monitor and record their behavior(s) as part of a behavior change strategy

### Transferability to sport-based interventions in SUD recovery

Self-monitoring is a crucial tool for substance use disorder recovery, as it helps clients track their exercise and sports participation behaviors, thoughts, and feelings. This process provides accountability, motivation, and insights, leading to increased motivation and a stronger commitment to exercise routines. It also helps identify potential barriers and resolve them, enhancing long-term engagement in exercise and sports.

<u>Here you can find resources on how to incorporate BCTs into Stage # 4: Engagement: "What will be my next sport experience?" is connected with the second and the third stage of recovery</u>



# **BCT: Problem-solving**

**Definition:** Analyze, or prompt the person to analyze, factors influencing the behavior and generating or selecting strategies that include overcoming barriers and/or increasing facilitators

# Transferability to sport-based interventions in SUD recovery

Problem-solving techniques can improve lifelong engagement in exercise and sport for individuals in SUD recovery by addressing specific challenges and barriers, fostering a sustainable and enjoyable relationship with exercise and sport, and contributing positively to their overall well-being.

# **BCT: Social Support**

**Definition:** Advice on, arrange, or provide social support (eg from friends, relatives, colleagues, buddies' or staff) or on contingent praise or reward for the performance of the behavior.

# Transferability to sport-based interventions in LDS recovery

Social support plays a crucial role in enhancing lifelong engagement in exercise and sport during SUD recovery. Having a supportive social network can provide motivation, accountability, and a sense of belonging, which are all important factors in maintaining a healthy and active lifestyle

# **BCT: Social support (emotional)**

**Definition:** Advice on, arrange, or provide emotional social support (eg from friends, relatives, colleagues, 'buddies' or staff) for the performance of the behavior

# Transferability to sport-based interventions in LDS recovery

Emotional support is crucial for long-term success in exercise and sports interventions for SUD recovery. It provides motivation, encouragement, and a safe space for sharing concerns. A supportive network boosts self-confidence, increases goal setting, and fosters a sense of belonging and community, ultimately leading to long-term success in these interventions.

### **BCT: Focus on past success**

**Definition:** Advice to think about or list previous successes in performing the behavior (or parts of it)

# Transferability to sport-based interventions in SUD recovery

Focusing on past success in SUD recovery can boost lifelong engagement in exercise and sport. Encourage clients to reflect on their successes, overcome self-doubt, and create a sustainable, enjoyable exercise routine that aligns with their past successes and overall well-being.

Here you can find resources on how to incorporate BCTs into Stage # 4: Engagement: "What will be my next sport experience?" is connected with the second and the third stage of recovery



# BCT: Restructuring the physical environment

**Definition:** Change, or advise to change the physical environment to facilitate the performance of the wanted behavior or create barriers to the unwanted behavior

# Transferability to sport-based interventions in SUD recovery

Restructuring the physical environment to enhance lifelong engagement in exercise and sport in SUD recovery involves creating supportive and motivating spaces that encourage individuals to adopt and maintain healthy lifestyles.

### **BCT: Habit Formation**

**Definition:** Prompt rehearsal and repetition of the behavior in the same context repeatedly so that the context elicits the behavior

### Transferability to sport-based interventions in SUD recovery:

Regular exercise routines offer structure to daily life, replacing substance use with health-promoting activities. Habit formation enhances lifelong engagement in exercise and sports for individuals in SUD recovery. As exercise becomes a habit, it helps manage stress and reinforces positive feelings and accomplishments. Developing healthy habits contributes to overall well-being and provides a structured outlet for recovery.

# BCT: Comparative imagining of future outcomes

**Definition:** Prompt or advise the imagining and comparing of future outcomes of changed versus unchanged behavior

### Transferability to sport-based interventions in SUD recovery

Comparative imagining can significantly increase lifelong engagement in exercise and sports during SUD recovery by allowing clients to visualize and compare potential future scenarios, emphasizing the positive effects of maintaining a healthy lifestyle.

### **BCT: Framing/Reframing**

**Definition:** Suggest the deliberate adoption of a perspective or new perspective on behavior (eg its purpose) to change cognitions or emotions about performing the behavior (includes 'Cognitive structuring')

### Transferability to sport-based interventions in SUD recovery

Framing and reframing are psychological techniques that can increase exercise and sports participation, especially in SUD recovery, thereby enhancing motivation, mental well-being, and overall health in individuals in recovery.



