Non Suicidal Self Injury in Youth:

From Evidence to Practice

Child Guidance Clinic
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Objectives

- What we know about NSSI
- Assessment of NSSI
  - Some useful tools
- Intervening and treating NSSI
  - Getting at what's underneath….

Defining Non-Suicidal Self Injury

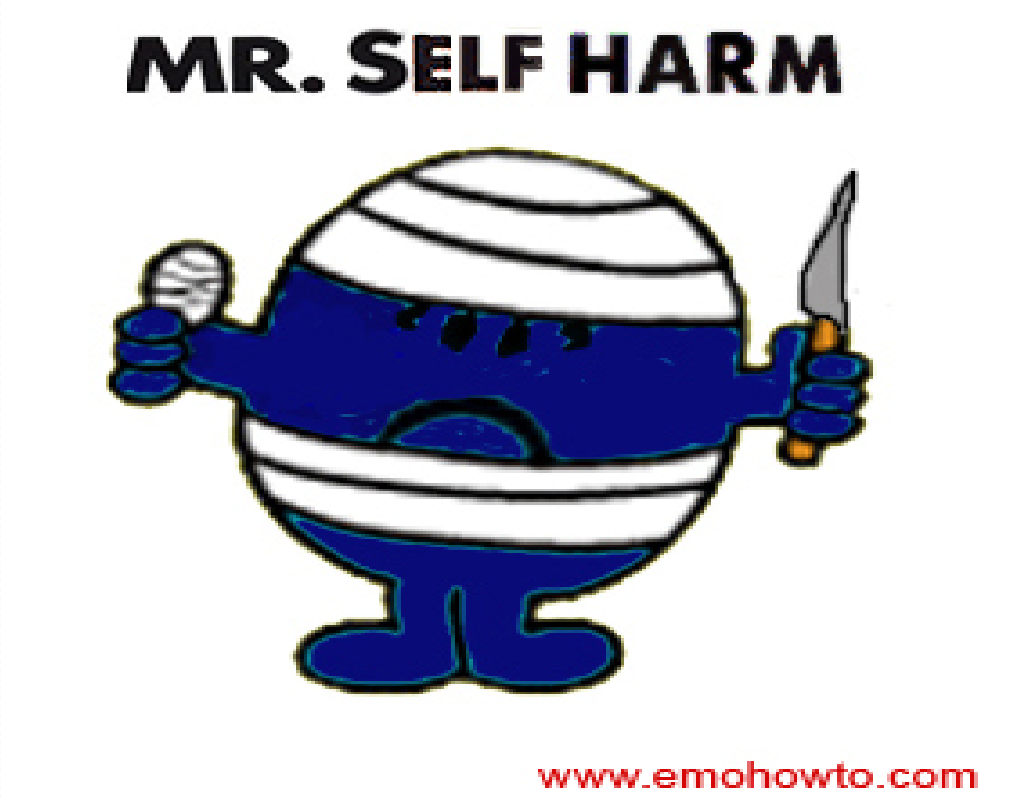
Nixon and Heath, 2009

- Purposefully inflicting injury that results in immediate tissue damage
- Without suicidal intent
- Not socially sanctioned within one's culture
- Nor for display
- Occurs within the broader range of non-suicidal self harm behaviors such as minor overdosing, ingesting non ingestible objects etc.

Types of Self Injury/Age of Onset

- Scratching
- Cutting
- Burning
- Self hitting
  - In community samples, the majority self injure once or twice
  - Those who repeat often have multiple methods
- Arms, hands, wrists, thighs, stomach
- Mean age of onset: 12-15 years

Not just a girl thing

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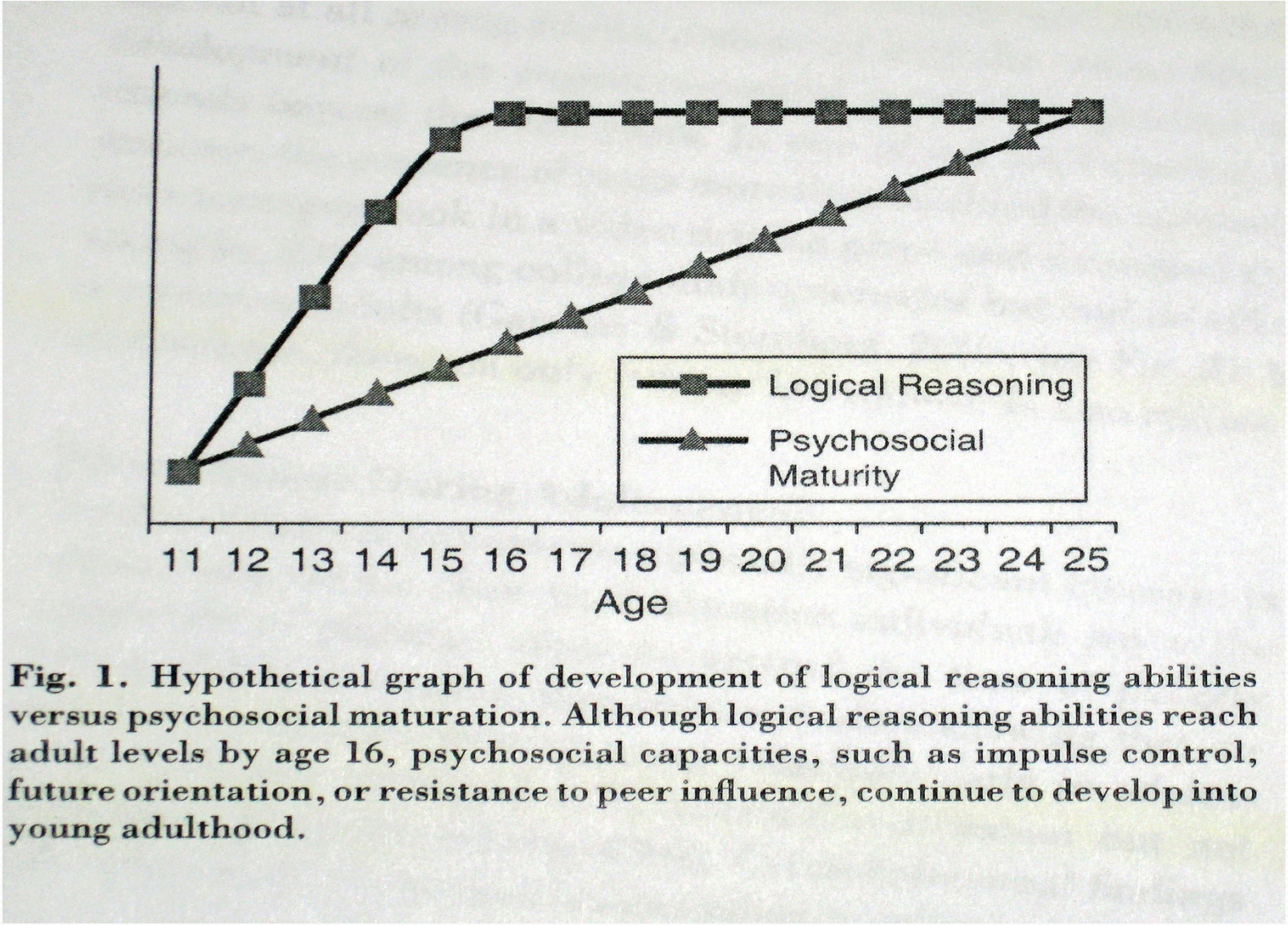


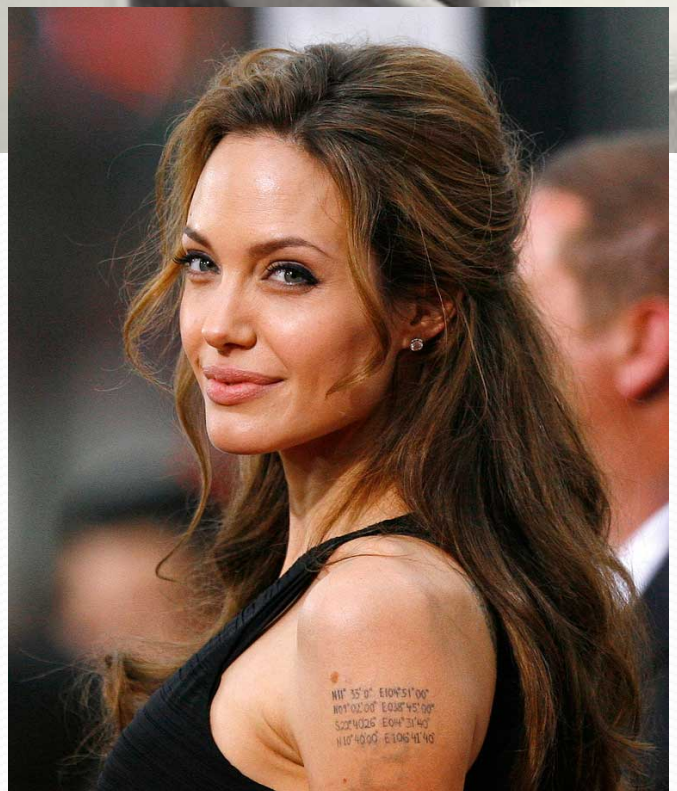
Fig. 1. Hypothetical graph of development of logical reasoning abilities versus psychosocial maturation. Although logical reasoning abilities reach adult levels by age 16, psychosocial capacities, such as impulse control, future orientation, or resistance to peer influence, continue to develop into young adulthood.

Steinberg, L. (2007).

Risk Taking

- Adolescents engage in more risky behaviour than adults
- Logical reasoning capacity is comparable between teens and adults
- But…
- Psychosocial capacities such as impulse control, resistance to peer influences etc lag behind logical reasoning capacity in terms of matching adult levels

Steinberg, L. (2007). Risk Taking in Adolescence: New Perspectives From Brain and Behavioural Science. *Current Direction in Psychological Science* Vol 16, Number 2, p. 55-58.



"Sometimes I even cut myself to see how much it bleeds. It's like adrenaline, the pain is such a sudden rush for me."
Eminem

Adolescent NSSI and the Internet

- Adolescents group themselves by common interest and behaviour both on and off line
- Whitlock et al, 2006 (*Pediatrics*)
  - 400 self injury message boards, most used by females, 12 to 20 years old
  - Co-morbid issues such as depression, eating disorders and suicide often mentioned on message boards
- Lewis et al, 2011 (*Pediatrics*)
  - 50 character and 50 non-character You Tube sites on NSSI
  - Most highly rated by young females, graphic depictions present esp in non character, some education, none suggest stopping
- Easy access to an abundance of NSSI related content online may ultimately reinforce NSSI as an acceptable/normal behaviour and perpetuate its occurrence in schools and other community settings as a means of group identification

RESEARCH

Nonsuicidal self-harm in youth: a population-based survey

CMAJ 2008;178(3):306-12

Mary K. Nixon MD, Paula Cloutier MA, S. Mikael Jansson PhD

Abstract

Background: Nonsuicidal self-harm includes cutting, scratching, burning and minor overdosing. There have been few studies that have examined the rate of self-harm and mental-health correlates among community-based youth. We performed a population-based study to determine the prevalence of nonsuicidal self-harm, its mental-health correlates and help-seeking behaviour.

