

The

limerent

Prevention Approach

The Research Base for the Limerent Prevention Framework and the Limerent Change Model

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Introduction

Public health campaigns usually employ good marketing principles or good prevention strategies. Rarely do they do both. Limerent has created a process to bring together evidence-based marketing and prevention practices to create positive change in the communities with which they work to reach youth.

This document presents the theory and research supporting our approach for accomplishing this important task, along with examples of practical applications of the research to back up the steps we take to make a lasting and positive impact on the lives of young people.

Purpose

The purpose of this paper is both internal and external. Within the Limerent organization, we want to ground our work in the research related to human development and behavior change theory. This grounding provides confidence and assurance that our approaches are sound and will be effective in improving outcomes for youth. Additionally, we at Limerent want to assure our customers, and more importantly the communities they serve, that our evidence-informed approaches to behavior change will achieve the safe and drug-free outcomes they so deserve.

Background

Since its inception more than a decade ago, Limerent has established itself as a preeminent marketing agency that meets the needs of its client base through marketing innovation, subject matter expertise, and exceptional creative work for prevention-, hospitality-, and consumer goods-focused clients. Through their involvement in local and regional public health campaigns and community-based prevention coalitions around the country, Limerent's principal owners Kris Martin, Rosaleen Burke, and Mike Cox have worked with some of the most innovative marketing brands in the country. Their experience with Red Bull, Paul Mitchell, and other brands helped them imagine that the research, principles, and marketing techniques that encourage customers to purchase beverages or beauty products could also be applied – in conjunction with the latest in prevention science – to achieve positive changes in healthy behavior among youth.

Consequently, Limerent began the process of researching and building our marketing-based approach to prevention of adolescent problems and the promotion of healthy behavior and lifestyles. To start, we asked ourselves this question: "How can prevention marketing reduce risk and enhance protective factors associated with substance use and adverse mental health conditions among youth in a community?" The Limerent Prevention Approach resulted from that quest.

Limerent's Prevention Approach

This paper describes and supplies a brief description of the research foundation behind the two cornerstones of the Limerent Prevention Approach:

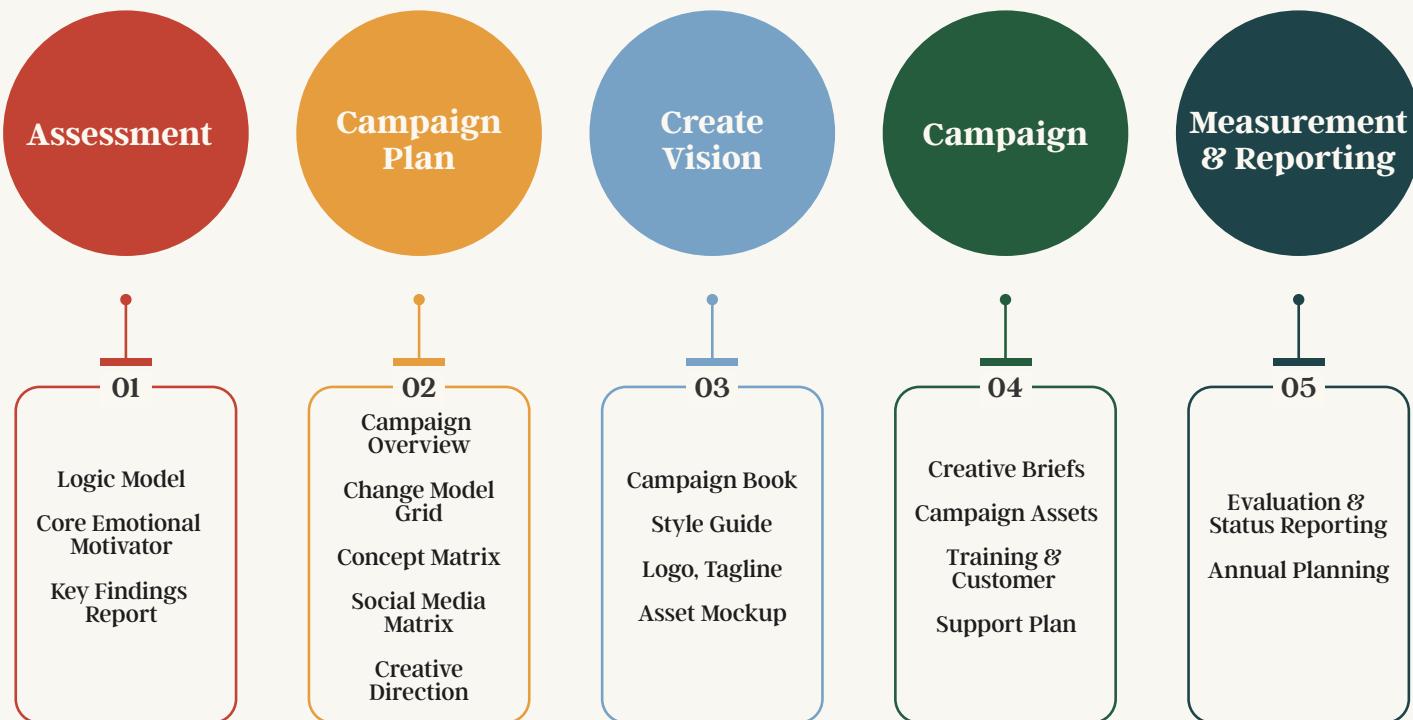
- The **Limerent Prevention Framework** provides *a five-step process* by which the Limerent team, in collaboration with clients, staff, and community members, identifies the key features of a community that will be used to develop a comprehensive marketing campaign to achieve desired behavior changes among youth and parents in a community.
- The **Limerent Change Model** identifies *seven phases* that must take place in a population in order for behavior changes to occur – and to be sustained over the long-term.

In addition, the paper provides a comprehensive example of how tools, techniques, and campaign assets are generated using the Limerent Prevention Approach.

Limerent Prevention Framework

During the past fifteen years, Limerent has innovated a five-step framework that moves our work with clients through the creation and implementation of a campaign with intent and strategy built in, every step of the way. The Limerent Prevention Framework (LPF) is an evidence-informed and data-driven process that creates marketing campaigns.