# Part Three

# Capacity-building Training Manual

# STRUCTURE AND CONTENTS

The RACE4LIFE Capacity-Building training is designed to take place over four days. Two days in online training and two days face-to-face. Additional days can be used, depending on the context and profile of the trainees. In some circumstances, the participants may not be available for full days, or conducting the training over four days may be too demanding due to their workload. There may also be other aspects to consider, such as factoring in extra time for interpretation during the training. Depending on these considerations, the training can be implemented either over four (or fewer/ more) consecutive days, or it can be spread over a longer period.

The following section will provide an overview of the RACE4LIFE Capacity-Building structure and key considerations for preparing the training. It includes three components:

A. The <u>RACE4LIFE Theory Guide</u> presents an overview of key concepts and the theoretical foundation of the Sport-based behavior change protocol for people under SUD recovery. The Theory Guide is a crucial resource that should be frequently consulted when adjusting each session to the specific needs of the trainees.

B. The **RACE4LIFE Sport-based behavior change protocol** for people under SUD recovery

C. The RACE4LIFE Capacity-building Training Manual, a crucial part of the RACE4LIFE training program, offers guidance and tools for the preparation, design, and implementation of sports trainer and health professional training.

# A. The RACE4LIFE Theory Guide is divided into six thematic modules

# **Session 1: Understanding Addiction**

The <u>Understanding Addiction session</u> focuses on key aspects to consider when exploring addiction, which is crucial for designing sport-based interventions for substance use disorder recovery, highlighting key aspects to consider.

# Supporting materials:

- 1. Modeling The Addiction Presentation
- 2. The role of Motivation\_presentation
- 3. The recovery capital\_presentation
- 4. The recovery stages\_presentation

# Session 2: The role of sport in SUD recovery

The session discusses <u>The role of sport in SUD recovery</u>, emphasizing its holistic approach to supporting individuals, highlighting barriers and facilitators to exercise, and its contribution to physical and psychological well-being.

# Supporting materials:

- 1. The role of sport in SUD recovery\_presentation
- 2. Evidence-based recommendations for sport implementations in SUD recovery
- 3. What about sport and physical exercise in substance use disorder recovery? Perceptions of individuals undergoing SUD recovery. Barriers & Benefits
- 4. What about sport and physical exercise in substance use disorder recovery? Health professionals' perceptions
- 5. <u>Empowering Substance Use Disorders treatment through physical exercise</u>. An overview of studies

# Session 3: Design sport-based intervention for SUD recovery

The session discusses the process of <u>Designing a sport-based intervention for SUD recovery</u>, which uses exercise and sports as therapeutic tools to promote physical health, mental wellbeing, and community. Key components and steps are discussed, ensuring a structured and supportive environment.

# Supporting materials:

- 1. <u>Design sport-based intervention for SUD recovery\_presentation</u>
- 2. Behavior Change Techniques (BCTs) Taxonomy
- 3. <u>Application of a theory-based exercise promotion program (RACE) to adults in therapy for substance use disorders: A longitudinal interventional study.</u>

# **Session 4: Theories of Behaviour Change**

When designing a sport-based intervention for Substance Use Disorder (SUD) recovery, incorporating theories of behavior change is essential for developing effective strategies to promote and sustain positive behavior change. Several behavior change theories provide frameworks for understanding the factors influencing behavior and guiding the development of interventions. The <u>Theories of Behaviour Change session</u> focuses on prominent theories that can be applied to sport-based interventions for SUD recovery

# Supporting materials:

- 1. Social Cognitive Theory presentation
- 2. <u>Self-Determination Theory presentation</u>
- 3. Self-efficacy\_presentation
- 4. Goal-Setting Theory presentation
- 5. Motivational interviewing presentation

# Session 5: Life skill development through sport

The <u>Life Skill Development through sport</u> session discusses the importance of incorporating life skill development through sport into Substance Use Disorder recovery programs, highlighting its holistic approach that considers physical, mental, and social well-being. It emphasizes the benefits of sports in promoting physical health, community building, and personal growth.