Methods: We used data from the Victoria Healthy Youth Survey, a population-based longitudinal survey of youth aged 14–21 in Victoria, British Columbia. The survey included questions about the history, method, frequency, age of onset and

Nonsuicidal self-harm includes behaviours such as self-cutting, scratching and burning, done without the conscious intent to take one's life. Onset typically occurs between 14 and 24 years of age.[1,2] The most common reasons for this type of harm are regulation of affect (e.g., to reduce tension or relieve dysphoric feelings), but reasons may also include self-punishment, interpersonal reasons, sensation seeking and anti-dissociation mechanisms.[3] Factors associated with nonsuicidal self-harm include being female, awareness of self harm in peers, family members who self harm, drug misuse, depression, anxiety, impulsivity, disruptive disorders and low self-esteem.[4,5] Suicide ideation and attempts are more likely to be reported among those with repeated nonsuicidal self-harm.[6]

Method

- 664 randomly selected youth,
  - aged 12 to 18, participated in wave 1 in 2003
- 580 participated in a second wave in 2005
  - self-harm questions were asked

Survey Sample N=568		
sex	n	%
Male	258	45.5%
Female	310	54.6%

Results

Mean age of onset - 15.3, range 10-20

Mean duration – 1.78 yrs

58% stopped (N=50/93)

Have you ever harmed yourself in a way that was deliberate and not intended as a means to end your life? N=568		
	n	%
Yes	96	16.9%
No	472	83.1%

Number of males and females who have self-harmed N=95		
Sex	n	%
Male	23	24.3%
Female	72	75.8%

Which statements best describe the self harm behaviour? (Yes/No)

N=95		
Type	n (yes)	% (yes)
Self Injury as cutting, scratching, self-hitting, etc.	79	83.2%
Ingesting a substance in excess of the prescribed or generally recognized therapeutic dose	28	31.5%
Ingesting a recreational or illicit drug or alcohol as a means to harm yourself	15	16.9%
Ingesting a non-ingestible substance or object	0	0%
Other	8	9.4%

Frequency and Origin

- How frequently did (does) this self-harm behaviour occur?
  - One occasion only
    - 29%
  - One to three times
    - 33%
  - More than three times
    - 38%
- Where did you get the idea: n=95
  - It was my own idea: 72%
  - Heard about it from my friends: 17%
  - I saw it in a movie or television: 16%
  - I read about it: 12%
  - From family: less than 5%

Affect Regulation and Addictive Aspects of Repetitive Self-Injury in Hospitalized Adolescents

MARY K. NIXON, M.D., PAULA F. CLOUTIER, M.A., AND SANJAY AGGARWAL, M.D.

ABSTRACT

Objective: The incidence of self-injurious behavior (SIB) in adolescent psychiatric inpatients has been reported to be as high as 61%, yet few data exist on the characteristics and functional role of SIB in this population. Because of the repetitive nature of SIB and its potential to increase in severity, features of SIB and its specific reinforcing effects were examined. **Method:** Participants were 42 self-injuring adolescents admitted to a hospital over a 4 month period. Data sources consisted of self-report questionnaires and medical chart review. **Results:** Mean age was 15.7 ± 1.5 years. Reported urges to self-injure were almost daily in 78.6% of the adolescents ($n = 33$), with acts occurring more than once a week in 83.3% ($n = 35$). The two primary reasons endorsed for engaging in self-injury were "to cope with feelings of depression" (83.3%, $n = 35$) and "to release unbearable tension" (73.8%, $n = 31$). Of the sample, 97.6% ($n = 41$) endorsed three or more addictive symptoms. **Conclusions:** SIB in hospitalized adolescents serves primarily to regulate dysphoric affect and displays many addictive features. Those with clinically elevated levels of internalized anger appear at risk for more addictive features of this behavior. *J. Am. Acad. Child Adolesc. Psychiatry*, 2002, 41(11):1333–1341. **Key Words:** self-injury, addiction, affect regulation.

Various terms such as "delicate self-cutting," "self-wounding," "pathological self-mutilation," and "deliberate self-harm" have been used to describe a range of self-injurious behavmonly known as a symptom of borderline personality disorder (BPD) (American Psychiatric Association, 1994).

In a recent study, Briere and Gil (1998) reported adult

J. Am Acad Child Adolesc Psychiatry, 41:11, November 2002

Demographics (n=42)

- 42/50 had SI freq of at least 1/month over past 6 months
- age: 15.7 ± 1.5
- female 85.7%, male 14.3%
- age of onset 12.7±3.2
  - males 15.2 ± 1.7
  - females 12.3 ± 3.2
- Inpatients: 27/91 (30%)
- Partial hospitalization pts: 15/39 (39%)

Clinical Characteristics

- **GAF** 49.2 ± 9.6
- **BDI-II** 37.6 ± 10.4 (Severe range (≥ 29) 78.6% (33))
- **STAXI** (percent in the clinical range)

state anger	59.5% (25)
trait anger	31.0% (13)
internalized anger	52.4% (22)
externalized anger	52.4% (22)
anger control	16.7% (07)

- **Self -reported (Self Injury Inventory)**

problems with drugs/alcohol	42.9% (18)
eating disorders	50.0% (21)

Why do you self-injure?
(mean number of reasons 8.2 ±3.8)

- Cope with depression ---------- 83.3% (35)
- Release unbearable tension ---------- 73.8% (31)
- Cope with nervousness/fear---------- 71.4% (30)
- Express frustration ---------- 71.4% (30)
- Express anger/revenge ---------- 66.7% (28)
- Feel pain in one area, when the other pain I feel is unbearable ---------- 61.9% (26)
- Distraction from unpleasant memories------ 59.5% (25)
- Punish self for being bad / bad thoughts ----- 50.0% (21)
- Stop suicidal ideation/attempt ---------- 47.6% (20)
- Stop feeling alone/empty ---------- 42.9% (18)

endorsed at least one affect regulation reason 97.6% (41)

endorsed all five affect regulation reasons 40.5% (17)

Addictive Features

Feels relief after NSSI (92.9%, n=39)

Since you started to self-injure have you found that:

- NSSI occurs more often and/ or severity increased since started ---------- 97.6% (41)
- NSSI continues despite recognizing it as harmful 95.2% (40)
- Tension recurs without NSSI---------- 85.7% (36)
- Urges are upsetting, but not enough to stop NSSI 81.0% (34)
- NSSI causes problems socially ---------- 73.8% (31)
- Frequency and/or intensity has increased to achieve the same effect ---------- 73.8% (31)
- Time consuming ---------- 64.3% (27)

98% endorsed 3 or more items

81% endorsed 5 or more items

Co-Occurrence and NSSI in Youth

- Psychiatric diagnoses
  - Mood disorders eg depression, bipolar disorder
  - Anxiety
  - Eating Disorders
  - ADD/ADHD
  - Substance abuse
  - Borderline Personality Disorder

- Abuse
  - Only a modest association exists between childhood abuse and NSSI (Klonsky et al, 2007)
    - Examined 43 studies and concluded that child sexual abuse could be considered a "proxy risk factor" for NSSI
    - ie child abuse may play a role for some regarding NSSI but there are many who self injure who have not been abused and many who have been abused who do not self injury

Psychological Characteristics and NSSI

(Klonsky and Muehlenkamp, 2007)

- Negative emotionality
  - More frequent and intense negative emotions
- Deficits in emotion skills
  - Difficulties with their experience, awareness and expression of emotions
- Self derogation
  - Self critical, self directed anger

Is self injury contagious?

- Increased rates of self injury have been observed amongst adolescent inpatients and peer groups in schools and community settings
- There is growing concern that NSSI has a contagious effect amongst adolescents
- Scottish study (Young et al, 2006): identification with Goth culture was strongly associated with lifetime presence of self harm (53%) and attempted suicide (47%)

Lofthouse, N and L. Katz (2009). Chapter 13 - Adolescent Nonsuicidal self-injury in an inpatient setting in: *Self Injury in Youth* (Nixon and Heath)

Lieberman, R. (2004). Understanding and responding to students who self mutilate. Principal Leadership (High School Ed.), 4, 10-13.

Young, R, Sweeting, H., & P. West, (2006). Prevalence of deliberate self harm and attempted suicide within contemporary Goth youth subculture: Longitudinal cohort study. *British Medical Journal,* 332, 1058-1061.

How common is self injury?

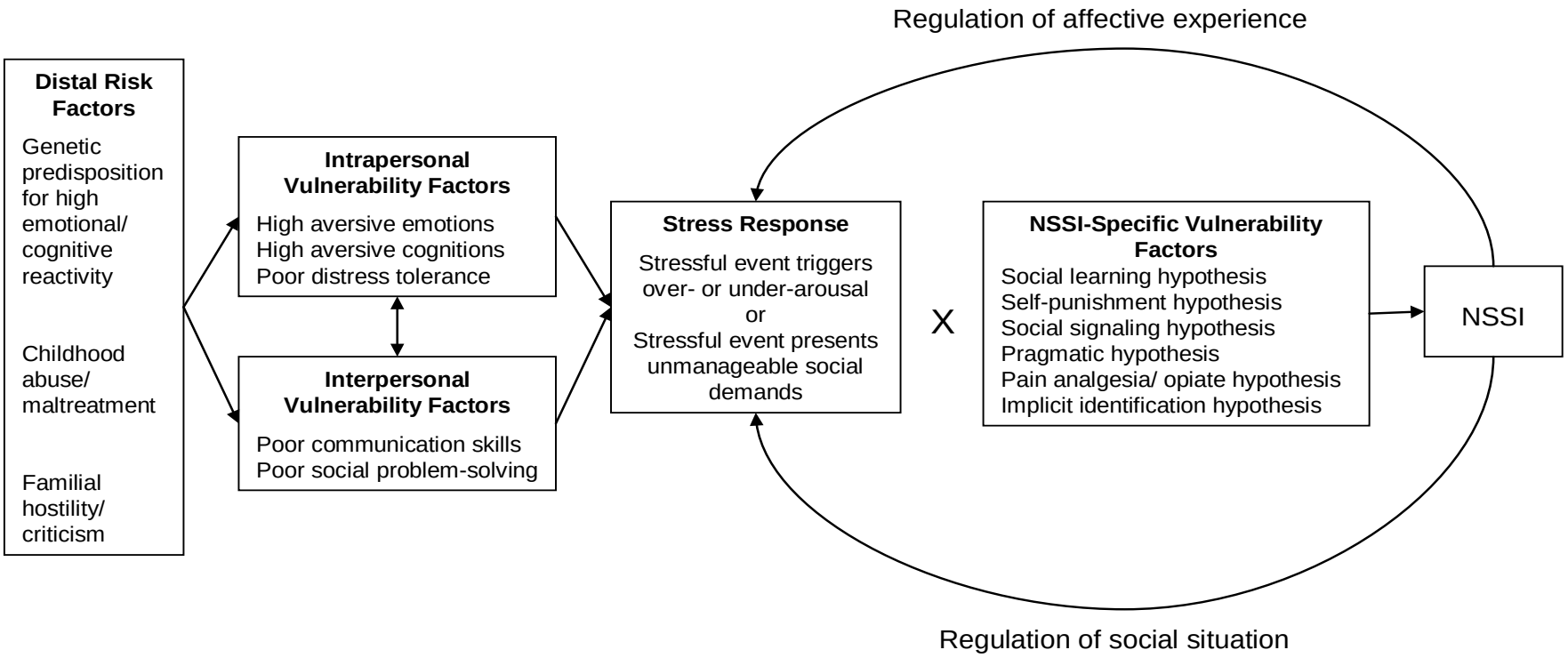
- Lifetime adolescent prevalence rates in the community vary but average ~ 15-20% in developed nations
- Higher rates are found amongst adolescent inpatient settings