Figure 1. The Five-Step Limerent Prevention Framework



Step 01: Assessment

An assessment guides the planning, implementation, and evaluation of a social marketing campaign with the goal to reduce youth substance use. The specific objectives of the assessment are to:

- Establish a communications and feedback mechanism to engage the client throughout the process.
- Collect information to understand the current youth substance use and mental health issues in the community.
- Identify current prevention strategies and campaigns in place or planned in the community.
- Identify the **Core Emotional Motivator** for each audience of focus (target audience) to be impacted by the campaign.
- Develop a data driven **Limerent Logic Model** to identify and prioritize the risk and protective factors and community conditions that will be addressed in the campaign.
- Create a **Key Findings Report** that includes specific **Long- and Short-term Objectives** to be targeted with the campaign. The report clarifies key knowledge, skills, attitudes, and behaviors to be changed.
- Provide specific recommendations for the campaign.

Step 02: Campaign Plan

The Campaign Plan provides the overall process, structure, and focus for the campaign. The specific objectives of the Campaign Plan are to:

- Describe how the **Core Emotional Motivator** (see below) is applied to the specific campaign.
- Identify the specific change objectives that will be targeted by the campaign.
- Provide the specific activities, timeline, and budget for the campaign.
- Develop a Campaign Plan which includes the following:
 - **Campaign Overview** – a summary of the campaign that describes the specific elements to be implemented to achieve the change objectives.
 - **Change Model Grid** – describes specific content for each element of the Limerent Change Model (see below) that will be communicated to each target audience.

- **Concept Matrix** – describes a comprehensive and detailed list of the specific Campaign Assets (e.g., campaign material that includes emails, social media posts, posters, blogs, websites) that will be implemented over the course of the campaign.
- **Social Media Matrix** – provides a daily plan for dissemination of social media that is aligned with the change model and directs audiences to appropriate tools that support their trial change.
- **Campaign Theme** – describes the unique creative concepts that will be threaded throughout the campaign.

Core Emotional Motivator - A Core Emotional Motivator (CEM) is developed for each audience of focus whose knowledge, attitudes, and behaviors will be the focus of the Limerent campaign. The CEM represents the key values held by the audience that need to be addressed and included in the campaign, as a way of encouraging the audience to change their attitudes and behavior around the problem.

For example, if teens and parents in a community value “success” as a key motivator for their behaviors, then the campaign would highlight how alcohol and other drug use, or stress and anxiety, can get in the way of student success. In short, the campaign addresses problems (such as AOD use and mental health issues) by using the core emotional motivator as a means for the audiences to question how alcohol and other drugs can impact what is important to them.

Step 03: Creative Vision

During the Creative Vision step, Limerent makes the “magic” happen. By combining stunning visuals with words that have just the right voice and tone, we develop a campaign that is impactful and intentional—and delivers the results clients want—by connecting emotionally with the target audience(s). The specific objectives completed during this step include:

- Creating a **Campaign Book** that describes the campaign’s personality.
- Putting together a **Style Guide** that identifies the campaign’s visual elements and voice—and ensures that the creative team stays on message visually and verbally.
- Developing a distinctive **Logo and Tagline** that shows the essence of the campaign brand and makes it identifiable and memorable to all stakeholders.
- Providing **Asset Mockups**—such as T-shirts, water bottles, banners, and posters—so the client can see what the deliverables will look like.

Step 04: Campaign

The messaging campaign is created and implemented in Step 4. Based on the overall Campaign Plan, the specific objectives for Step 4 are to:

- Develop **Creative Briefs** that describe the integration of the campaign theme and messaging content into each asset developed for the campaign.
- **Campaign Assets** are created by Limerent's team of creative, marketing, and subject matter experts. The assets are each uniquely crafted to address the Core Emotional Motivator and the specific stage of the Change Model.
- In collaboration with existing client resources, the Campaign Assets are distributed and implemented as identified in the **Campaign Plan**.

Step 05: Measurement & Reporting

Measurement and reporting occur throughout each campaign that includes the following specific tasks:

- The long- and intermediate-term objectives are identified based on the logic model developed during the Assessment phase. These objectives identify community-level changes the organization seeks to achieve through its prevention efforts. The Limerent campaign will contribute to these changes.
- Specific process and/or outcomes evaluation measures are identified for each asset in the Concept Matrix. **Process measures** include information about the assets distributed and the numbers reached. **Outcome evaluation**, where applicable, provides information about the extent to which changes in the target population's knowledge, attitudes, skills, and behaviors are changed as a result of the campaign.
- Status reports on campaign implementation and impact are provided to the client.

Guiding Frameworks

The Limerent Prevention Framework is shaped by multiple planning frameworks across several disciplines and from a variety of sources. Table 1 provides a summary of each framework and a brief description of how they inform our work.

- Strategic Prevention Framework (SPF)¹
- Socio-Ecological Model (SEM)²
- Institute of Medicine (IOM) Continuum of Care³
- CADCA Comprehensive Strategies⁴
- Risk and Protective Factors⁵

¹Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, (2019). A Guide to SAMHSA's Strategic Prevention Framework. Rockville, MD.

²Bronfenbrenner, U. (1979). The ecology of human development. Harvard University Press.

³National Research Council and Institute of Medicine Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults. (2009). Research Advances and Promising Interventions. National Academies Press.

⁴Community Anti-Drug Coalitions of America. (2019). Planning Primer: Developing a Theory of Change, Logic Models and Strategic and Action Plan.

⁵University of Washington, Social Development Research Group. (2020). What is risk and protective focused prevention?, University of Washington.

