

# A R.E.C.I.P.E. FOR RESILIENCE.

**PART TWO:  
DRUGS – STILL NOT PART OF A  
SUCCESSFUL RECIPE!**



Coalition of Alcohol and Drug Educators

**Dalgarno**  
INSTITUTE



# TO START WITH – **QUICK RECAP**

**BASIC  
SOCIALIZATION  
& LEARNING  
STAGES**

**ALL OF US  
START LIFE AS A  
'WHEELBARROW'**

**WE HUMANS,  
ARE NOT JUST A  
'LUMP OF CLAY' OR  
JUST A 'BLUEPRINT'  
WE ARE A  
R.E.C.I.P.E.**



# WHAT IS A WHEELBARROW, AGAIN?

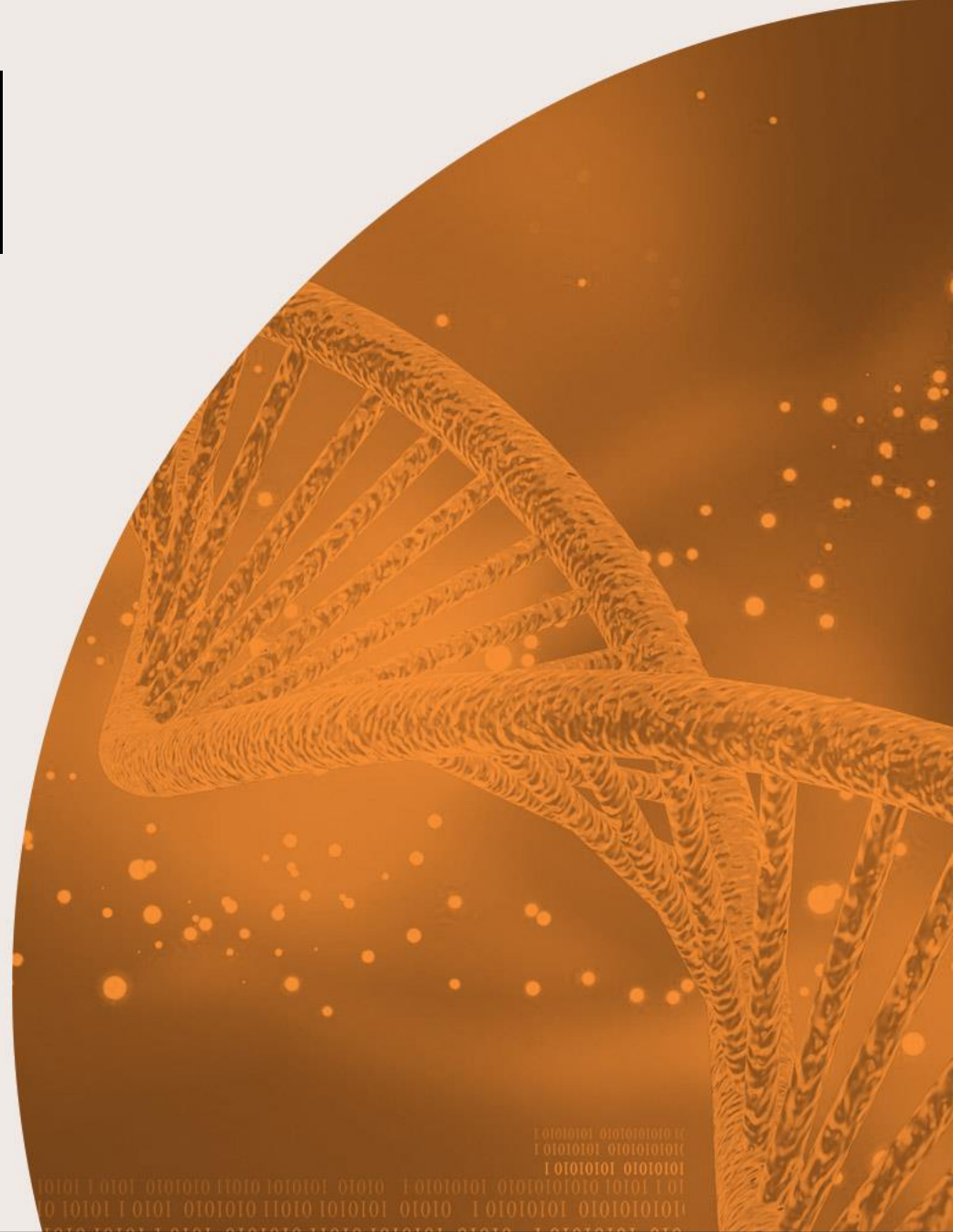
*It is an empty  
powerless vessel, that  
is filled by something  
or someone else and  
pushed by something  
and someone else.*