Risk Factors for NSSI

- Axis I psychiatric disorders
  - Mood disorders – especially depression
  - Anxiety disorders
  - Psychotic disorders
  - Eating Disorders, among others…
- Axis II disorders
  - Particularly Borderline PD
  - Developmental disability
- Adverse childhood experiences
  - Neglect
  - Abuse (physical, emotional, sexual)
  - Attachment problems
  - Poverty
  - Peer victimization
- Self derogatory beliefs
- Emotional dysregulation

Proximal and Distal Risk Factors for NSSI

Nock M (2009)Why do people hurt themselves? New insights into the nature & functions of self-injury.



Suicide Behaviour and NSSI in Youth

- 50% of a community based sample had a hx of a suicide attempt (Muehlenkamp and Gutierrez, 2007)
- 70% of inpatients (Nock et al., 2006)
- 73.8% of inpatients and partial hospitalized patients (Nixon et al., 2002) with repetitive SI, at least one SA in past 6 months
- Self injurers who are more likely to attempt:
  - More repulsed by life
  - Have greater amounts of apathy
  - Are more self critical
  - Fewer connections to family members
  - Less fear re suicide

  (Muehlenkamp and Gutierrez, 2004 and 2007)

Correlates and Predictors of Non-suicidal Self Injury in Youth

M.K. Nixon [1]
G. Barnes [1]
P.Cloutier [2]

Funding: CIHR

Centre for Youth & Society
University of Victoria

CHEO

1

University of Victoria | British Columbia Canada

2

CHILDREN'S HOSPITAL OF EASTERN ONTARIO

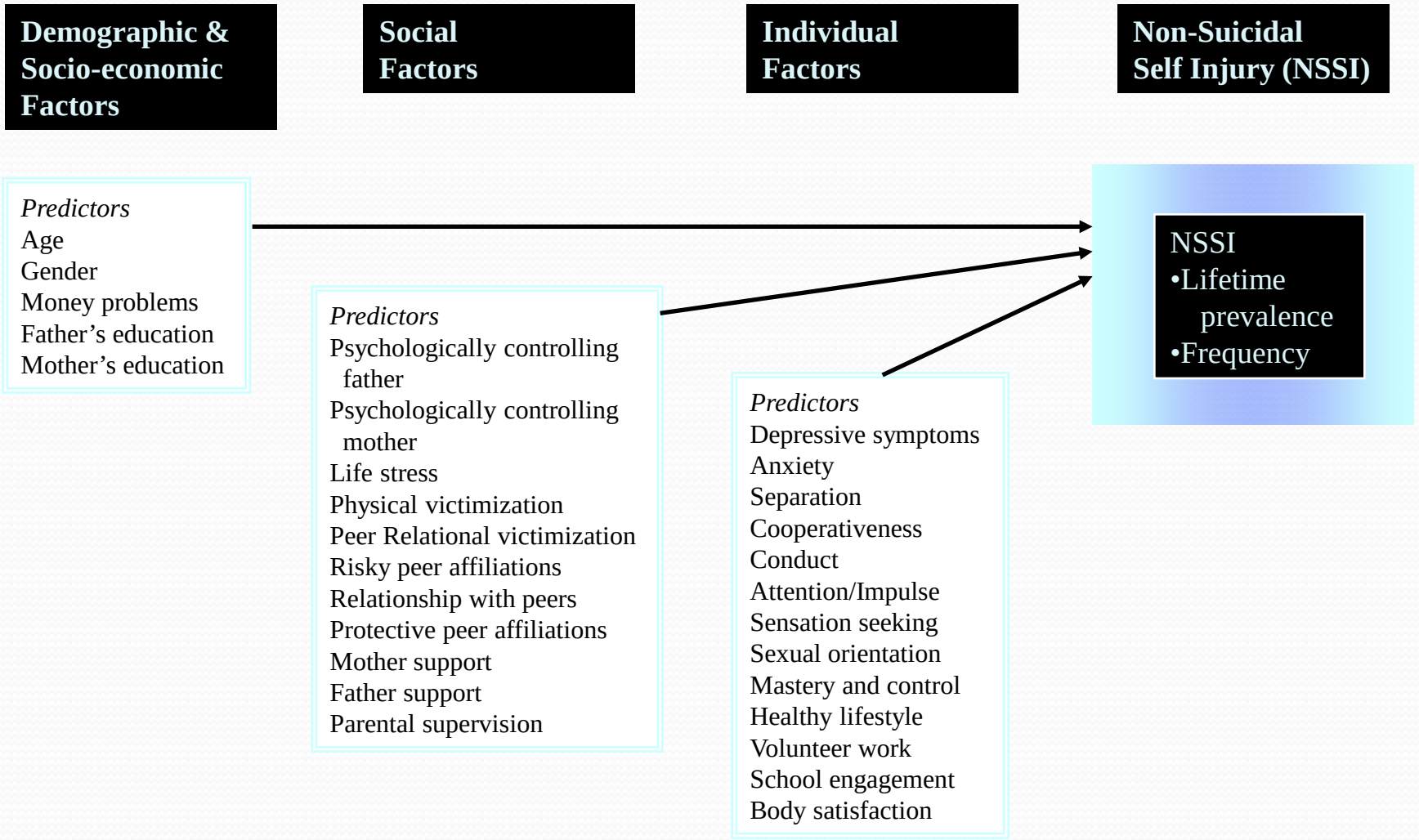
Method

- Health Youth Survey
  - Longitudinal Design/Cross sectional data
    - Three waves of data collected in 2003, 2005 & 2007
  - 580 adolescents completed the 2005 interviews
    - Interviewer administered and self report sections
  - Measures included information on:
    - socioeconomic demographics, neighborhood quality
    - life stress, victimization, peer relationships
    - parental support/quality of relationship
    - mental health (BCFPI), mastery/control, body satisfaction
    - sensation seeking (Zuckerman SS Scale)
    - nonsuicidal self harm (modified CASE definition of DSH)

Lifetime Prevalence of Non Suicidal Self Injury: 13.9%

Have you ever purposely tried to harm yourself without the intent to take your life? If so, how?	N	%
Self injury such as cutting, scratching and self-hitting	79	83
Ingesting a substance in excess of the generally recognized dosage	28	32
Ingesting recreational/illicit drug/alcohol as a means to harm yourself	15	17
Ingesting a non-ingestible substance or object	0	0
Other	8	9

Non-Suicidal Self Injury Predictor Model



Correlations Between Social Factors and Lifetime Prevalence of NSSI

Social Factors	Ever NSSI	Frequency of NSSI
Life stress	.17***	.21
Physical victimization	.10*	.20
Peer relational victimization	.19***	.13
Risky peer associations	.14***	.26***
Relationships with peers	-.03	-.20
Protective peer affiliations	-.01	-.17
Psychologically controlling father	.10*	.14
Psychologically controlling mother	.17***	.36***
Mother support	-.16***	-.30**
Father support	-.07	-.05
Neighborhood quality	-.15***	.01
Parental supervision	-.14***	-.19
Parenting style Index	-.18***	-.32**

Correlations Between Individual Factors and Lifetime Prevalence of NSSI

Individual Factors	Ever NSSI *r*	Frequency of NSSI *r*
Mental Health Symptoms		
Externalizing	.24***	.29*
Internalizing	.26***	.40***
Anxiety	.17***	.23*
Depression	.31***	.42**
Attachment	.15***	.25*
Cooperativeness	.22***	.24*
Conduct	.15***	.12
Attention	.16***	.25*
Sensation seeking	.10*	-.08
Sexual orientation (Phi)	.23***	.05
Mastery/Control	-.19***	-.12
Healthy lifestyle	-.06	-.02
Volunteer work	.02	.05
School engagement	-.08	-.05
Body satisfaction	-.25***	-.36***

Hierarchical Logistic Regression of Predictors of Lifetime Prevalence of NSSI

Step predictors	Step 1	
	OR	(95% CI)
Demographic/SES		
Age	1.00	(0.99-1.02)
Gender	3.72***	(2.04-6.80)
Money problems	2.26**	(1.30-3.90)
Social		
Parenting style Index		
Life stress		
Peer Relational Victimization		
Risky Peers		
Individual		
Body satisfaction		
Sensation seeking		
Depressive symptoms		
Sexual orientation		
Externalizing Symptoms		
Model χ^2	33.61	
Nagelkerke R^2	0.11	

Hierarchical Logistic Regression of Predictors of Lifetime Prevalence of NSSI

Step predictors	Step 1		Step 2	
	OR	(95% CI)	OR	(95% CI)
Demographic/SES				
Age	1.00	(0.99-1.02)	1.00	(0.99-1.02)
Gender	3.72***	(2.04-6.80)	4.08***	(2.17-7.66)
Money problems	2.26**	(1.30-3.90)	1.51	(0.84-2.72)
Social				
Parenting style Index			0.62	(0.36-1.06)
Life stress			1.11	(0.82-1.49)
Peer Relational Victimization			2.91*	(1.09-7.83)
Risky Peers			1.29	(1.00-1.67)
Individual				
Body satisfaction				
Sensation seeking				
Depressive symptoms				
Sexual orientation				
Externalizing Symptoms				
Model χ^2		33.61		56.75
Nagelkerke R^2		0.11		0.18