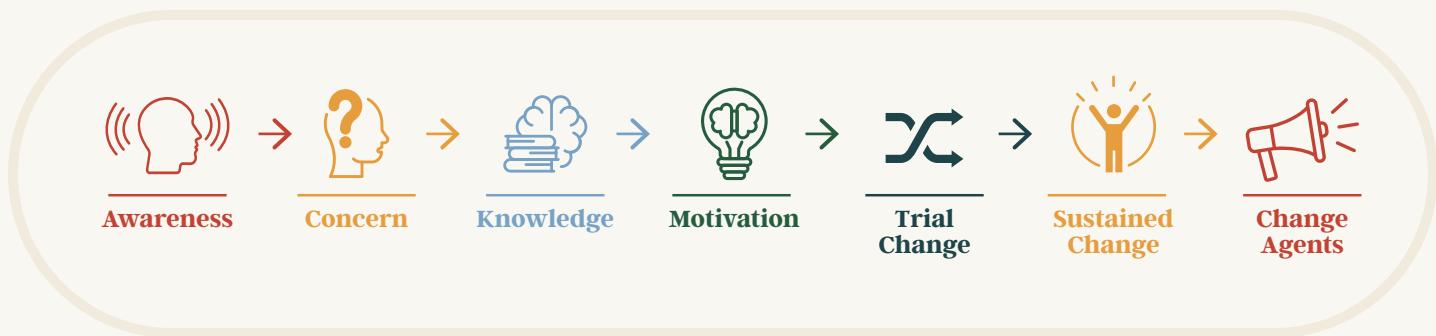
Table 1. Guiding Frameworks

Framework	Summary	How the Framework Informs the Limerent Prevention Framework
Strategic Prevention Framework (SPF) (Appendix A)	The SPF provides a five-step model for understanding and impacting behavioral health problems within communities.	Developing effective messages requires a data-driven and evidence-based process. The community assessment and logic model determine the specific objectives of the campaign strategies.
Socio-Ecological Model (SEM) (Appendix B)	The SEM is a multi-level framework that allows us to consider the different contexts in which risk and protective factors exist. The model also allows us to examine how contexts interact and how to best impact targeted problems.	Behavior change must occur on multiple levels to influence behavior. Limerent campaigns focus on impacting individuals (youth and parents), their peer groups, and the multiple community environments in which they live.
Institute of Medicine (IOM) Continuum of Care (Appendix C)	The Continuum of Care framework places prevention in a graded continuum that distinguishes between levels of prevention, treatment, and recovery.	Prevention messages must intentionally address participants at each stage of the Continuum of Care. Limerent recognizes that youth alcohol and drug using behavior ranges from no-use, experimentation, heavy use, and substance use disorder. Campaign messages must reflect these different populations.
CADCA Comprehensive Strategies (Appendix D)	Prevention research indicates that it takes a combination of evidence-based strategies to achieve changes in a community. These strategies include both individual and environmental focus. There is a strong consensus in the field of prevention that a comprehensive response must be used to reduce substance use and misuse.	Limerent prevention messaging provides the key elements of individual-focused change strategies that include providing information, building skills, and providing support. These campaign elements must also address and complement existing community-based environmental strategies that will ultimately achieve community-wide behavior change.
Risk and Protective Factor Theory (Appendix E)	Prevention focusing on risk and protective factors is based on a simple idea: To prevent a problem from developing, we need to identify factors that reduce or, in contrast, increase the chance of the problem. Risk factors increase the chances the problem will occur. Protective factors reduce the likelihood of problems. After identifying these factors, we then need to find ways to reduce risks and increase protection so that better health and wellbeing occur.	Limerent's Community Assessment process identifies key risk factors and resources that build protective factors among youth and families in a community that can be impacted through a messaging campaign. Limerent builds specific campaign assets that target these risk and protective factors among the specific target audiences.

Limerent Change Model

The campaign itself is based on an evidence-informed theory of change. The plan outlines a specific process for accomplishing targeted change. This effort to achieve behavior change is embedded in the campaign via the Limerent Change Model. The model provided below describes the process Limerent leads individuals and communities through to achieve the desired change in knowledge, attitudes, perceptions, and behaviors.

Figure 2. The Limerent Change Model



Awareness

The campaign starts by raising Awareness of a problem, to lift the community out of complacency and denial. For example, community members might say, “youth in our community don’t drink much,” or, “drinking alcohol is just a normal rite of passage for teenagers.” The early campaign helps the community understand there is a problem. It targets the public as well as specific populations like parents of teenagers; and we accomplish this through a variety of broad advertisements, posters, and social media. In order to ensure that we build awareness in the community, we incorporate the 70/3 method of media planning: Reach at least 70 percent of the target audience with a frequency of at least three. The goal for this step is to reach as many people in the community, or within a specific target audience, as possible.



Concern (Uncertainty)

Once we've generated awareness in the community, we can begin the process of educating the community on the risks of certain behaviors and how it might affect them. It's important that these messages speak to a core emotional motivator to ensure success. In addition, we use the power of retargeting ads to ensure that the messages are delivered to those who need them most. The campaign again targets these populations with a variety of broad advertisements, posters, and social media to build **concern** about the problem and create **uncertainty** in what they know and believe. They may now say, "I thought marijuana use was harmless..., after all I smoked weed as a teenager, but now I am not so sure." This part of the campaign helps the community question their assumptions and begin thinking about the problem.



Knowledge

As awareness and concern go up in the community, we target specific populations with **knowledge** or **information** about the problem to build their interest in what they can do to help. Here the campaign appears with more intensity on landing pages, in emails, and at community events. Limerent uses the power of cutting-edge AI to optimize ad delivery by providing resources to individuals based on their previous interactions with the campaign. In addition, we employ functional design principles to ensure that additional resources are easy to find and utilize. We work to provide a depth of knowledge to individuals and selected organizations that are connected to the places where teens feel safe and valued – with peers at school or at home around the dinner table. These special populations may ask themselves, "I need to know more about this problem, where do I go to get information and products related to underage drinking or marijuana use?" This part of the campaign provides guidance to help answer that exact question.



Motivation

Caring about a problem and accessing information does not change behavior. People need motivation to change, and we provide this motivation through targeted information sharing, peer-to-peer connections, linking people to resources, and supplying products. The target here is not the public or community as a whole; rather, we use this step to speak directly to those individuals and groups that need persuasion to change or can persuade someone to change. Individuals at this stage are ready to make a change, they just need a little support and inspiration. That's why we follow up with each individual regularly via enterprise level marketing automation. It allows your organization to provide individualized assistance without any additional staffing. These individuals might say, "I drank as a teenager years ago, but I am going to teach my children not to drink because it will interfere with their success in school and on the basketball court." Notice the "core emotional motivators" in that quote. Motivation can be encouraged in individuals by emphasizing the following characteristics of the desired changes in knowledge, attitudes, skills, and behaviors:

- **Relative Advantage** - The degree to which the desired change is seen as better than the idea or behavior it replaces.
- **Compatibility** - How consistent the desired change is with the values, experiences, and needs of the potential adopters.
- **Complexity** - How difficult the desired change is to understand and/or use.
- **Trialability** - The extent to which the desired change can be tested, or practiced with, before a commitment to adopt is made.
- **Observability** - The extent to which the desired change provides tangible results.



Trial Change

Behavior changes do not happen overnight. Teenagers, especially, need to try out new behavior and solutions to a larger problem. Our campaign provides ways for youth to experiment with this Trial Change to see for themselves that this action is worthwhile. Again, we target individuals and groups through information sharing, peer connections, links to resources, and access to products. Our goal for this step is youth trying out the solutions and products (behavior change) with positive results. A teenager might think to themselves, "I am more successful without drinking, and I am really happy to hang out with friends who also don't drink."