# Supporting materials:

- 1. Life Skills presentation
- 2. The role of life skills in SUD recovery presentation
- 3. What about sport and physical exercise in substance use disorder recovery? Perceptions of individuals undergoing SUD recovery. Life Skills Development

# Session 6: Experiential learning

Experiential learning is a crucial aspect of Substance Use Disorder (SUD) recovery programs, offering practical experiences for personal growth, self-discovery, and skill development. The <a href="Experiential learning session">Experiential learning session</a> focuses on incorporating experiential learning into sport-based interventions.

The debriefing process is a structured and reflective discussion that occurs after a specific event, activity, or experience. The purpose of debriefing is to review and analyze what happened, identify lessons learned, and improve future performance. The session also presents some key techniques and considerations for an effective debriefing process

### Supporting materials:

- 1. Experiential learning presentation
- 2. The Debriefing Process/technics

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# B. The RACE4LIFE Sport-based behavior change protocol

The Sport-based behavior change protocol for people under SUD recovery is divided into 5 sessions

# Session 1: RACE4LIFE Sport-based behavior change protocol presentation

SUD recovery is a long-term process involving multiple interventions and regular monitoring. Targeted interventions in an exercise and sport environment can be beneficial for SUD recovery, as they help individuals develop life skills and behavior change strategies. The RACE4LIFE protocol is a suggested framework for implementing exercise interventions aimed at changing behavior by enhancing motivation in SUD recovery. The protocol aims to improve the quality of exercise and sport interventions for SUD recovery, promoting sports engagement in treatment and lifelong engagement in exercise that enhances mental and physical health. It emphasizes the importance of tailor-made interventions considering participants' physical, cognitive, emotional, and moral aspects. The protocol also emphasizes using theories or models as guides, based on evidence and data, to enhance the effectiveness of sport-based interventions.

# Supporting materials:

1. <u>Race4Life protocol\_presentation</u>

# Session 2: Stage # 1: Readiness "Let's get physically active"

BCTs help individuals identify their motivations for exercising, setting meaningful goals, and addressing common barriers like time constraints and low energy levels. They teach problem-solving skills, seek social support, and consider the stages of the change model to tailor interventions to meet individuals' readiness stages. By understanding motivations, setting achievable, time-bound goals, and addressing barriers, BCTs increase the likelihood of exercise initiation and adherence. Stage # 1: Readiness "Let's get physically active" focuses on promoting physical activity and readiness for exercise by incorporating a Motivational Interviewing protocol to support the readiness of the clients to start exercising

Stage #1: Readiness "Let's get started is connected with the early <u>stage of recovery</u>

# Supporting materials:

- 1. <u>Stage # 1 Readiness Let's get started\_presentation</u>
- 2. ACSM pre-participation health screening exercise
- 3. Resistance Training for Health
- 4. Being Active as We Get Older
- 5. Motivational interviewing RACE4LIFE protocol
- 6. Weekly Monitoring Goal-Setting Form

# Session 3: Stage # 2: Arousal "It feels good"

Long-term substance abuse can significantly impact an individual's well-being and quality of life, leading to dropout rates. Exercise and sport participation can enhance physical and mental well-being and social functionality during the early stages of recovery. Exercise programs should be provided as a "here and now" intervention, supporting treatment and managing factors that may lead to early dropout. Exercise and sport should complement therapeutic goals; as higher relapse rates occur within the first three months of recovery. Arousal and motivation play crucial roles in exercise engagement. BCTs can promote positive behavior change, enhancing physical exercise arousal, by setting goals, providing feedback, and emphasizing benefits. Social support, such as social modeling, social comparison, and peer support, can also significantly impact exercise behavior. Stage # 2 involves intentionally increasing arousal to a level that encourages active engagement.

Stage # 2: Arousal "It feels good" is connected with the early stage of recovery

# Supporting materials:

1. Stage # 2: Arousal "It feels good \_\_presentation



# Session 4: Stage # 3: Competencies "What have I learned?"

Exercise and sports programs are beneficial for individuals undergoing SUD recovery, as they improve self-efficacy and social life skills, preparing them for sustainable social reintegration. These programs provide a safe learning environment for developing control, time management, communication, social, collaboration, leadership, problem-solving, and goal-setting skills. Mastery experiences, achieved through personal experiences, foster a strong sense of effectiveness and coping mechanisms. Stage # 3: Competencies "What have I learned?" focus on improving sports competencies through a combination of sports participation and strategies, such as <u>BCTs</u> Taxonomy and <u>Experiential learning</u>.