# EPIGENETIC REFRESHER

*Remember your DNA doesn't change, but many factors influence the way the genetic information plays out.*

*Even 'encode' over time. It can be slow and subtle, but that's how much influence all the **RECIPE** factors can have on outcomes – we have some influence over changing them.*



# ALL YOUNG CANNABIS USERS FACE PSYCHOSIS RISK

*“This finding means that all young cannabis users face psychosis risk, not just those with a family history of schizophrenia or a biological factor that increases their susceptibility to the effects of cannabis – The whole population is prone to have this risk..*

Patricia J. Conrod, PhD, professor of psychiatry, University of Montreal, Canada,  
[https://www.dalgarnoinstitute.org.au/images/resources/pdf/cannabis-conundrum/All\\_Young\\_Cannabis\\_Users\\_Face\\_Psychosis\\_RiskMedscape2018.pdf](https://www.dalgarnoinstitute.org.au/images/resources/pdf/cannabis-conundrum/All_Young_Cannabis_Users_Face_Psychosis_RiskMedscape2018.pdf)



# CANNABIS EXPOSURE DURING CRITICAL WINDOWS OF DEVELOPMENT: EPIGENETIC AND MOLECULAR PATHWAYS IMPLICATED IN NEUROPSYCHIATRIC DISEASE

Developmental cannabis exposure alters epigenetic processes with functional gene consequences. These include potentially heritable alterations in genes and molecular pathways critical for brain development and associated with

- autism spectrum disorder (ASD),
- attention deficit hyperactivity disorder (ADHD),
- schizophrenia,
- addiction,
- and other psychiatric diseases.

Springer Academic <https://link.springer.com/content/pdf/10.1007/s40572-020-00275-4.pdf>

However, that debate has been done and dusted. It is a remarkable combination of both. One of the better ways to look at how we are developed is by using the idea of a R.E.C.I.P.E. (We use the following acrostic)

- **RELATIONSHIPS**
- **ENVIRONMENT**
- **CONDUCT**  
(how you behave and why)
- **INFORMATION**
- **PARADIGM AND PRACTICE**  
(your worldview and how you live it out)
- **EPIGENETICS**



*“It is now clear that experience, be it*

- environmental toxins,
- maternal behavior,
- psychological or physical stress,
- learning,
- drug exposure, or
- psycho-trauma,

leads to active regulation of the chemical and three-dimensional structure of DNA in the nervous system...These epigenomic changes lead to alterations in gene readout (and who knows what else?) in cells in the nervous system that trigger lasting, and in some cases perpetual, changes in neural function.”

(The Emerging Field of Neuroepigenetics J. David Sweatt, Department of Neurobiology and Evelyn F. McKnight Brain Institute, University of Alabama at Birmingham, Birmingham, AL 35294, USA <http://dx.doi.org/10.1016/j.neuron.2013.10.023>



In this session we are going to start you looking at the other 5 'ingredients' in the **R.E.C.I.P.E.** that is YOU!