Sustained Change

Our goal is not just for youth to try a behavior change but to live with this change. We work on Sustained Change by providing ongoing targeted information sharing, links to resources, access to products, and innovation. Again, this is for specific individuals and groups that make up a safe and valued community. At the same time, we work to expand this community over time with ongoing media support. An individual in this community might say, "I really like being alcohol-free and spending time with others who are alcohol-free. I am going to spread the word and help my friends experience this kind of success."



Change Agents

Change agents encourage adoption of a new idea. Change agents usually work with opinion leaders to enhance the impact of their diffusion activities in a social system. They are typically more innovative than others and their communication may pose challenges to the diffusion process⁶. In a given community, it is important to identify those individuals (adults and youth) who have engaged in the trial change and are working to sustain healthy behaviors. These individuals can, in turn, encourage others within their social groups and communities to consider the trial change.

⁶Rogers, E.M. (1995). *Diffusion of Innovations* (4th ed.). Free Press.

Change Theory

The Limerent model is not only based upon the prevention research described above, but also upon research on behavior change and effective marketing practices. Prevention has long used media to attempt behavior change and research has shown the appropriate use of media can work to prevent substance use and its consequences⁷. Research has also described several theories for effectively developing marketing for sustained behavior change. This section describes six related efforts and research. **Table 2** provides a summary of each Change Theory and a brief description of how they inform our work.

- Marketing Consumer Decision Making Model⁸
- Digital Marketing Funnel⁹
- Stages of Change Model¹⁰
- Community Readiness¹¹
- Diffusion of Innovation: The Innovation-Decision Process¹²
- Motivational Interviewing¹³

Table 2: Change Theories

Framework	Summary	How the Framework Informs the Limerent Prevention Framework
Marketing Consumer Decision Making Model <small>(Appendix F)</small>	<p>The consumer decision-making process is a method used by marketers to identify and track a consumer's journey from recognizing a need, to making a purchase decision, to evaluating their purchase.</p>	<p>The model emphasizes the need to provide sufficient time and information to "consumers" as they make a decision. The Limerent Change Model reflects this in the Awareness, Uncertainty, and Knowledge phases.</p>
Digital Marketing Funnel <small>(Appendix G)</small>	<p>The digital marketing funnel is like the consumer decision-making model in its narrowing approach of sustaining customers. The funneling approach identifies that the number of individuals targeted by a digital marketing campaign decreases as consumer knowledge and intent to consume increases.</p>	<p>This model recognizes the need to reach large numbers of people in the Awareness, Uncertainty, and Knowledge phases, and that there will be smaller numbers of individuals who engage in trial change. These "change agents" must be supported in promoting the behavior change within (and outside of) their peer networks.</p>

⁷Wakefield, M.A., Loken, B., & Hornik, R.C. (2010). Use of mass media campaigns to change health behavior. *The Lancet*, 376, 1261-1271.

⁸Nicosia, Francesco M. (1966). Consumer decision process marketing and advertising implications. Prentice Hall.

⁹Rossiter, J.R.; Bellman, S. (2005). Marketing communications: Theory and applications. Pearson Australia.

¹⁰Prestwich, A., Kenworthy, J., & Conner, M. (2018). Health behavior change: Theories, methods, and interventions. Routledge.

¹¹Plested, B. A., Jumper-Thurman, P., Edwards, R. W., & Oetting, E. R. (1998). Community readiness: A tool for effective community-based prevention. *Prevention Researcher*.

¹²Rogers, E.M. (1995). Diffusion of Innovations (4th ed.). Free Press.

¹³Miller, W. R., & Rollnick, S. (2012). Motivational interviewing, helping people change (3rd ed.). Guilford Press.

Table 2: Change Theories Continued

Framework	Summary	How the Framework Informs the Limerent Prevention Framework
Stages of Change Model (Appendix H)	<p>This model describes the individual decision-making process and is often referenced in treatment for substance use disorder. The model recognizes the need to “guide” individuals through the change process and to reinforce the behavioral changes.</p>	<ul style="list-style-type: none"> • Precontemplation relates to Awareness and Concern (Uncertainty) • Contemplation relates to the Uncertainty and Knowledge • Preparation relates to Knowledge and Motivation • Action relates to Trial and Sustained Change • Maintenance and Relapse relate to Sustained Change
Community Readiness (Appendix I)	<p>The Community Readiness model identifies the stages that individuals, organizations, social groups, and communities go through in the process of change. The model recognizes that different information must be shared with the audiences as they progress through the change process.</p>	<p>Key features of the Community Readiness model that inform the Limerent Change Model include the stages of No Awareness, Denial/Resistance, and Vague Awareness. These inform by stressing the need to understand why people are at a particular stage and share information that is relevant and unique to their understanding of the problem.</p>
Diffusion of Innovation: The Innovation-Decision Process (Appendix J)	<p>The process through which an individual (or other decision-making unit) passes from first knowledge of an innovation, to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision.</p>	<p>The Persuasion Phase provides key characteristics that inform Limerent's Motivation Phase where the following aspects of the desired change must be emphasized and communicated: relative advantage, compatibility, complexity, trialability, and observability.</p>
Motivational Interviewing (MI) (Appendix K)	<p>MI is a goal-oriented communication paying particular attention to the language of change. It strengthens personal motivation for, and commitment to, a specific goal by exploring the person's own reasons for change within an atmosphere of acceptance and compassion.</p>	<p>While the Limerent Model does not see the target population of a media campaign as patients, it does consider the readiness of this population and how to motivate them to change. This includes specific goals and a clear path.</p>

Appendices

Guiding Frameworks

- A. Strategic Prevention Framework (SPF)
- B. Socio-Ecological Model (SEM)
- C. Institute of Medicine (IOM) Continuum of Care
- D. Community Anti-Drug Coalitions (CADCA) Comprehensive Strategies
- E. Risk and Protective Factors

Change Theory

- F. Marketing Consumer Decision Making Model
- G. Digital Marketing Funnel
- H. Stages of Change Model
- I. Community Readiness Theory
- J. Diffusion of Innovation: The Innovation-Decision Process
- K. Motivational Interviewing



Appendix A: Strategic Prevention Framework (SPF)

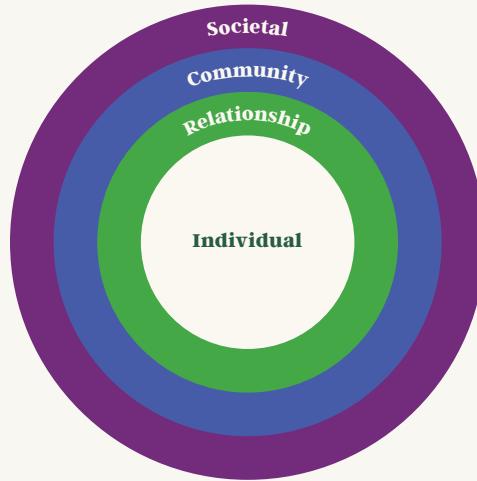
Prevention planners are pressed to put in place solutions to urgent substance misuse problems facing their communities. But research and experience have shown that prevention must begin with an understanding of these complex behavioral health problems within their complex environmental contexts; only then can communities establish and implement effective plans to address substance misuse. To facilitate this understanding, SAMHSA developed the Strategic Prevention Framework (SPF)¹⁵.