Stage # 3: Competencies "What have I learned?" is connected with the second & and third stages of recovery

# Supporting materials:

- 1. <u>Stage # 3 Competencies What have I learned \_ presentation</u>
- 2. The Debriefing Process/technics

# Session 5: Stage # 4: Engagement "What will be my next sport experience?"

SUD recovery can be challenging due to the return of old behaviors, but it can be managed through aftercare, relapse prevention, and general recovery support. A healthy lifestyle, including regular exercise and sport participation, is crucial for overall well-being. Exercise professionals should gradually target behavioral change and help clients identify PA opportunities. A local network between sport services is necessary to reduce stigma and barriers. Using BCTs can enhance engagement in sport and promote long-term adherence to physical activity goals. The choice of techniques should consider the client's preferences, needs, and the specific context of the sport or activity.

Stage # 4: Engagement: "What will be my next sport experience?" is connected with the second and the third <u>stages of recovery</u>.

# Supporting materials:

1. <u>Stage # 4 Engagement What will be my next sport experience</u>



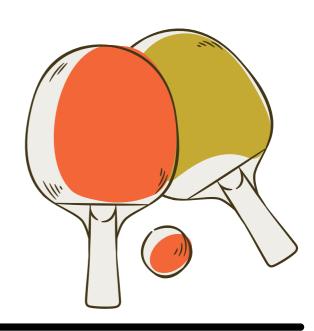


The suggested agenda can be adjusted to meet timing requirements, but the order of activities should not be altered.

# Online sessions

Session	Title	DURATION	TIMING
1	Team introduction, Project presentation  1.1 Activity 1. Expectations & Concerns  1.2. Race4Life protocol_presentation	30 min	11.00-11.30
2	Understanding Addiction 2.1. Modeling The Addiction 2.2 The Role of Motivation 2.3 The recovery capital 2.4 The recovery stages	30 min	11.30-12.00
Break			
3	The role of sport in SUD recovery  3.1. The role of sport in SUD recovery	30 min	12.10-12.40
4	Design sport-based intervention for SUD recovery 4.1. <u>Design sport-based intervention for SUD recovery</u>	30 min	12.40-13.10
Break			
5	Theories of behaviour change 5.1. Social Cognitive Theory 5.2. Self-Determination Theory 5.3. Self-efficacy 5.4. Goal-Setting Theory 5.5 Motivational interviewing	30 min	13.20-13.50
6	Wrap-up and evaluation of Day 1 Brief summary of learning. Participants to mention activities or takeaways. Ask for additional questions, comments, and feedback.	10 min	13.50-14.00

Session	Title	DURATION	TIMING
7	Welcome back and recap	10 min	11.00-11.10
8	Behavior change Techniques presentation 8.1. Behavior Change Techniques (BCTs) Taxonomy	30 min	11.30-12.00
Break			
9	Life skill development through sport 9.1. Life Skills 9.2. The role of life skills in SUD recovery presentation	30 min	12.10-12.40
10	Experiential learning 10.1. Experiential learning presentation 10.2. The Debriefing Process/technics	30 min	12.40-13.10
Break			
11	RACE4LIFE Sport-based behavior change protocol 11.1. Race4Life protocol presentation	30 min	13.20-13.50
12	Wrap-up and evaluation of Day 2 Brief summary of learning. Participants to mention activities or takeaways. Ask for additional questions, comments, and feedback.	10 min	13.50-14.00