Hierarchical Logistic Regression of Predictors of Lifetime Prevalence of NSSI

Step predictors	Step 1		Step 2		Step 3	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Demographic/SES						
Age	1.00	(0.99-1.02)	1.00	(0.99-1.02)	1.01	(0.99-1.02)
Gender	3.72***	(2.04-6.80)	4.08***	(2.17-7.66)	3.72***	(1.89-7.29)
Money problems	2.26**	(1.30-3.90)	1.51	(0.84-2.72)	1.11	(0.58-2.12)
Social						
Parenting style Index			0.62	(0.36-1.06)	1.10	(0.58-2.07)
Life stress			1.11	(0.82-1.49)	1.06	(0.77-1.47)
Peer Relational Victimization			2.91*	(1.09-7.83)	1.56	(0.52-4.73)
Risky Peers			1.29	(1.00-1.67)	1.18	(0.89-1.56)
Individual						
Body satisfaction					0.64	(0.39-1.05)
Sensation seeking					1.10	(0.97-1.25)
Depressive symptoms					3.42**	(1.54-7.59)
Sexual orientation					2.63**	(1.28-5.42)
Externalizing Symptoms					2.33	(0.56-9.73)
Model χ^2		33.61		56.75		94.80
Nagelkerke R^2		0.11		0.18		0.30

Hierarchical Linear Regression of Predictors and Frequency of NSSI

	Step 1
	β
Demographic & Socio-economic Predictors	
Age	.19
Gender	.08
Father Education	-.25*
Social Predictors	
Parenting Style	
Individual Predictors	
Depressive Symptoms	
R^2 Change	.09
R^2 Total	.09

Hierarchical Linear Regression of Predictors and Frequency of NSSI

	Step 1 β	Step 2 β
Demographic & Socio-economic Predictors		
Age	.19	.20
Gender	.08	.06
Father Education	-.25*	-.19
Social Predictors		
Parenting Style		-.29*
Individual Predictors		
Depressive Symptoms		
R^2 Change	.09	.08
R^2 Total	.09	.17

Hierarchical Linear Regression of Predictors and Frequency of NSSI

	Step 1 β	Step 2 β	Step 3 β
Demographic & Socio-economic Predictors			
Age	.19	.20	.19
Gender	.08	.06	.09
Father Education	-.25*	-.19	-.17
Social Predictors			
Parenting Style		-.29*	-.14
Individual Predictors			
Depressive Symptoms			.35**
R^2 Change	.09	.08	.10
R^2 Total	.09	.17	.27

Conclusion

- Engaging in non suicidal self harm is likely determined by a constellation of demographic, social and individual factors
- In this model, lifetime presence and frequency of NSSI was predicted by:
  - Depressive symptoms
- Lifetime presence of NSSI (but not frequency) was also predicted by:
  - female gender
  - questioning or non-heterosexual orientation
- In repetitive NSSI the contribution of negative parenting may be mediated by depressive symptoms and by peer victimization in the presence of lifetime NSSI
- Future Research: longitudinal study re risk and protective factors

Assessing Non Suicidal Self Injury in Youth

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Hidden Hurt

- Many youth do not seek professional help despite severe injuries and consequences of self injury
  - 1/5 reported injuring themselves more severely than expected or that they should have received medical help – yet very few actually sought medical help

- Many physicians are unaware of self injury in their adolescent patients
  - Only 3.2% indicated their physician knew

- Overall detection rates are low
  - 36% - no one knew about their self injury behaviour

Whitlock, J., Eckenrode, J., & Silverman, D. (2006). Self-injurious behaviors in a college population. *Pediatrics, 117*, 1939-1948.

Initial Safety Screening

- Assess for:
  - Suicide risk
    - Suicidal ideation, intent, plan, risk factors, protective factors
    - Distinguish suicide vs NSSI
  - Injury risk
  - Co-occurring psychiatric issues

Suicide vs NSSI

Characteristic	Suicide	NSSI
Demographics	Males> females	Females> males
Intent	To die	To alleviate distress
Lethality	High, needs medical treatment	Low, rarely needs medical treatment
Repetition	Infrequent	High, chronic
Methods	Often one	Multiple
Prevalence	Low	High
Hopelessness	Common	Infrequent
Psych consequences	Exacerbation of psychological pain	Relief of psychological pain

Lofthouse, N., Muehlenkamp, J. and R. Adler.(2009) – Nonsuicidal Self-Injury and Co-occurrence, p. 63 in: *Self Injury iin Youth*.

Assessing Youth with NSSI

- Things to consider:
  - Building therapeutic alliance
  - Non judgmental approach
  - Assessing motivation to change
  - A stepwise approach to assessment
  - Use of self report questionnaires
  - Using your assessment to determine and triage re treatment approach and types of referrals required

Four Key Approaches to Assessment

1. Biopsychosocial perspective
2. Stepwise approach depending on level of intervention required
3. Cumulative assessment
4. Reassessment

Biopsychosocial Assessment of NSSI

- Affective
  - Emotions profile or style, experiencing of emotions
- Behavioral
  - Behavior style (e.g., avoids close relationships, non-communicative)
- Biological
  - Neurochemical dysregulation, (e.g., serotonin, dopamine, noradrenaline systems), eg mood disorder, affective instability, anxiety disorder, ?addictive componant
- Cognitive
  - Cognitive style, thoughts, beliefs about self and others, past and future
  - Thoughts prior, during and after NSSI
- Environmental/Social
  - Family issues
  - Abuse/peer victimization
  - social support
  - Peer relationships and influence
-

Behavioral Assessment and Self Assessment of NSSI

- The Self Assessment Sheet
  - Identifies triggers
  - Identifies cognitions associated with SI act
  - Rates intensity of emotional state using a likeart scale
  - Addresses any attempts to cope differently
  - Provides a self assessment rating scale re coping
  - Asks to youth to identify consequences of their behaviour
  - Can be used as both an assessment tool and a means to monitor any use of different coping skills with treatment over time

Case #2

NAME: _____
DATE: _____

S.A.S

(self-assessment sheet)

Was there a "TRIGGER" for your SI? (What first made you **UPSET?**)
was on ACID - parents pissed me off

If so, **Where** were you? at home - then left to see friends
Was there **anyone else** there? no
Describe **what happened**, briefly. left home - pissed off - cut at home - then left & did acid + saw my friends

What were you THINKING (What was going through your head)?
NOT SURE - JUST UPSET - WANT THE FEELINGS TO STOP

How UPSET were you? Circle one:

1	2	3	4	5
Very upset	Really	Moderately	Mildly But still ok	Not at all

What did you DO? How did you handle this situation?
CUT, TALKED TO FRIENDS, DID DRUGS

Did you use any techniques or ways to cope differently with your distress?
talked to friends - Nope not really different

How well do you feel you handled yourself? Circle one:

1	2	3	4	5
Poorly	Not so well	Okay	Good	Great

What were the consequences? What happened as a result of how you handled this situation?
Don't feel good - my girlfriend is upset with me

WOULD YOU DO ANYTHING DIFFERENTLY? If so, What would you do?
call my girlfriend right away

Detailed Assessment

- Ottawa Self Injury Inventory-Functions
  - Assesses functions of NSSI only
- Ottawa Self Injury Inventory- Clinical
  - Gives more detailed information eg. regarding frequency, type of NSSI, functions, addictive aspects, motivation to change
- Aids in informing potential role for
  - Psychiatric evaluation
  - Type of intervention best suited for repetitive SI, eg problem solving versus DBT
  - Other interventions eg family therapy

13. How did/do you injure yourself (without meaning to kill yourself)?
Please (√) all that apply and put an (X) beside the most frequent method of self-injury.

WHEN YOU FIRST STARTED		CURRENTLY (past month if still self-injuring)	
√ all that apply	(X) top reason	√ all that apply	(X) top reason
___ cutting	(X)	___ cutting	(√)
___ scratching	(X)	___ scratching	(√)
___ interfering with wound healing	(X)	___ interfering with wound healing	(√)
___ burning	(X)	___ burning	(√)
___ biting	(X)	___ biting	(√)
___ hitting	(X)	___ hitting	(X)
___ hair pulling	(X)	___ hair pulling	(√)
___ severe nail biting and/ or nail injuries	(X)	___ severe nail biting and/ or nail injuries	(√)
___ piercing skin with sharp pointy objects	(X)	___ piercing skin with sharp pointy objects	(√)
___ piercing of body parts	(X)	___ piercing of body parts	(√)
___ excessive use of street drugs	(X)	___ excessive use of street drugs	(X)
___ excessive use of alcohol	(X)	___ excessive use of alcohol	(X)
___ trying to break bones	(X)	___ trying to break bones	(X)
___ headbanging	(X)	___ headbanging	(X)
___ taking too much medication	(X)	___ taking too much medication	(X)
___ taking too little medication	(X)	___ taking too little medication	(X)
___ eating or drinking things that are not food	(X)	___ eating or drinking things that are not food	(X)
___ other (please list)	(X)	___ other (please list)	(X)

14. Why do you think you started and if you continue, why do you still self-injure (without meaning to kill yourself)? Please circle the number that best represents how much your self-injury is due to that reason.

Circle "0" if it has never been a reason that you self-injure and "4" if it has always been a reason that you self-injure.

WHY DID YOU START?	never a reason			sometimes a reason	always a reason
1. to release unbearable tension	0	1	(2)	3	4
2. to experience a "high" that feels like a drug high	(0)	1	2	3	4
3. to stop my parents from being angry with me	(0)	1	2	3	4
4. to stop feeling alone and empty	0	1	2	(3)	4
5. to get care or attention from other people	(0)	1	2	3	4
6. to punish myself	0	1	2	3	(4)
7. to provide a sense of excitement that feels exhilarating	(0)	1	2	3	4
8. to relieve nervousness/fearfulness	0	1	2	(3)	4

IF YOU CONTINUE WHY DO YOU CONTINUE?	never a reason			sometimes a reason	always a reason
1. to release unbearable tension	0	1	2	3	(4)
2. to experience a "high" that feels like a drug high	(0)	1	2	3	4
3. to stop my parents from being angry with me	(0)	1	2	3	4
4. to stop feeling alone and empty	0	1	2	(3)	4
5. to get care or attention from other people	(0)	1	2	3	4
6. to punish myself	0	1	2	3	(4)
7. to provide a sense of excitement that feels exhilarating	(0)	1	2	3	4
8. to relieve nervousness/fearfulness	0	1	2	3	(4)

	never a reason		sometimes a reason		always a reason
9. to avoid getting into trouble for something I did	(0)	1	2	3	4
10. to distract me from unpleasant memories	(0)	1	2	3	4
11. to change my body image and/or appearance	(0)	1	2	3	4
12. to belong to a group	(0)	1	2	3	4
13. to release anger	0	1	2	3	(4)
14. to stop my friends/boyfriend/girlfriend from being angry with me	(0)	1	2	3	4
15. to show others how hurt or damaged I am	(0)	1	2	3	4
16. to show others how strong or tough I am	(0)	1	2	3	4
17. to help me escape from uncomfortable feelings or moods	0	1	2	(3)	4
18. to satisfy voices inside or outside of me telling me to do it	(0)	1	2	3	4
19. to experience physical pain in one area, when the other pain I feel is unbearable	(0)	1	2	3	4
20. to stop people from expecting so much from me	(0)	1	2	3	4
21. to relieve feelings of sadness or feeling "down"	0	1	2	(3)	4
22. to have control in a situation where no one can influence me	(0)	1	2	3	4
23. to stop me from thinking about ideas of killing myself	0	1	2	(3)	4
24. to stop me from acting out ideas of killing myself	0	1	2	(3)	4
25. to produce a sense of being real when I feel numb and "unreal"	0	1	2	3	(4)
26. to release frustration	0	1	(2)	3	4
27. to get out of doing something that I don't want to do	(0)	1	2	3	4
28. for no reason that I know about - it just happens sometimes	(0)	1	2	3	4
29. to prove to myself how much I can take	(0)	1	2	3	4
30. for sexual excitement	0	(1)	2	3	4
31. to diminish feeling of sexual arousal	(0)	1	2	3	4
32.					
33. other (please specify) _____	0	1	2	3	4