The five steps and two guiding principles of the SPF offer prevention planners a comprehensive approach to understanding and addressing the substance misuse and related behavioral health problems facing their states and communities. The SPF includes these five steps:

1. **Assessment:** Identify local prevention needs based on data
(e.g., What is the problem?)
2. **Capacity:** Build local resources and readiness to address prevention needs
(e.g., What do you have to work with?)
3. **Planning:** Find out what works to address prevention needs and how to do it well
(e.g., What should you do and how should you do it?)
4. **Implementation:** Deliver evidence-based programs and practices as intended
(e.g., How can you put your plan into action?)
5. **Evaluation:** Examine the process and outcomes of programs and practices
(e.g., Is your plan succeeding?)

The SPF is also guided by two principles that should be integrated into each of the steps that comprise it:

- **Cultural competence.** The ability of an individual or organization to understand and interact effectively with people who have different values, lifestyles, and traditions based on their distinctive heritage and social relationships.
- **Sustainability.** The process of building an adaptive and effective system that achieves and maintains desired long-term results.



Appendix B: Socio-Ecological Model (SEM)

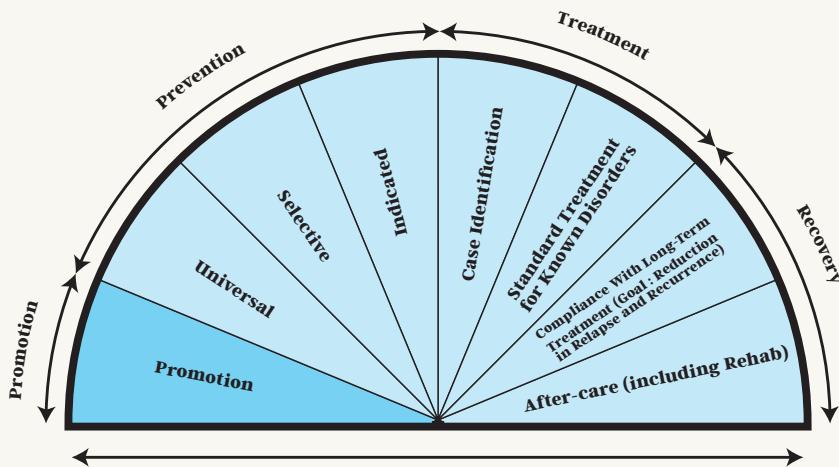
The socio-ecological model is a multi-level framework that allows us to consider the different contexts in which risk and protective factors exist. The model also allows us to examine how contexts interact with one another and to choose prevention strategies that operate at multiple levels to achieve the greatest impact¹⁶.

The theory behind the socio-ecological model is that an individual does not exist in a vacuum and that their behavior both influences, and is influenced by, the surrounding environment which consists of various levels. Each level operates within, and is influenced by, the next level.¹ This reciprocal relationship and dynamic interaction helps us to understand human development and behavior because different risk and protective factors operate within each level. The four levels are:

- 1. INDIVIDUAL.** Includes factors specific to the individual, such as age, education, income, health, and psychosocial problems, which may correspond with substance use. For example, undergraduate students who exhibit poor self-regulation, impaired control, and impulsiveness are more likely to binge drink.
- 2. RELATIONSHIP.** Includes an individual's closest social circle—family members, peers, teachers, and other close relationships—that contribute to their range of experience and may influence their behavior. For example, youth who affiliate with deviant peers are more likely to use marijuana.
- 3. COMMUNITY.** Includes the settings in which social relationships occur, such as schools, workplaces, and neighborhoods. For example, living in neighborhoods with chronically high rates of disorganization, crime, and unemployment is associated with higher risk for substance abuse.
- 4. SOCIETY.** Includes broad societal factors, such as social and cultural norms. Other significant factors operating at this level include the health, economic, educational, and social policies that contribute to economic and/or social inequalities between populations.

Source: Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.

¹⁶Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.



Appendix C: Mental Health & Substance Use Intervention Spectrum (IOM Continuum of Care)

The National Research Council and Institute of Medicine in 2009 published an updated version of the Continuum of Care framework which places prevention in a graded continuum of care that distinguishes between prevention, treatment, and maintenance, and shows their interrelation. It also distinguishes between three levels of prevention services according to the risk levels of the target populations. The IOM framework has been visibly adopted in prevention policy language, which describes the range of interventions and strategies which support healthy lifestyles and choices¹⁷.

Health promotion interventions: Usually targeted to the general public or a whole population. Interventions aim to enhance individuals' ability to achieve developmentally appropriate tasks (competence) and a positive sense of self-esteem, mastery, wellbeing, and social inclusion, and strengthen their ability to cope with adversity.

Example: Programs based in schools, community centers, or other community-based settings that promote emotional and social competence through activities emphasizing self-control and problem solving.

Universal preventive interventions: Targeted to the general public or a whole population that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group.

Example: School-based programs offered to all children to teach social and emotional skills or to avoid substance misuse. Programs offered to all parents of sixth graders to provide them with skills to communicate to their children about resisting substance use.

¹⁷National Research Council and Institute of Medicine Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults. (2009). Research Advances and Promising Interventions. National Academies Press.

Selective preventive interventions: Targeted to individuals or a population subgroup whose risk of developing mental disorders is significantly higher than average. The risk may be imminent, or it may be a lifetime risk. Risk groups may be identified on the basis of biological, psychological, or social risk factors that are known to be associated with the onset of a mental, emotional, or behavioral disorder.

Example: Programs offered to children exposed to risk factors, such as parental divorce, parental mental illness, or parental substance misuse, which seek to reduce risk for adverse mental, emotional, and behavioral outcomes.

Indicated preventive interventions: Targeted to high-risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing mental, emotional, or behavioral disorder, or biological markers indicating predisposition for such a disorder, but who do not meet diagnostic levels at the current time.

Example: Interventions for children with early problems of aggression or elevated symptoms of depression or anxiety, youth caught drinking at the prom or youth cited for MIP (minor in possession).

