

# Project T.N.D. 2010

**University of Southern California**  
Institute for Health Promotion &  
Disease Prevention Research

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# Project TND Recognition

- Considered an evidence-based program by:
  - National Institute on Drug Abuse (NIDA)
  - U.S. Department of Education
  - Center for Substance Abuse Prevention (CSAP)/Substance Abuse and Mental Health Services Administration (SAMSHA)
  - University of Colorado “Blueprints” Project
  - Health Canada
  - California and other State Departments of Education
  - Maryland Blueprints
  - OJJDP

# Goals of Project TND

## Blueprint 2010 Workshop

1. Mention general structural features of TND and revisions of session material per feedback from teachers and students.
2. Summary of the experimental trials of Project TND.
3. Speculate on what might be “really” mediating program effects.
  - What might be going on beyond the “halo”

# Background

- Very few effective drug abuse prevention programs that target senior high school-age youth (14-18) have been developed.
- For younger teens (middle school), drug abuse prevention programs based on social influences model have been most effective.
- Project TND is an effective drug abuse prevention program that targets high school age youth (older teens).

# Target Audience for Project TND

- High school youth, ages 14-19, including males and females
- Students in regular and alternative high schools
- Youth from diverse cultural/ethnic groups (e.g., White, Latino/Hispanic, African American, Asian)

# Program Delivery

- Includes 12 classroom-based lessons.
- Approximately 40-50 minutes each.
- Designed to be implemented over a 4-week period (3 days per week).
- Some people have implemented TND twice a week for 6 weeks, on the condition that all lessons are taught.

TND INVOLVES MATERIAL THAT  
FACILITATES A SOCIAL-  
INTERACTIONAL CONTEXT

# Use of Socratic Method

- Used throughout the curriculum, characterized by:
  - Emphasis on interaction of students with teacher, and students with each other
  - Teacher's use of questioning to elicit existing knowledge
  - Students assemble facts and draw conclusions from facts
  - Students tend to "own" the answers they produce, which enhances their beliefs against drug abuse



# The T.N.D. Game

- The T.N.D. game was developed to:
  - Motivate student participation
  - Reinforce learning
  - Aid the teacher with classroom management
- The game is to be used as a previous session review at the beginning of class and as a session summary at the end of class.

## Psychodrama (Talk Shows)

- Involves having a person behave like they would in a real world situation.
- Provides students with training in empathy.
- Allows students to better appreciate drug abuse consequences by experiencing a network of drug abuse-related social roles.

## Method: Role-Playing

- Involves having students practice how to handle social situations that they may experience in the future.
- Used mainly in Session 8 (Self Control).

# Changes that appear in TND Third Edition

- Re-ordering of 3 sessions: interactive sessions are weaved in between more didactic material (Session 8 [SHGoals] became 6, Session 9 [SControl] became 8, Session 6 [MPanel] became 9)
- Addition of option of greater peer group discussion (Sessions 1, 3, and 6)
- Removal of some “cheesy” examples
- Easier to use teacher’s manual



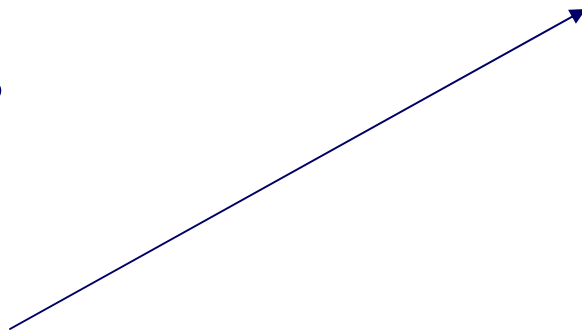
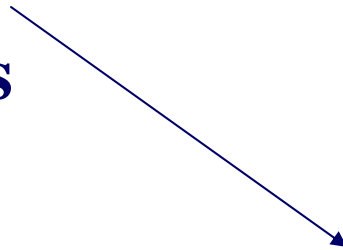
# Project TND Model and “Current Working Theory”

# **Motivation-Skills-Decision Making Model of Problem Behavior: The “Initial” Guiding Theory for TND**

**Motivation/  
Cognitive Misperceptions**

**Social and  
Self-control Skills**

**Decision Making**



**Behavior:  
- Violence-  
related  
- Drug use**

# Motivation-Skills-Decision Making Model

## Motivation:

- People like to live in harmony between their beliefs and behaviors.
- Awareness of discrepancies in one's beliefs leads to a desire to reduce the discrepancies (motivation).