# **Face to Face sessions**

Session	Title	DURATION	TIMING
1	Welcome back and recap Welcome participants and recap previous sessions. Remind participants of ground rules. Introduce next training part.	30 min	10.00-10.30
2	Stage # 1: Readiness "Let's get physically active"  2.1. Stage # 1 Readiness Let's get started _presentation  2.2. ACSM pre-participation health screening exercise  2.3. Resistance Training for Health  2.4. Being Active as We Get Older  2.5. Motivational interviewing RACE4LIFE protocol  2.6. Weekly Monitoring Goal-Setting Form  2.7. Stage of recovery  2.8. Behavior Change Techniques (BCTs) Taxonomy	45 min	10.30-11.30
Break			
3	Stage # 2: Arousal "It feels good"  3.1. Stage # 2: Arousal "It feels goodpresentation  3.2. Stage of recovery  3.3. Behavior Change Techniques (BCTs) Taxonomy	45 min	12.00-12.45
4	ACTIVITY 2  Design of a sports-based intervention for the early recovery stage	35 min	12.45-13.20
Lunch Break			
5	Stage # 3: Competencies "What have I learned?"  5.1. Stage # 3 Competencies What have I learnedpresentation  5.2. The Debriefing Process/technics  5.3. Stage of recovery  5.4. Behavior Change Techniques (BCTs) Taxonomy	45 min	14.00-14.45
7	ACTIVITY 3:  Design of a sports-based intervention to enhance capabilities and skills	35 min	14.45-15.20
8	Wrap-up and evaluation of Day 1 Brief summary of learning. Participants to mention activities or takeaways. Ask for additional questions, comments, and feedback.	40 min	15.20-16.00

Session	Title	DURATION	TIMING	
9	Welcome back and recap Welcome participants and recap previous sessions. Remind participants of ground rules. Introduce next training part.	15 min	10.00-10.15	
10	Activity 4 KORFBALL GAME	45 min	10.15-12.00	
Break				
11	Stage # 4: Engagement "What will be my next sport experience?"  11.1. Stage # 4 Engagement What will be my next sport experience_presentation  11.2. Stage of recovery 11.3. Behavior Change Techniques (BCTs) Taxonomy	45 min	12.30-13.15	
12	Activity 5:Video presentation	45 min	13.15-14.00	
Lanch Break				
13	Discussion	30 min	14.45-15.15	
14	Closing, wrap-up and program evaluation Brief summary of learning. Participants to mention activities or takeaways. Ask for additional questions, comments, and feedback.  • Evaluation Immediately after the completion of RACE4LIFE Blended Capacity Building  • Evaluation after three months from the completion of RACE4LIFE Blended Capacity Building	45 min	15:15-16:00	

# KEY CONSIDERATIONS

This summary provides a list of essential keys for facilitators to consider when preparing a training:

- All materials needed for the training can be found in the RACE4LIFE Blended Capacity Building e-platform and The Training Manual.
- All trainings require at least two facilitators, one lead, and one co-facilitator, who must meticulously prepare the training together.
- Translate materials into trainees' language and adapt them to their context or substitute them with local, culturally appropriate alternatives.
- The training should be conducted in groups of 15-20 trainees, with a focus on ensuring a gender balance between facilitators and trainees.
- Meals, drinks and snacks should be provided to trainees during the training.





# **RACE4LIFE Blended Capacity Building Evaluation**

# Aims and Objectives

The evaluation will assess the practicality, relevance, reliability, and validity of the RACE4LIFE Blended Capacity Building program, enabling modifications and revisions. The evaluation will also assess the program's readiness for open use, using tools to measure process, outcome, and impact, ensuring its confidence in implementation.

# Methodology

The RACE4LIFE Blended Capacity Building program will be evaluated using an adapted questionnaire based on Kirkpatrick's model of evaluation, a widely-used method for assessing training and educational activities, to ensure its quality and receive critical feedback.

# in practice

**Level 1 – Reaction**: At this level, the focus is on participants' immediate reactions to the training program. This can include their satisfaction with the training, perceptions of its relevance, and the extent to which they found it engaging and useful.

**Level 2 – Learning**: This level assesses the extent to which participants have gained knowledge, skills, or changed attitudes as a result of the training. It evaluates the participants' understanding of the material and their ability to apply it in their work environment.

**Level 3 – Behavior**: This level evaluates the extent to which participants apply the knowledge and skills they acquired during the training in their workplace. It focuses on observable changes in behavior, such as improved performance, increased productivity, or better teamwork, directly resulting from the training.

**Level 4 - Results:** This level seeks to establish a direct connection between the training program and the overall success of the organization.

Evaluation of the levels 1 and 2 immediately after the training.

Evaluation of the levels 3 and 4 three months after training.





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