Treatment: These services are for people diagnosed with a substance use, or other behavioral health, disorder. They include case identification and standard forms of treatment.

Recovery: These services support individuals' abilities to live productive lives in the community and can often help with abstinence. This is a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.



Appendix D: CADCA Comprehensive Strategies

One of the key lessons learned in a coalition is that it often takes a combination of comprehensive, complementary, evidence-informed strategies to achieve changes in a community. As we all know, there is no one program that can eliminate drug use in the community. If there was, we would all be implementing the program. There is a strong consensus in the field of prevention that it takes a comprehensive response to reduce substance use and misuse.

- **Comprehensive** means that there are enough strategies to target each local condition identified on your coalition's logic model.
- **Complementary** means that each of the strategies implemented build on each other in a way that impacts the entire targeted community.

There are seven “categories” of strategies that can be used by coalitions to change community behavior and conditions¹⁸. These categories of strategies include:

1. **Providing information.** One of the most common strategies used in prevention is providing information to community members. The goal of this strategy is to change knowledge and beliefs related to substance use and misuse including accepting drug problems exist, understanding the physical and social consequences of drug use, and an awareness of what the community is doing to combat drug use.
2. **Building skills.** In addition to changing what people know, prevention efforts seek to give people new abilities to take action. These skill development efforts cross a broad range of abilities and audiences. Examples include refusal skills for youth, parenting skills for caregivers, professional development for teachers, police, youth workers or other support personnel, and advocacy skills for community residents and coalition members.

¹⁸Community Anti-Drug Coalitions of America. (2019). Implementation Primer: Putting Your Plan into Action.

- 3. Providing support.** Most of us are more likely to act on our knowledge and skills if someone encourages us or participates with us. For example, we know we should exercise more, and we may have learned some new exercise skills, but we still may fail to get adequate exercise. However, if we set a time to meet with friends to exercise, or our spouse agrees to exercise with us three times a week, then we are likely to follow through and get the exercise we know we need. Prevention puts this principle into practice in many ways including through peer support groups, alternative activities, and mentoring.
- 4. Change access/barriers.** Let's continue with the earlier example of getting adequate exercise. We know we should exercise. We have skills to participate in different forms of physical activity. We even may have supportive family members or friends who will exercise with us. But what if the tennis courts are only open on weekends, the gym membership is too expensive, or our bike needs repair. Each of these illustrates a barrier. An important strategy in prevention is to ensure that there are no barriers to the behaviors in which we want people to engage, such as healthy after school activities. Conversely, there should be numerous barriers to the behaviors we are trying to discourage, such as increasing the price of alcohol and limiting the hours during which it can be sold to discourage underage drinking.
- 5. Changing consequences/incentives.** Providing incentives or increasing penalties has a strong effect on the behavior choices people make. If an employer holds a contest and awards prizes such as a day off with pay to those who meet their exercise goals then even more people will begin exercising. Information, skills, social support, and access may all be provided by the employer to encourage exercise (for example an employer may create paycheck stuffers with exercise tips, provide a gym at the workplace, an exercise instructor to build skills, and form employee exercise teams) but the addition of incentives will always increase the number of people who participate. Likewise, increasing penalties for behaviors to be discouraged can be effective such as increasing fines for providing alcohol to minors or stiffer penalties for selling drugs.
- 6. Changing the physical design of the environment.** Studies show that if good sidewalks are available and connect to places people want or need to go, and if these sidewalks are reasonably “pedestrian friendly” (such as being offset from the road and having shade), more people will walk every day. No other changes are necessary. Simply change the environment and people's behavior changes. This is true of many behaviors coalitions seek to promote or discourage. Crime can be affected by how the neighborhood is physically designed (for example C.P.T.E.D.—“crime prevention through environmental design” programs) and changes can be made to reduce crime by increasing lighting or changing traffic patterns. Coalitions should always look at the relationship between the physical design of the local community and the behaviors they are trying to promote or discourage.

7. Changing rules and policy. Many choices that people make are governed by rules that dictate what can and cannot be done. Rules in the workplace, school regulations, and laws in the community are just some examples. Ensuring that these policies and rules are appropriately promoting positive behaviors and discouraging negative behaviors is an important role for coalitions. Often, policy makers are unaware of the unintended side effects of a given policy, or if an appropriate policy lacks enforcement. Regardless of what a coalition learns through a community assessment, it is almost impossible to achieve community-level objectives without addressing some aspect of local policy.

In addition to ensuring that the interventions selected by the coalition employ a complete and complementary set of strategies, the interventions also must strike a balance between targeting youth, families, community leaders, and addressing other aspects of the community. Focusing just on the police, or exclusively on schools, or only on social service organizations will not lead to success. All of these aspects of the community will likely have to improve if rates of substance use and misuse are to change for the better.

When considering policy changes, it is sometimes helpful to think of the policy changes as either “Big P” or “little p” policy changes. “Big P” policy changes are changes to laws or regulations that affect the entire community. “Little p” policy changes are those changes to organizational policy and practice which impact how the organization interacts with the community (e.g., law enforcement changes patrol policies to visit specific locations on weekend evenings).

Behavioral Health Problems

	Substance Use	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
Community Risk Factors						
Availability of Drugs	✓				✓	
Availability of Firearms		✓			✓	
Laws and Norms Favorable Toward Drug Use, Firearms, and Crime	✓	✓			✓	
Media Portrayals of Violence	✓				✓	
Transitions and Mobility	✓	✓		✓		✓
Low Neighborhood Attachment and Community Disorganization	✓	✓			✓	
Poverty/Extreme Economic Deprivation	✓	✓	✓	✓	✓	
Family Risk Factors						
Family History of Problem Behavior	✓	✓	✓	✓	✓	✓
Family Management Problems	✓	✓	✓	✓	✓	✓
Family Conflict	✓	✓	✓	✓	✓	✓
Favorable Parental Attitudes and Involvement in Problem Behavior	✓	✓			✓	
School Risk Factors						
Academic Failure Beginning in Late Elementary School	✓	✓	✓	✓	✓	✓
Lack of Commitment to School	✓	✓	✓	✓	✓	
Peer & Individual Risk Factors						
Early and Persistent Antisocial Behavior	✓	✓	✓	✓	✓	✓
Rebelliousness	✓	✓		✓	✓	
Gang Involvement	✓	✓			✓	
Friends Who Engage in the Problem Behavior	✓	✓	✓	✓	✓	
Favorable Attitudes Toward Problem Behavior	✓	✓	✓	✓	✓	
Early Initiation of the Problem Behavior	✓	✓	✓	✓	✓	
Constitutional Factors	✓	✓			✓	✓

Appendix E: Risk and Protective Factors

Risk and protective factor-focused prevention is based on a simple premise: To prevent a problem from happening, we need to identify the factors that increase the risk of that problem developing and then find ways to reduce the risks. Researchers at the University of Washington¹⁹ have identified risk factors that can contribute to five problem behaviors and protective factors that work to buffer children from risk. Risk and protective factors are grouped in four domains: community, family, school, and peer/individual.