# Motivation

In TND lessons, students:

- Examine their beliefs and perspectives
- Examine their ambivalence about drug use
- Clarify what kind of person they are and what they value
- Resolve self-arguments



# Lessons that Emphasize Motivation Component

## Session 2 – Stereotyping

- Students become aware that others often think they are deviant, but they are not that deviant. To achieve balance, to rebel against the stereotype.

## Session 3 – Myths and Denials

- Students identify myths associated with drug use, and how people use various beliefs to justify their drug use.

## Session 4 - Chemical Dependency

- Family roles, TRAP, assistance

## Session 5 – Talk Show

- Empathy on consequences of drug misuse

## Session 6 – Stress, Health, and Goals

- Students learn importance of health as a value in accomplishing life's goals.

## Session 9 – Marijuana Pannel

- Empathy and knowledge on marijuana consequences

## Session 11 – Perspectives

- Students find that most people have moderate views regarding drug use.

# Lessons that Emphasize Skills

- Social skills
  - Session 1: Introduction to Project TND and Communication Skills. Students learn the importance of listening and other communication skills.
- Coping
  - Session 6: Stress, Health, and Goals. Students learn healthy alternatives for coping with stress.
- Smoking cessation
  - Session 7: Tobacco Basketball and Use Cessation. Youth learn some quit tobacco use skills
- Self-control
  - Session 8: Self-Control. Students learn how to match their behavior to different social situations.

# Lessons the Emphasize Decision Making

- Session 10: Thought and Behavior Loops

- Youth learn steps of positive thinking and apply it to violence and drug use.

- Session 12: Decision Making and Commitment

- Students examine the many choices they have about behaviors, including drug use.
  - They make a personal commitment regarding drug use (e.g., to think about the dangers of drug use, reduce or quit drug use, or continue to be drug free).

# Program Evaluation Research

## Evaluation of TND

- 6 experimental (randomized) evaluation studies have been conducted since 1994.
- Studies have involved ethnically diverse groups of students from regular and alternative high schools, in urban, suburban, and rural areas.

# Early TND Evaluation Studies (1994-2000)

	<u>Design</u> (Random assignment)	<u>Implementers</u>	<u>Setting</u>
1.	SAC-program vs. program vs. control	USC health educators	Alternative* high schools (CA.)
2.	Program vs. control comparison	USC health educators	Regular high schools (CA.)
3.	Program HE taught vs. self-instruction vs. control	USC health educators	Alternative* high schools (CA.)

\* In California, alternative high schools are referred to as "continuation" high schools. Across the 3 studies, more than 2400 students participated.

# Demographic Characteristics of Students in the Early TND Evaluations

<b>Demographics</b>	<b>Study 1 (AHS)</b>	<b>Study 2 (RHS)</b>	<b>Study 3 (AHS)</b>
% Male	62	47	54
% Anglo	37	34	45
% Latino	46	38	42
% African American	8	26	5
% Asian	4	1	1
% Other ethnicity	5	1	1

NOTES: AHS=Alternative High School; RHS = Regular High School; N=2473

# Baseline Behavioral Characteristics of Students in the Early TND Evaluation Studies

	<b>Study 1</b>		<b>Study 2</b>		<b>Study 3</b>	
<b><u>Drug Use</u></b>	<b><u>(AHS)</u></b>		<b><u>(RHS)</u></b>		<b><u>(AHS)</u></b>	
% Using CIGARETTES	57		24		57	
% Using ALCOHOL	64		36		63	
% Using MARIJUANA	55		22		54	
% Using HARD DRUGS	29		7		30	
<b><u>Violence</u></b>	<b><u>M</u></b>	<b><u>F</u></b>	<b><u>M</u></b>	<b><u>F</u></b>	<b><u>M</u></b>	<b><u>F</u></b>
% WEAPON CARRYING	60	22	34	15	53	18
% VICTIMIZED	68	40	37	28	60	50

NOTES: AHS=Alternative High School; RHS = Regular High School

M=males, F=females.

Drug use %: pertains to any use in last 30 days. "Hard drugs" includes stimulants, hallucinogens, cocaine, inhalants, and other drugs.

Violence %: pertains to any such behavior in the last 12 months.

Weapon carrying includes guns and/or knives.