- **RELATIONSHIPS**
- **ENVIRONMENT**
- **CONDUCT**  
(how you behave and why)
- **INFORMATION**
- **PARADIGM AND PRACTICE**  
(your worldview and how you live it out)

There are many learning and socializing models, but our journey we are going to start you investigating the following model:

- **AFFECTIVE LEARNING**
- **OPERANT LEARNING**
- **OBSERVATIONAL LEARNING**
- **COGNITIVE LEARNING**
- **CULTURAL LEARNING**



# affective learning

'learning via feeling'

12-24 months

In the early stages of this socialisation/learning process, how the infant feels has profound consequences. (These also matter later stages of life too)

**Safety – Security – Tenderness – Care – Affection**





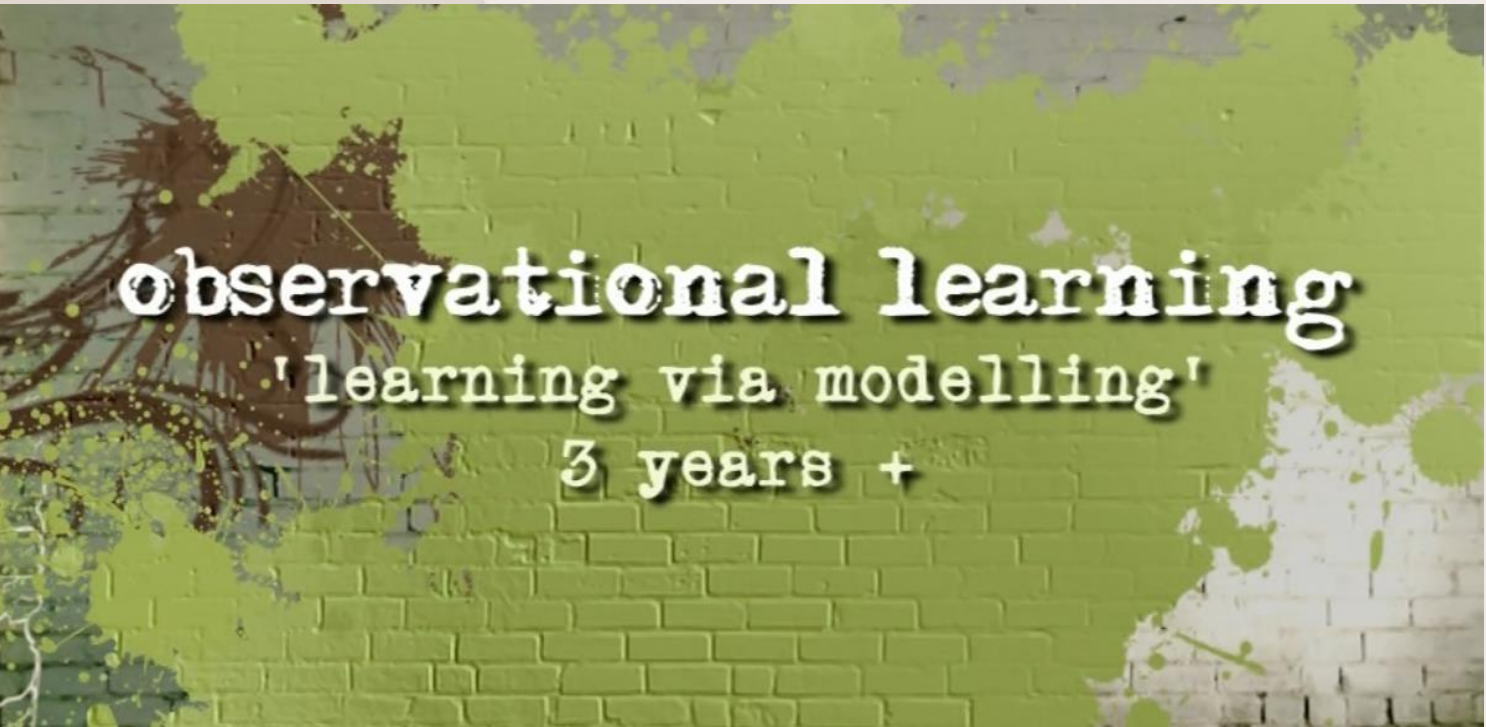
# operant learning

'learning via doing'