Risk Factors:

- **Family Management:** Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places them at higher risk for substance use and other problem behaviors. Also, parents' failure to provide clear expectations and to monitor their children's behavior makes it more likely that they will engage in drug abuse whether or not there are family drug problems.

- **Parental Attitudes Favorable Toward Drug Use:** In families where parents use illegal drugs, are heavy users of alcohol, or are tolerant of children's use, children are more likely to become drug abusers during adolescence. The risk is further increased if parents involve children in their own drug (or alcohol) using behavior, for example, asking the child to light the parent's cigarette or get the parent a beer from the refrigerator.
- **Low Commitment to School:** Surveys of high school seniors have shown that the use of hallucinogens, cocaine, heroin, stimulants, and sedatives or non-medically prescribed tranquilizers is significantly lower among students who expect to attend college than among those who do not. Factors such as liking school, spending time on homework, and perceiving the coursework as relevant are also negatively related to drug abuse.
- **Youth Attitudes Favorable Toward Drug Use:** During the elementary school years, most children express anti-drug, anti-crime, and pro-social attitudes and have difficulty imagining why people use drugs or engage in antisocial behaviors. However, in middle school, as more youth are exposed to others who use drugs and engage in antisocial behavior, their attitudes often shift toward greater acceptance of these behaviors. Youth who express positive attitudes toward drug use and antisocial behavior are more likely to engage in a variety of problem behaviors, including drug use.

Protective Factors:

- **Opportunities for Involvement:** Young people who are exposed to more opportunities to participate meaningfully in the responsibilities and activities of the family, their schools, and their community are less likely to engage in drug use and other problem behaviors.
- **Rewards for Pro-Social Involvement:** When parents, siblings, other family members, teachers, coaches, and other community members praise, encourage, and attend to things done well by a child, children are less likely to engage in substance use and problem behaviors.
- **Family Attachment:** Young people who feel that they are a valued part of their family are less likely to engage in substance use and other problem behaviors.
- **Religiosity:** Young people who regularly attend religious services are less likely to engage in problem behaviors.
- **Social Skills:** Young people who are socially competent and engage in positive interpersonal relations with their peers are less likely to use drugs and engage in other problem behaviors.
- **Belief in the Moral Order:** Young people who have a belief in what is "right" or "wrong" are less likely to use drugs.



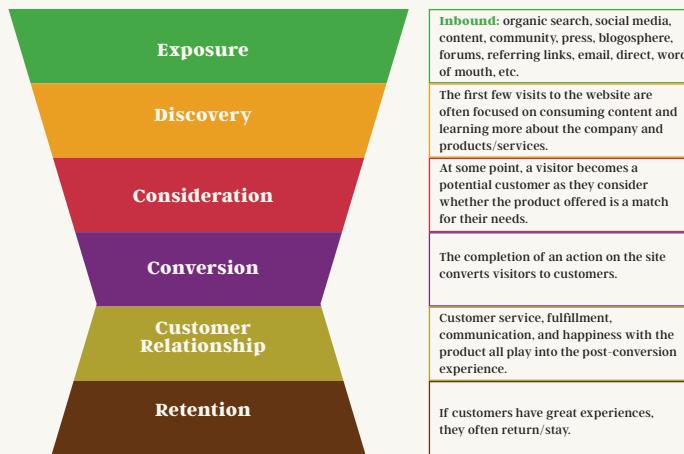
Appendix F: Marketing Consumer Decision Making

The consumer decision making process is a method used by marketers to identify and track a consumer's journey from recognizing a need to evaluating their purchase²⁰. Specifically, it involves five steps that include Problem Recognition, Information Search, Evaluation of Alternatives, Purchase, and Post-Purchase Satisfaction. This theory depends upon the assumption of rationality and knowledge on the part of the consumer. The model is a reflection of how consumers purchase goods (for example, in a grocery store or buying a new automobile). It relates to the Limerent Change Model by identifying the specific stages an individual goes through before making decisions or changes in their lives.

Marketing Consumer Decision Making process informs the Limerent Change Model in the following ways:

Marketing Consumer Decision Making	Informs	Limerent Change Model
Recognition of Need	→	Awareness Uncertainty
Information Search	→	Knowledge
Evaluation of Alternatives	→	Motivation
Purchase Decision	→	Trial Change
Post-Purchase Evaluation	→	Sustained Change Change Agent

²⁰Nicosia, Francesco M. (1966). Consumer decision process marketing and advertising implications. Prentice Hall.



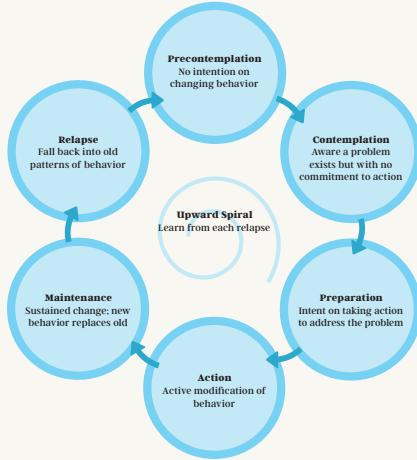
Appendix G: The Digital Marketing Funnel

The digital marketing funnel is like the consumer decision making model in its narrowing approach sustaining customers²¹. The narrowing approach identifies that the number of individuals targeted by a digital marketing campaign decreases as consumer knowledge and intent to consume increases. It begins with **Exposure** of large numbers of individuals to a product through marketing media. A subset of individuals who become aware of a product (**Discovery**) through media engage in further **Consideration** of the product. This parallels the Awareness, Concern, and Knowledge steps in the Limerent model.

The next three steps are **Conversion**, **Customer Relationship**, and **Retention** stages of digital marketing. These parallel the **Motivation**, **Trial**, and **Sustained Change** steps in the Limerent model by further narrowing down the individuals who are most interested in consuming the product. Customer relationship and retention in the digital marketing funnel is an acknowledgement of the importance of customer service and fulfillment, or delivery, of the product. This might mean answering phone calls from consumers or delivering purchase products efficiently.