	never a reason		sometimes a reason		always a reason
9. to avoid getting into trouble for something I did	(0)	1	2	3	4
10. to distract me from unpleasant memories	(0)	1	2	3	4
11. to change my body image and/or appearance	(0)	1	2	3	4
12. to belong to a group	(0)	1	2	3	4
13. to release anger	0	1	2	3	(4)
14. to stop my friends/boyfriend/girlfriend from being angry with me	(0)	1	2	3	4
15. to show others how hurt or damaged I am	(0)	1	2	3	4
16. to show others how strong or tough I am	(0)	1	2	3	4
17. to help me escape from uncomfortable feelings or moods	0	1	2	(3)	4
18. to satisfy voices inside or outside of me telling me to do it	(0)	1	2	3	4
19. to experience physical pain in one area, when the other pain I feel is unbearable	(0)	1	2	3	4
20. to stop people from expecting so much from me	(0)	1	2	3	4
21. to relieve feelings of sadness or feeling "down"	0	1	2	(3)	4
22. to have control in a situation where no one can influence me	(0)	1	2	3	4
23. to stop me from thinking about ideas of killing myself	0	1	2	(3)	4
24. to stop me from acting out ideas of killing myself	0	1	2	(3)	4
25. to produce a sense of being real when I feel numb and "unreal"	0	1	2	3	(4)
26. to release frustration	0	1	(2)	3	4
27. to get out of doing something that I don't want to do	(0)	1	2	3	4
28. for no reason that I know about - it just happens sometimes	(0)	1	2	3	4
29. to prove to myself how much I can take	0	(1)	2	3	4
30. for sexual excitement	0	1	(2)	3	4
31. to diminish feeling of sexual arousal	(0)	1	2	3	4
32. I am "addicted" to doing it	0	(1)	2	3	4
33. other (please specify) _____	0	1	2	3	4

NAME: _____
DATE: _____

S.A.S

(self-assessment sheet)

Was there a "TRIGGER" for your SI? (What first made you UPSET?)
fight with step dad

If so, **Where** were you? at home
Was there **anyone else** there? parents downstairs
Describe **what happened**, briefly.
He's a bully - won't listen - puts me down.

What were you THINKING (What was going through your head)?
I hate him - he's an ass

How UPSET were you? Circle one:

1	2	3	4	5
Very upset	Really	Moderately	Mildly But still ok	Not at all

What did you DO? How did you handle this situation?
Drew, listen to music - get online - it worked for a while - I didn't cut, but I did use dope to feel relaxed.

Did you use any techniques or ways to cope differently with your distress?

How well do you feel you handled yourself? Circle one:

1	2	3	4	5
Poorly	Not so well	Okay	Good	Great

What were the consequences? What happened as a result of how you handled this situation?
none

WOULD YOU DO ANYTHING DIFFERENTLY? If so, What would you do? Not sure. -

NAME: _____
DATE: _____

S.A.S

(self-assessment sheet)

Was there a "TRIGGER" for your SI? (What first made you UPSET?)

No - I realized I can't let [redacted] get to me

If so, **Where** were you? home

Was there **anyone else** there? parents

Describe **what happened**, briefly. [redacted] was nagging again - but I realized I can't let him get to me. I ignored him instead

What were you THINKING (What was going through your head)?

I am not gonna let you bring me down

How UPSET were you? Circle one:

1	2	3	4	5
Very upset	Really	Moderately	Mildly But still ok	Not at all

What did you DO? How did you handle this situation?

Ignore - listen to music,

Did you use any techniques or ways to cope differently with your distress?

IGNORE HIM!

How well do you feel you handled yourself? Circle one:

1	2	3	4	5
Poorly	Not so well	Okay	Good	Great

What were the consequences? What happened as a result of how you handled this situation?