N=2473



Drug Use and Violence-Related Effects across the first 3 TND Evaluation Studies: Compares Prevalence Reduction of Program Group(s) Relative to Control Group(s)

	Study 1 (AHS); BC	Study 2 (RHS)	Study 3 (AHS); HEC
Cigarettes	NS	NS	27%
Alcohol	7%	12%	9%
Marijuana	NS	NS	22%
Hard Drugs	25%	25%	26%
Victimization*	23%	17%	6%
Weapon Carrying*	21%	19%	25%

Notes: AHS=alternative high schools; RHS=regular high schools; NS=not statistically significant; drug use refers to last 30 days; violence indicators refer to last 12 months; \* = among males only

# Recent TND Evaluation Studies (2000 to present)

	<u>Design</u> (Random assignment)	<u>Implementers</u>	<u>Setting</u> *
4.	Combined program vs. cognitive misperceptions-only program vs. control	USC health educators and trained classroom teachers	Regular and alternative high schools (CA.)
5.	TND vs. TND with social network focus vs. control	USC health educators	Alternative high schools (CA.)
6.	Program (regular teacher training) vs. program (enhanced training) vs. control	Trained classroom teachers	Mostly regular high schools (across U.S.); a few AHSs

\*Across 3 studies, more than 5700 students participated.

# Demographic Characteristics of Students in Recent TND Evaluations

<b>Demographics</b>	<b>Study 4 (AHS/RHS)</b>	<b>Study 5 (AHS)</b>	<b>Study 6 (AHS/RHS)</b>
% Male	52	62	48
% Anglo	18	11	41
% Latino	62	72	29
% African American	8	6	16
% Asian	8	0	3
% Other ethnicity	4	11	11

NOTES: AHS=Alternative High School; RHS = Regular High School;  
N=5757 across 3 studies

# Key Findings from Recent TND Evaluations

## Study 4:

- TND program only had an effect on reducing hard drug use at 1-year follow-up.
- Fidelity of implementation (based on classroom observations) was comparable between USC health educators and trained classroom teachers.
- Effects were observed at RHS and AHS

# Key Findings from Recent TND Evaluations

## Study 5:

- TND Network program (includes some activities taught with students in peer network groups) had effect on reducing substance use (marijuana, cocaine) at 1-year follow-up.
- TND Network was effective mainly for students with peer networks that did not use drugs.

# Key Findings from Recent TND Evaluations

## Study 6:

- Short-term student outcomes were better when teachers receive enhanced training vs. regular training, but this effect disappeared at 1-year follow-up. Standard training – 2 day in-person workshop will do.
- Behavioral effects at 1-year were found on marijuana use and hard drug use.

## Any Effects on Drug Use by TND Trial

TND Trial	Cigarettes	Alcohol	Marijuana	Hard drug use
TND-1 AHS		+		+
TND-1 RHS		+		+
TND-2 AHS	+	+	+	+
TND-Networked			+	+
TND-3 AHS				+
TND-Dissemination			+	+
TND-EA	In progress	In progress	In progress	In progress

### Summary of effects:

No negative impacts were found.

Most consistent effects were on hard drug use, in all 6 of 6 evaluated trials.

Effects on alcohol use, 3 trials; effects on marijuana use, 3 trials; effects on cigarette smoking , only 1 trial.

School environment manipulations do not enhance effects.

Self-instruction does not work.

Behavioral skills instruction does not appear important above and beyond cognitive misperception correction.

Quality of classroom interaction is very important.

Enhanced training appears to not be important.

Effects were found on violence victimization and weapons carrying: TND-1-AHS and RHS, TND-2 AHS.

In general, the program has tended to work better on heavier levels of use.

Differences in effects have failed to be observed as a function of gender or ethnicity of participant.

Current trial: Potential of motivational interviewing booster programming to strengthen program effects

# Does enriched school environment programming help?-- nope

- TND-1-AHS made use of a school-as-community component, with use of the ASB, 6 events per school, and a newsletter to network schools in that condition – manipulation check worked but not incremental effects of this component



## Does self-instruction programming work?--nope

- TND-2-AHS provided a comparison of the SAME program material via health educator delivered, highly interactive versus a self-instruction format (programmed learning packets, with a health educator simply available for questions)– the self-instruction program produced the same change in knowledge as the interactive program condition but did not do better than the control condition.

Does making use of social networks within anti-drug use socioenvironmental contexts help?--yes

- TND-Networked increased social interaction among youth within groups in the classroom, guided by appropriate peer leaders, and enhanced program effects in TND compared to the standard TND.

Does behavioral skills instruction above and beyond motivation and decision making help?---nope

- TND-3-AHS found that a combined TND program did no better than a cognitive misperception only version, and both worked on hard drug use.