For Limerent, this is about identifying the smaller numbers of individuals who engage in trial change of the desired behaviors and supporting them in promoting the behavior change within (and outside of) their peer networks. This effort requires a more intense and personal communication through personal connection and social media. Limerent develops a combination of internet and social media sources to build a community around prevention.

²¹Rossiter, J.R.; Bellman, S. (2005). Marketing communications: Theory and applications. Pearson Australia.



Appendix H: Stages of Change Model

According to one model, there are five specific stages of change²². This model describes the individual decision-making process to take action at changing their personal choices and behaviors. This model includes:

- **Precontemplation** when people are not thinking about changing or interested in any kind of help. They may be defensive and in denial. This relates to the **Awareness and Concern (Uncertainty)** elements of the Limerent Change Model.
- **Contemplation** when people weigh the pros and cons of changing. They consider the negative and positive aspects of their behavior and they may doubt the benefits of change. This relates to the **Uncertainty and Knowledge** elements of the Limerent Change Model.
- **Preparation** when people make a commitment to change. They gather information and attempt to move to action. This relates to the **Knowledge and Motivation** elements of the Limerent Change Model.
- **Action** when people actively take steps to change their behavior. They use short-term rewards and accept help from others. This relates to the **Trial Change and Sustained Change** elements of the Limerent Change Model.
- **Maintenance** when people remind themselves of their progress and embrace new habits. This relates to the **Sustained Change** elements of the Limerent Change Model.
- **Relapse** when people return to their old behavior and/or stop using their newly acquired behaviors.

²²Prestwich, A., Kenworthy, J., & Conner, M. (2018). Health behavior change: Theories, methods, and interventions. Routledge.



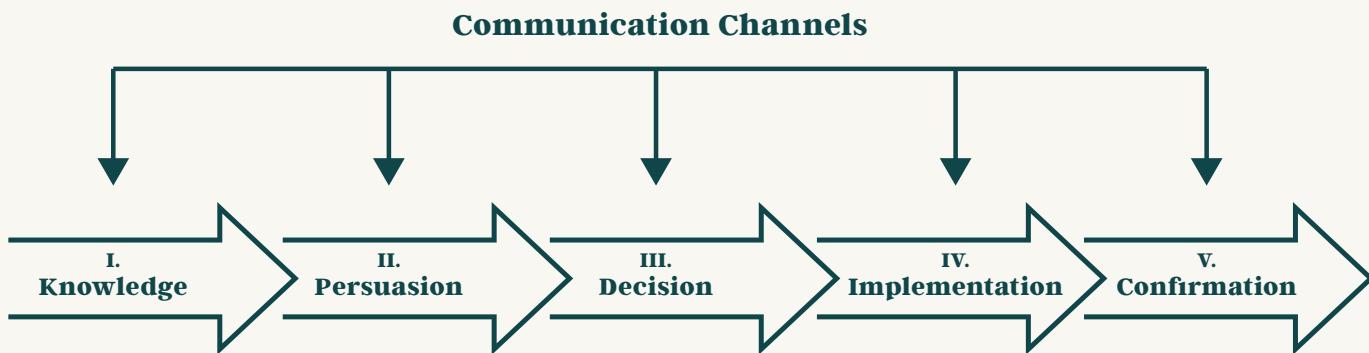
Appendix I: Community Readiness Theory

Researchers developed the community readiness model in the 1990s to detail how to move communities from no awareness and a denial of a community problem, to the expansion and professionalization of the prevention system²³. The model considers many dimensions like community knowledge, climate, and resources. While this model applies to communities, it also reflects the journey of the Limerent model.

This includes moving from awareness and concern, to action and sustained change. The Limerent model can reflect an individual's journey. For example, a parent who does not know underage drinking is a problem and pursues knowledge and takes action with their children. Or it can reflect a population level journey. For example, a community that shows no concern for underage drinking can move to sustaining resources and efforts.

Readiness Model	Informs	Limerent Change Model
No Awareness Denial / Resistance	→	Awareness Uncertainty
Vague Awareness Preplanning	→	Knowledge
Preparation Initiation	→	Motivation Trial Change
Stabilization Confirmation / Expansion Professionalization	→	Sustained Change Change Agent

²³Plested, B. A., Jumper-Thurman, P., Edwards, R. W., & Oetting, E. R. (1998). Community readiness: A tool for effective community-based prevention. *Prevention Researcher*.



Appendix J: Diffusion of Innovation: The Innovative Decision-Making Process

Diffusion of innovations was best articulated and expanded by Everett Rogers to understand how communication channels lead to behavior change by individuals²⁴. This involves both mass media and interpersonal communication. While it focuses upon several communications theories, it is best known for its five stages of decision-making and five different types of adopters. The latter includes innovators, early adopters, early majority, late majority, and laggards. The process of decision-making moves from gaining knowledge, attitude change, adoption, implementation, and confirmation. The Limerent model reflects this decision-making process. The Awareness, Concern, and Knowledge steps parallel the Knowledge stage of diffusion; the Motivation and Trial Change steps parallel the Attitudes, Adoption, and Implementation stages of diffusion; and the Sustained Change step parallels the Confirmation Stage of diffusion. Moreover, Limerent considers the types of innovators in its focus upon, not only individual youth, but their parents and peer groups.

²⁴Rogers, E.M. (1995). *Diffusion of Innovations* (4th ed.). Free Press.

R	Resist
U	Understanding
L	Listen
E	Empower

Appendix K: Motivational Interviewing

Motivational Interviewing is a person-centered approach to counseling that focuses upon patient motivation to change specific behaviors²⁵. It differs from many traditional non-directive approaches to counseling in that it works with patients to create goals, a sense of purpose, and a clear path to change. In this approach a counselor might ask, “How would you like things to be different?” It also recognizes different levels of readiness among patients and change can happen quickly or take a much longer time. While the Limerent model does not see the target population of a media campaign as patients, it does consider the readiness of this population and how to motivate them to change. This includes specific goals and a clear path. For example, when a parent begins to understand a problem and, during the Motivation step declares, “I drank as a teenager years ago, but I am going to teach my children not to drink because it will interfere with their success in school and on the basketball court.” Another key component of the Limerent model based on Motivational Interviewing is the focus on Core Emotional Motivators like success in school, being a good friend, or going to college.

In sum, the Limerent model considered all six of these theories to create a theory of change based upon solid research that can effectively move youth behavior in a positive direction.

²⁵Miller, W. R., & Rollnick, S. (2012). Motivational interviewing, helping people change (3rd ed.). Guilford Press.

Endnotes