I feel great - he's pissed because I didn't get upset

WOULD YOU DO ANYTHING DIFFERENTLY? If so, What would you do? No

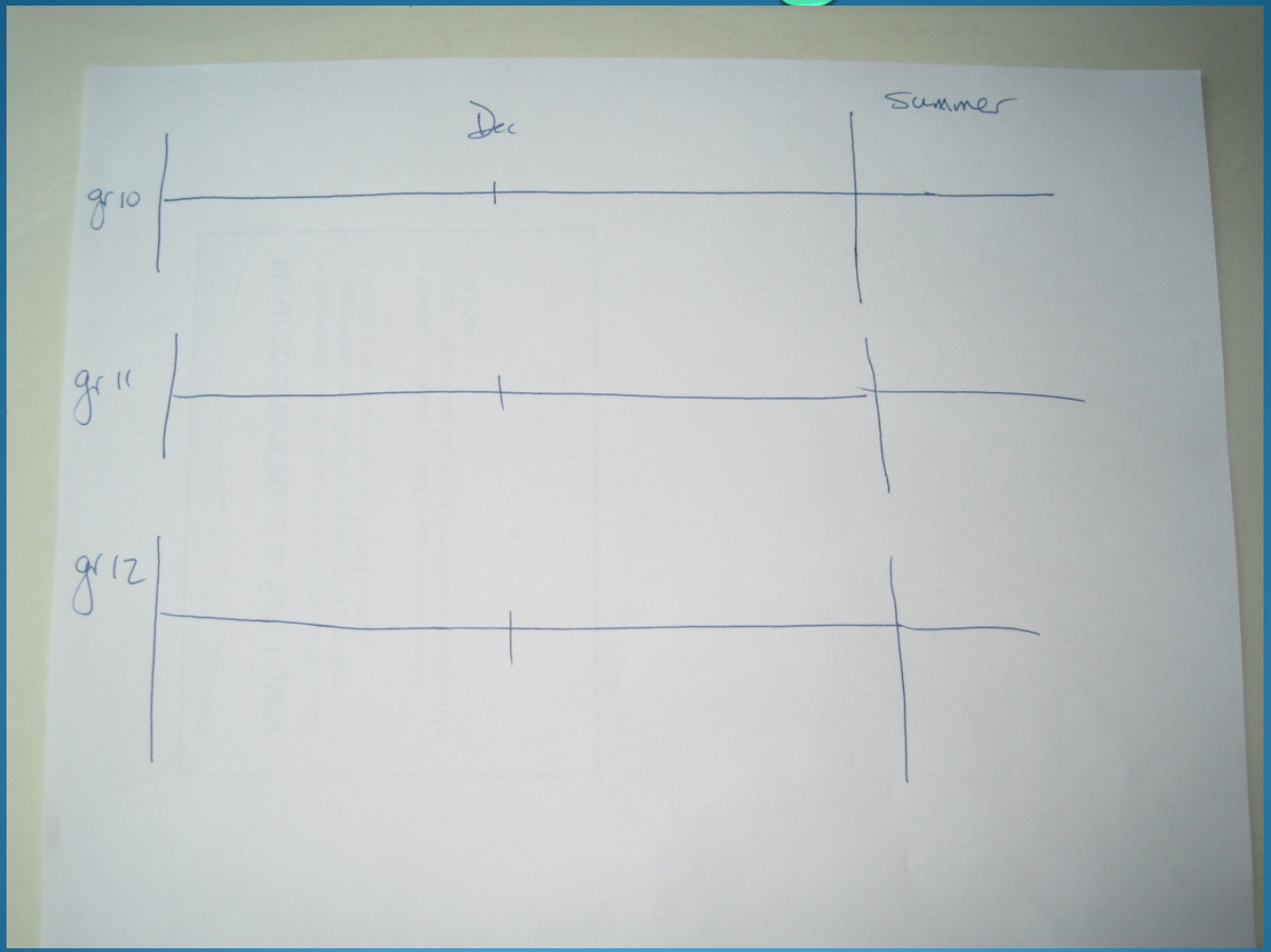
INSYNC website

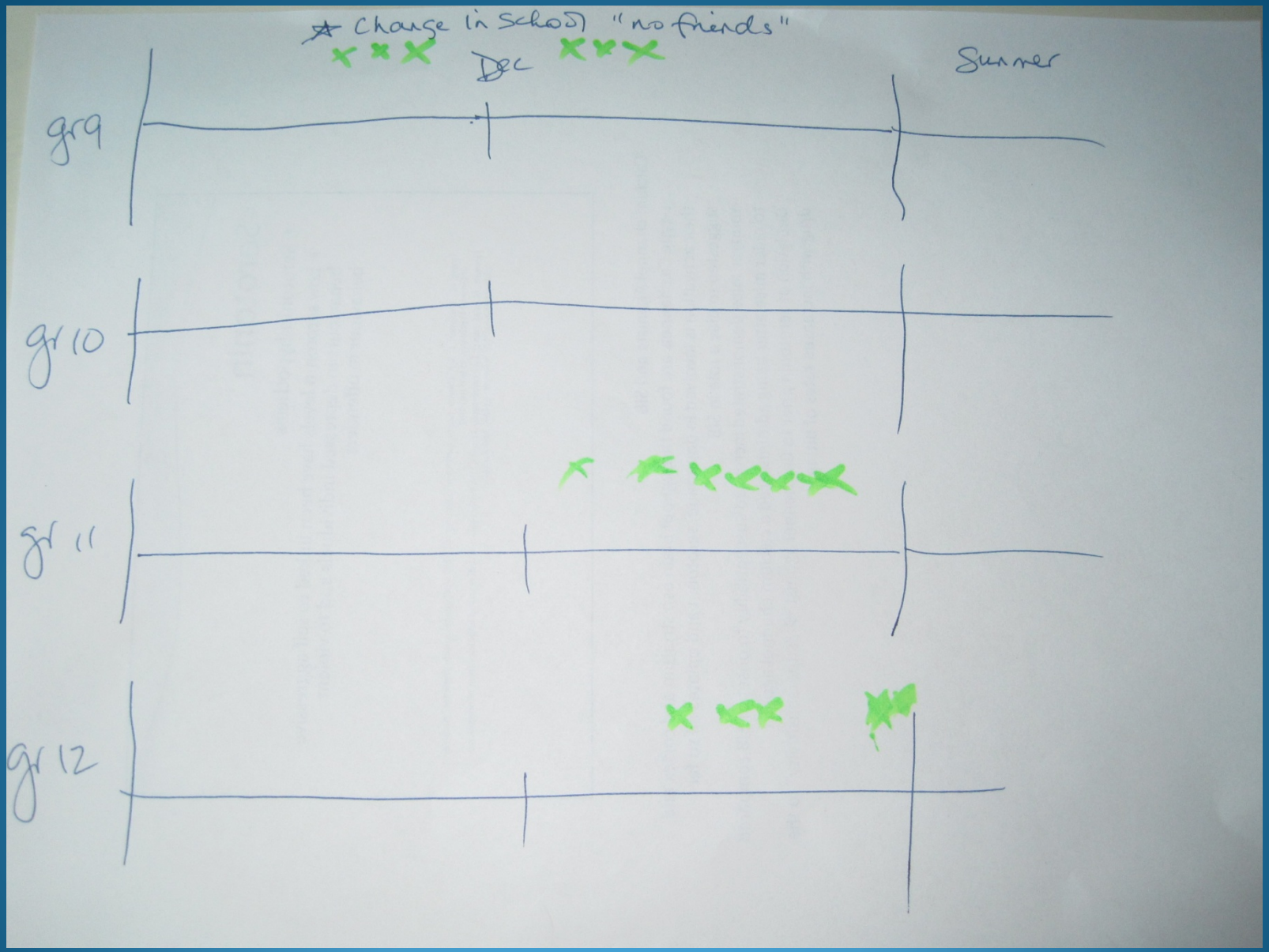
www.insync-group.ca

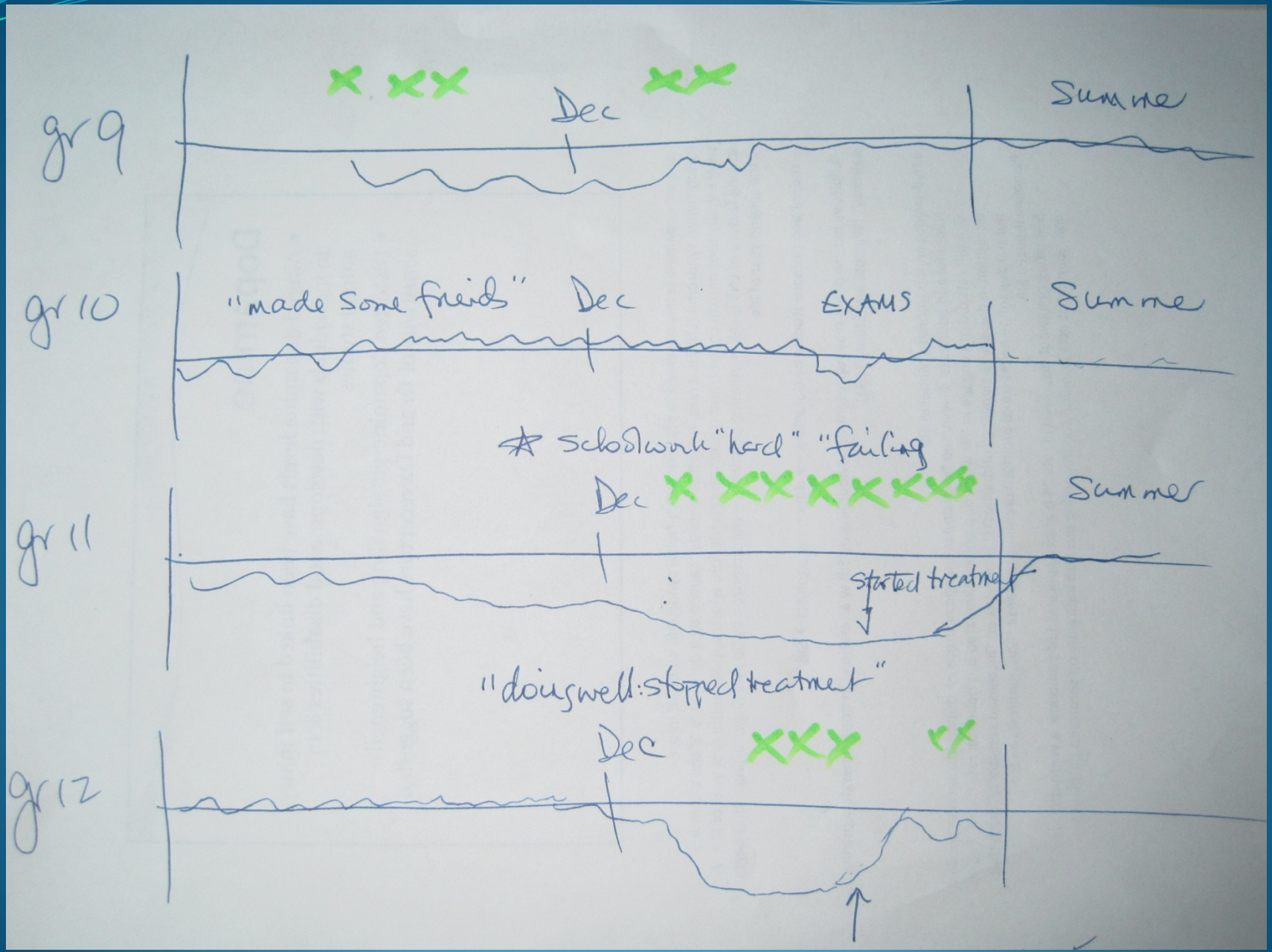
Mental Health Assessment

- Screen for:
  - Mood disorder
  - Anxiety disorder
  - Impulse control problems
  - Conduct disorder problems
  - Uncontrolled anger
  - Borderline traits
  - Substance Abuse
  - Eating Disorders

Life Events/Mood Charting




Change in School "no friends"
Dec
Summer
gr 9
gr 10
gr 11
gr 12


gr 9
Dec
Summe
gr 10
"made some friends"
Dec
EXAMS
Summe
schoolwork "hard" "failing
Dec
Summer
gr 11
started treatment
"doing well: stopped treatment"
Dec
gr 12

Parental Expressed Emotion and Adolescent NSSI

(Wedig and Nock, 2007)

- High parental EE was associated with
  - Suicidal ideation, suicide plans, suicide attempts and NSSI
  - For NSSI, *parental criticism* was strongly associated with self harm behaviours while emotional over involvement was not
  - The relationship between EE and self harm behaviours was not explained by adolescent mental health problems
- Moderation model was supported
  - the relationship between *parental criticism* and self harm behaviours was especially strong in youth with a *self critical cognitive style*

Assessment of Family Functioning

- presence of factors that may enhance or protect youth in families,
  - e.g., level of warmth, adaptability, cohesion, respect for adolescent developmental processes such as separation and individuation
- assessment of parental skills,
  - e.g., level of reactivity, affective expression, ability to negotiate, listening skills
- presence of parental psychopathology
  - e.g., major depression, substance and alcohol abuse, anxiety, borderline personality disorder, history of abuse, history of self harming behaviors

Factors to consider when determining type of treatment for NSSI

- Age, cognitive and developmental stage
- Motivation for change
- Family involvement
- Acute and chronic stressors

- Access to a multi-disciplinary mental health team (i.e. psychologist, psychiatrist,, school counsellor, etc)

- Co-morbid mental health issues.
  - Ex: Axis I: Anxiety, Depression, Bipolar, ADHD, Eating Disorder etc
  - Addictions? Suicidality?

  - Treat these conditions with best practice treatments

Psycho-education

- Forms the foundation of many therapies (CBT, DBT, family therapy, etc)
- Important initial step in treatment
- No evidence based psycho-education programs currently exist for NSSI
  - many develop their own materials and methods to disseminate information
- Use of internet sites such as www.insync-group.ca

Psycho-education in DBT

Cognitive Behavioral Therapy

CBT involves teaching youth how to identify the connection between thoughts, feelings and behaviours.

- Helping youth learn skills to identify and challenge irrational beliefs which contribute to maladaptive thinking patterns.
- Using behavioural therapy to change maladaptive behavioural patterns.

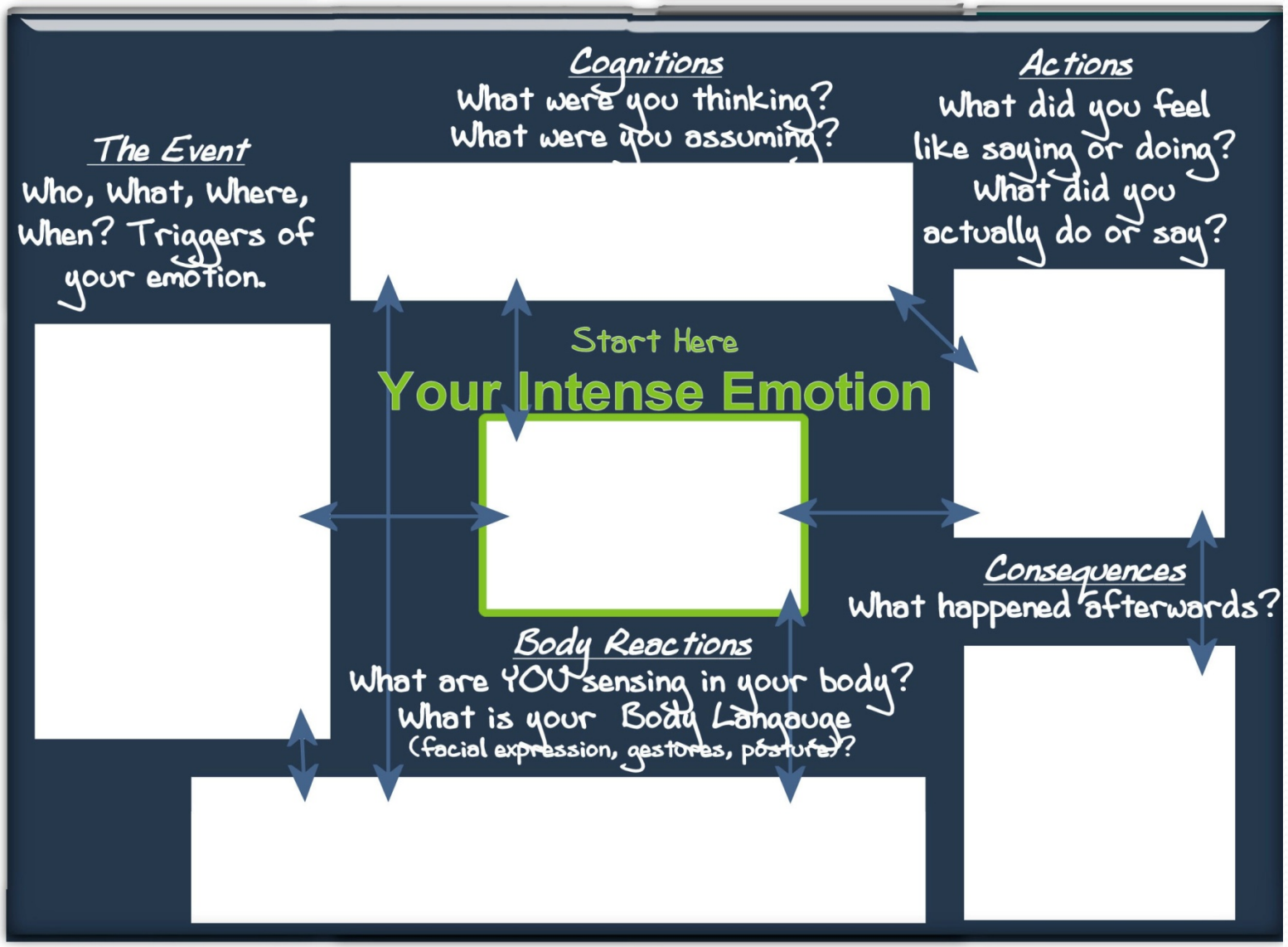
Short term treatment (6 sessions) (Tyre et al., 2003)

Combined PST plus CBT and interpersonal therapies to reduce repetitive NSSI via:

- -managing emotions
- -changing negative thinking

Breaking Down Emotions

Blackboard Exercise



Motivational Interviewing (Miller and Rollnick,1991)

- Combines Humanistic Therapy and Cognitive Therapy approaches
- Good efficacy with clients with drug and alcohol issues as well as those in pre-contemplative or contemplative stages of treatment.
- Consider MI for NSSI youth who an addictive component to their behaviour and/or are in the pre-contemplative stage of change.