# What does this mean? One may speculate...

- Something about the classroom interactional context is key.
- Something that students do based on prompting from the material is key.
- Healing talk– spontaneous statements made
  - By students to class (e.g., “both of my parents are alcoholic, maybe I should not drink”)
  - Students to each other (e.g., Student 1: “I only use meth on weekends, that is not abuse”; Student 2: “Yes, that is drug abuse.”)

## Current TND Research

- We are examining use of Motivational Interviewing and “change talk” as booster programming with three contacts, 1 in person and 2 by telephone
- We are comparing this condition to standard TND and a control condition

# Curriculum Overview

## Materials Needed for Session Delivery

- TND Teacher's Manual and cue cards, student workbooks and worksheets
- TND Game board and pieces
- TND Game score sheets
- TND Video "Drugs and Life's Dreams"
- Overhead projector or power point
- Roll sheets

# Project TND Curriculum Outline

- Session 1: Introduction and Communication Skills
- Session 2: Stereotyping
- Session 3: Myths and Denial
- Session 4: Chemical Dependency
- Session 5: Talk Show
- Session 6: Stress, Health, and Goals
- Session 7: Tobacco Basketball and Cessation\*
- Session 8: Self-Control
- Session 9: Marijuana Panel\*
- Session 10: Thought and Behavior Loops\*
- Session 11: Perspectives
- Session 12: Decision making and Commitment

Note: \* = Three new lessons added to the TND-1 curriculum to comprise the (current) 12-session TND-2 curriculum.



# Session 1: Introduction to Project TND and Communication Skills

- Students are introduced to Project TND and discuss the importance of being active listeners.
- Students learn how to communicate effectively and listen with an open mind.
  - Motivation & skills component (MSD Model).

## Session 2: Stereotyping

- Students learn that believing negative stereotypes can lead to self-fulfilling prophecies making themselves more “at risk” for substance abuse.
- Prevalence data regarding high school drug use is provided which shows them just how much students over estimate drug use among peers.
  - Motivation component (MSD Model).

## Session 3: Myths and Denial

- Students learn to identify myths associated with drug use, how to distinguish a truth from a lie, and how people use various beliefs to deny or justify their drug abuse.
- Session also confronts denial regarding drug use to minimize the perceptions of positive functions of drug use.
  - Motivation & decision making components (MSD Model).

## Session 4: Chemical Dependency

- Students learn about the negative consequences associated with chemical dependency.
- Family roles and enabling are also discussed.
- Students are also provided with a self-help assistance tool kit.
  - Motivation component (MSD Model).

# Session 5: Talk Show

- Students role play a talk show whose guests are affected by drug abuse.
- They learn about many physical, emotional and social consequences of chemical dependency.
- Students can experience what it would be like to have a drug abuser impact your life everyone participates- 6 students sit on panel.
  - Motivation & decision making components (MSD Model).

## Session 6: Stress, Health and Goals

- Students learn various ways to cope with stress and the importance of health as a life value in accomplishing life's goals.
  - Motivation and skills components (MSD Model).

# Session 7: Tobacco Basketball and Use Cessation

- Students play a “tobacco basketball” question game and learn about tobacco use consequences and cessation information.
- They are also introduced to a brief quit manual.
  - Motivation and skills components (MSD Model).

## Session 8: Self-Control

- Students learn to examine their own level of self-control, how to match their behavior to different social contexts, the importance of being assertive, and achieving personal goals.
  - Skills component (MSD Model).



## Session 9: Marijuana Panel

- Students learn about the consequences of marijuana use through use of a group “panel” activity.
- Students role-play those affected by marijuana use.
  - Motivational component (MSD Model).

# Session 10: Thought and Behavior Loops

- Students learn how positive thinking, choices and behavior, or negative thinking, choices and behavior are tied together as process “loops”.
- Also covered are reasons for violent behavior and violence prevention material.
  - Motivation, skills and decision-making components (MSD Model).

# Session 11: Perspectives

- Students present differing views on topics (e.g., public smoking laws; drug use) and find out that most people have moderate views regarding drug use.
  - Motivation and decision making components (MSD Model).

# Session 12: Decision Making and Commitment

- Students realize they have many choices and can make different decisions regarding drug use and abuse.
- Students practice decision-making skills by thinking through the “pros” and “cons” of drug use and make a commitment to themselves regarding drug use.
  - Decision making component (MSD Model).

Questions ????