1-3 years

In the early stages of this socialisation/learning process, the child is 'trying things out' – What the care giver does in this early stage will determine what behaviours/activities are extinct or developed. This is done by what is allowed or not allowed by the care giver. Boundary Setting, structure and discipline is vital at early stage and continues through later developmental stages too

**Attempting – Inquisitive – Trial & Error – Boundaries**

The image shows a green brick wall with various paint splatters in shades of green, yellow, and brown. The text 'observational learning' is written in a white, typewriter-style font with a drop shadow effect.

# observational learning

'learning via modelling'

3 years +

In the early stages of this socialisation/learning process, the child is watching and listening to not only the care giver, but also the environment they are in. – the actions, behaviours, words, tone, and the activities in the environment make a strong impression on the infant (and in future stages of development too) More is 'caught than taught' in this space

**Modelling – Demonstration – Mimicking – Correction**



# cognitive learning 'thinking'

In the early stages of this socialisation/learning process, the child is developing their own interpretations of their environment and beginning to investigate, question and evaluate, separately, but not independent of the relational care giver environment. Learning how to think critically, logically rationally is geared not only to information, but also values and belief systems. Also that this process oversees feelings, is not driven by them

**Wisdom – Logic – Evaluation – Analysis – Values – World View**





# cultural learning

'conformity'  
peer matrix

This socialisation/learning stage really begins once the child commences relationship with peers, but more so in the non-supervised independent peer interaction environment. The influence – positive or negative – of the ‘cultural/peer’ environment is impacted by teens priorities, sense of self, strength of values and family environment and how secure that makes them feel. If you, as a teen, have no filters, no resiliency, then the likelihood that ‘whatever my peers do is okay by me’, will be the narrative. What is needed

**Clear Vision/Direction – Values – Security – Trusted Wiser Mentors**



## CONVERSATION STARTER



Understanding a little more about how we learn and grow in our understanding of the world, what specific learning process did you feel helped you make smarter and healthier decisions and why was that?

And what process was unhelpful and why?

## Discuss

“ ”

# QUOTE OF THE MOMENT



“ ”

IN BETWEEN STIMULUS  
AND RESPONSE IS THE  
GREATEST POWER YOU  
HAVE, THE POWER TO  
CHOOSE!

COVEY

”





## TAKE-A-WAYS: SCRIPT BUILDER POINTS



### Strengthening my BUNGEE Rope, by adding to Scripting Tool-kit

- 1) Evidence now proves, *all young cannabis* users face psychosis risk.
- 2) Who and How we are is made up of a lot of factors, including our environments, decisions, values and behaviours.
- 3) Drug use messes with your genes. Your choices really matter, particularly around substance use as it will not only impact brain development but can also influence genetic expression for the worse.
- 4) Environments matter – Not just where, but who with and the activities and practices you're part of.  
(some you have no control over, but others you do)  
– Exercise your power to choose well!



HOW **NOT** TO SAY YES TO  
CAPACITY & RESILIENCY  
DIMINISHING  
**DRUGS**



**WHAT YOU HAVEN'T HEARD**  
*about the push to legalize marijuana*



**MORE RESOURCES FOR  
BUILDING RESILIENCY  
WITHOUT DRUG USE**



# **Strengthening my BUNGEE Rope – Filling Your Wheelbarrow with good stuff!**

CLICK ON LINKS BELOW

**PATHWAYS FROM EPIGENOMICS**

**DRUG POLICY BUILDING OR DEMOLISHING COMMUNITY  
RESILIENCY**

**SOCIAL DETERMINEANTS & SUBSTANCE USE**

**CANNABIS CONUNDRUM INFORMATION SHEET**

**VAPING CRISIS INFORMATION SHEET**