Motivational Interviewing

- Main principals:
  - **Expressing empathy** using reflective listening to not only establish rapport, but accept and mirror the client's experiences as a means of increasing their awareness of the need for change.
  - **Developing discrepancy**, focuses on using specific types of questions, along with selective reflections, to focus the client on the discrepancy between their present behavior and broader personal values.
    - The aim is not to point out the positive and negative aspects of the behavior, but more so the discrepancy between what the youth is currently doing and would like to do in order to increase the motivation to change.
  - **improving self efficacy**
  - **Avoiding argumentation**
  - **Rolling with resistance**

Dialectical Behaviour Therapy

- Combines behavioral, PST, dialectical and validation strategies. (Rathus & Miller, 2002).
  - A balance of change based therapy techniques with Eastern philosophies of "acceptance" and "tolerance"
  - Traditional DBT: Individual and family skills training (24 session program conducted in 12 weeks):
- DBT skills training focuses on:
  - Mindfulness
  - Distress tolerance
  - Emotional regulation
  - Interpersonal/communication skills
  - Walking the Middle Path

Contracts, Emergency Card, Promises

- Self-Protection Contingency Management Contract (Walsh, 2006)
  - Get baseline of NSSI behaviour, collaboratively set realistic goals for reduction, teach skills to providing replacement coping strategies and rewards

- Promises
  - made to people they have close relationships with can often be motivating, but difficult to keep and dependent on the nature of the relationship.

- No Harm contracts – All or none, cold turkey approach - not effective and can worsen condition by making youth hide behaviour from you.

Developmental Group Psychotherapy Wood et al., 2001

Use of positive corrective therapeutic relationships as a means to help youth

- Goals: reduce self harm, reduce depression

- Combines Problem Solving, CBT, and Psychodynamic psychotherapy

  Open groups:

  - Acute phase: 6 themes including relationships, school problems, personal relationships, family problems, anger management depression and self harm, hopelessness and feeling re the future

  - Long term group: emphasis on group process

Group Therapy for DSH: Failure of a Replication of a Randomized Trial (Hazell et al., 2009)

- Primary outcome measure was repetition of self harm at 6 and 12 months
- Experimental group vs routine care, ages 12 to 16
- No significant difference between groups on outcome measure
  - Much of DSH at outcome was self cutting in this study
- Australian study (2009) had more youth at baseline with self cutting and more females while the UK study (2001) had more DSH by self poisoning

Groups for Self Harming Adolescents and their Parents (Nixon et al., 2004)

- *Adolescent*, 12-14 sessions, weekly
  - *DBT portion* (*Miller et al, 2004):*
    - Provides validation, introduction of new coping skills and provides practice to reinforce use of new skills
  - *Therapeutic Support for Adolescents, (Fine et al 1991):*

    Process oriented, based on experiential, interpersonal and insight oriented approach.

    Creates an environment where adolescents use their peers to facilitate separation from parents supportive environment within which change can be facilitated
- Parent Group, 6-7 sessions, every 2 weeks
  - psychoeducation re NSSI, adolescent development, therapeutic support for parents, parental skill building, mindfulness training

Families

When would you consider family therapy?

- Some evidence of family risk factors for NSSI
  - emotional neglect, physical/sexual abuse,
  - Impaired parent-child communication
  - Family stressors (lowered family cohesion, parental illness or mental health issues, family suicide, family conflict)

- Some evidence of protective family factors:
  - Good parent-child communication
  - Positive emotional involvement of family members
  - Positive time spent together, common interests and activities
  - Collaborative decision-making

DBT Multifamily Skill Development Group

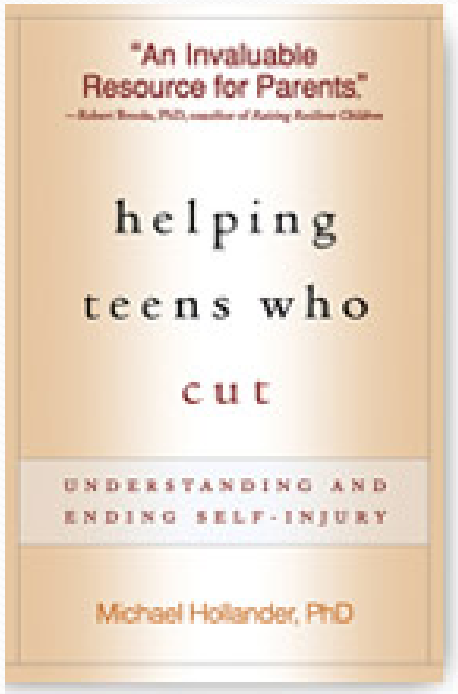
(Miller et al, 2002)

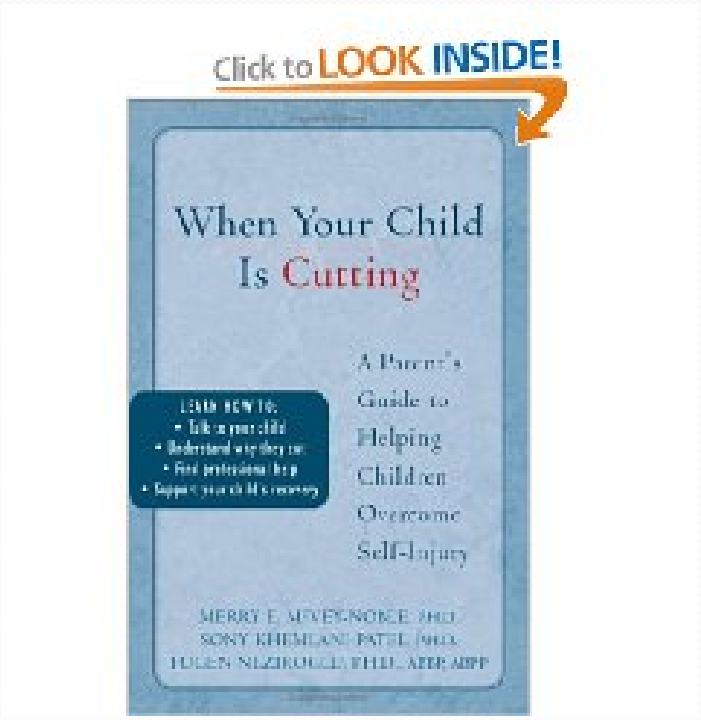
- Miller suggested that family members attend group sessions to learn DBT components such as:
  - Mindfulness, affect identification and management, etc.
  - Family members are then encouraged to help the adolescent practice DBT skills within the family context.
  - Middle Path Skills -learning skills such as validation and reinforcement, parents are able to disengage from power struggles which could potentially decrease NSSI

Recurrent Topics with Families

- *Promoting a predictable family environment*
  - Flexibility balanced with limit setting
  - Consistent, predictable approach to conflict
  - Appropriate expectations
- *Improving interaction and communication*
- *Increasing emotional connectedness*
- *Enabling adolescent developmental tasks*
- *Parental Functioning and Parental Factors*

Resources for Families





Pharmacological Treatment Principles

- Medications can be utilized as part of a comprehensive treatment approach
- Patients and families should be informed that medications are considered 'off label' & warned of potential side effects
- Remember the principle: "Start low, go slow… and treat as short as possible but as long as necessary."

- Treat any underlying psychiatric disorder if it exists
- Target associated & clustered symptoms (eg. Affective instability, impulsivity) that may be responsive to medication
- Re-evaluate symptoms & diagnosis over time to ensure evolving psychiatric disorders (eg major mood disorder) are not missed

Medication options

- SSRIs
  - Target: depressive symptoms, anxiety symptoms
  - Need to monitor closely especially in early phases of treatment

- Mood stabilizers
  - Target: severe affective instability seen in certain mood disorders

- Atypical Antipsychotics
  - Target: Co-occuring NSSI and affective instability, severe irritablity , mixed or severe anxiety and mood states (with severe sleep disturbance and NSSI)
    - Psychiatric evaluation is typically over time and with the youth and often family recording baseline and ongoing symptoms to help in determining outcome of the medication trial

Benzodiazepines

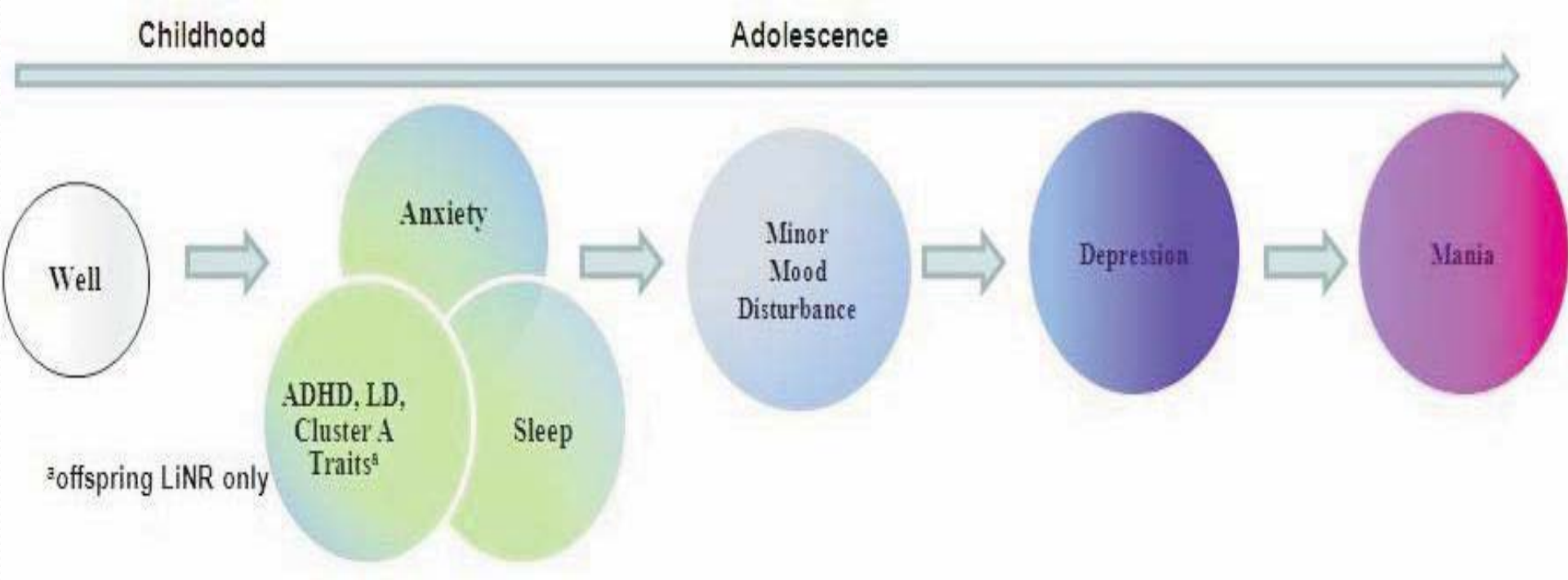
- Rarely recommended but used in certain cases of severe anxiety

Detailed informed consent and proper monitoring is always a part of any medication trial

Omega 3 Fatty Acids

- No clear supporting evidence for use in NSSI
- Some studies have shown benefit in decreasing depressive symptoms and aggression
- Side effect profile is low
- More research is needed

Clinical stages: development of BD in high-risk offspring (Duffy, 2010)



a = Offspring lithium nonresponders only
LD = learning disability

Medication options

- SSRIs
  - Target: depressive sx, anxiety sx (flashbacks, compulsions), and bulimic sx
  - Need to monitor closely in early phases of treatment for increased SI

- Mood stabilizers
  - Target: affective instability (with &without psychosocial triggers) and aggression

- Atypical Antipsychotics
  - Target: Co-occuring NSSI and affective instability, tension, impulsivity, anxiety or depressive states (with sleep disturbance or SI)
  - Choose agent with lower metabolic risk, warn pt & monitor for weight gain
- Typical Antipsychotics
  - Target: Acute & intense urges to self injure & sleep disorder difficulties
  - Use only on a prn basis due to side effect profile & use low potency AP

- Opiate antagonist (Naltrexone)
  - Target: Addictive features (eg. Cravings, increased tolerance) of NSSI
  - May be used as monotherapy or in combination with SSRI or SGA

- Alpha-2-adrenergic receptor agonist (Clonidine)
  - Limited evidence so far with no studies in youth.
  - Helpful in reducing urges to self injure, suicidal ideation and inner tension in a pilot study of women with BPD

- Benzodiazepines
  - No clear supporting evidence for use in NSSI
  - Beware of possible paradoxical reaction in youth and addictive potential of BZDs and use in short term only
  - Choose medium-duration half life BZDs –eg. Lorazepam

Plener, P., Libal, G. and M.K. Nixon. (2009). Use of Medication in the Treatment of Nonsuicidal Self-Injury in Youth.

Omega 3 Fatty Acids

- No clear supporting evidence for use in NSSI
- Some studies have shown benefit in decreasing depressive symptoms and aggression
- Side effect profile is low
- More research is needed

Simplifying Your Formulation/ Treatment Plan

Concerns: YOUTH

Thoughts of suicide
Sudden depressive states
THC

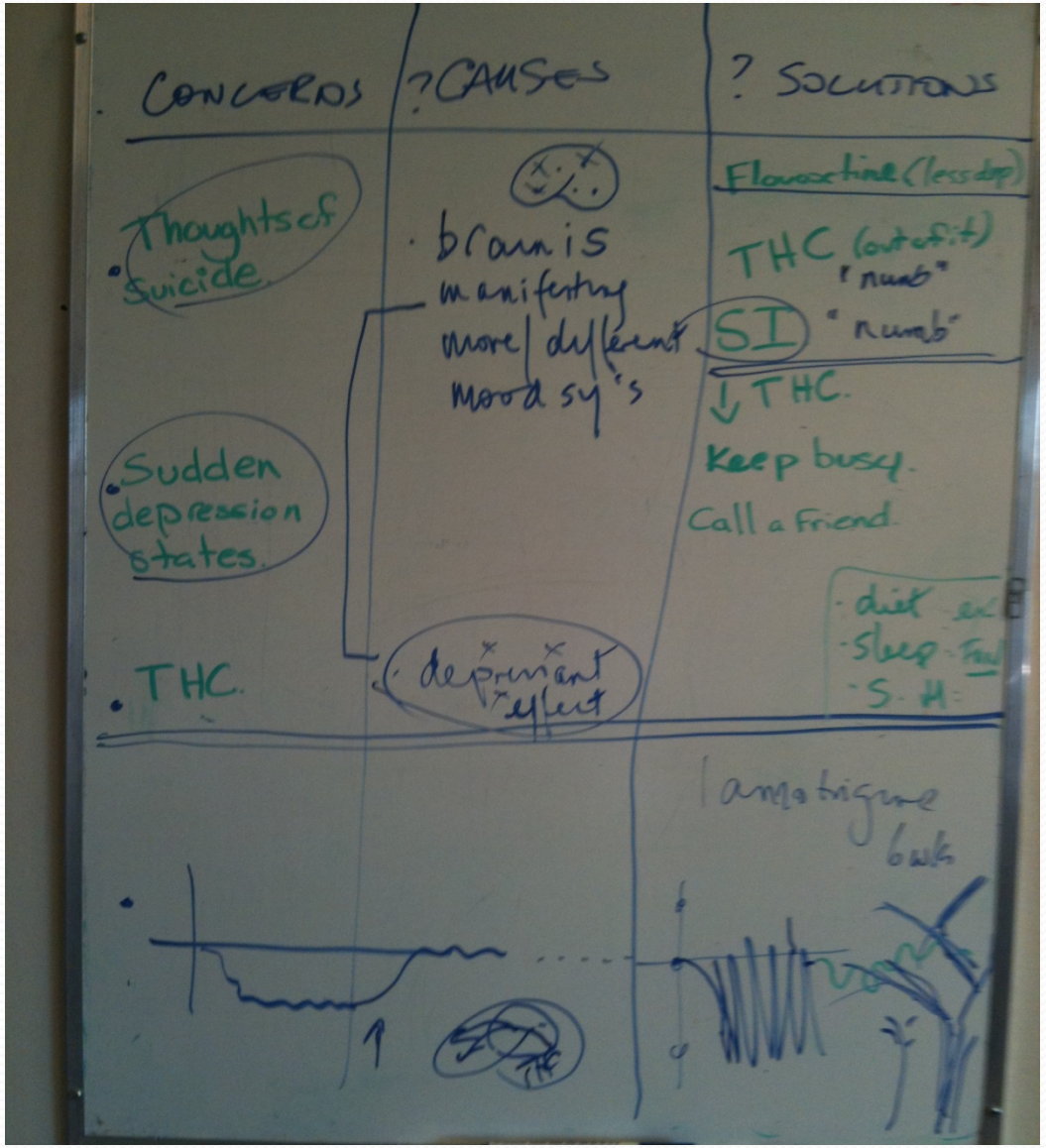
?Causes: MKN

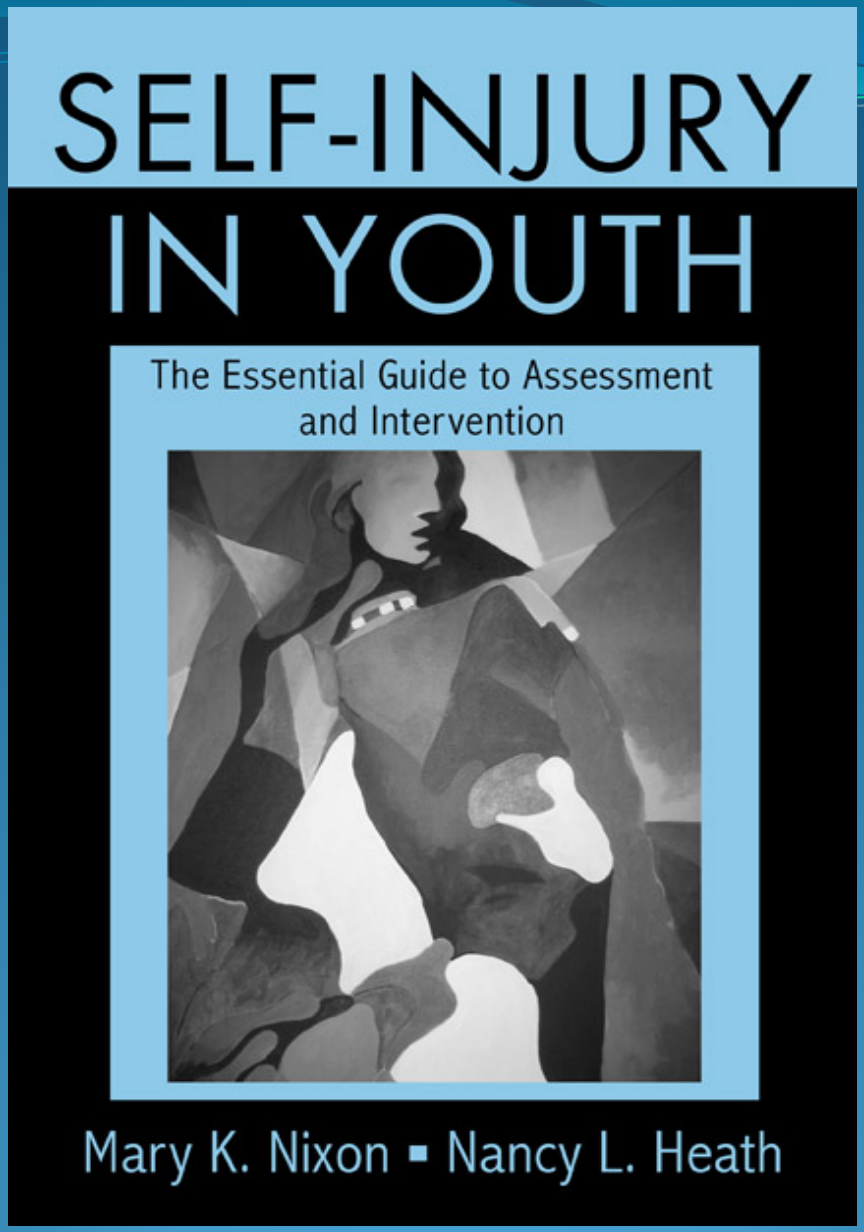
Brain is manifesting more/different mood symptoms

?Solutions: YOUTH & MKN

Fluoxetine
THC: ? numb
NSSI: ? numbs

Decrease THC
Keep busy
Call a friend
Lamotrigine trial





Routledge Press, Taylor and Francis, NY, 2009

Thank you
Discussion/Questions