Developmental Perspective on Motivation for Engagement

Jacquelynne S. Eccles
University of Michigan
Paper Presented at the Cognitive Remediation Conference
New York, June 2004
Goals of My Talk

- Discuss Two Aspects of Motivation
  - What is it?
  - How does it change with age and school experiences?
What is Motivation?

- The many different constructs studied under the general category of motivation can be organized into four basic questions.
Four Basic Questions

- Can I succeed at the task?
Four Basic Questions

- Can I succeed at the task?
- Do I want to do the task?
Four Basic Questions

- Can I succeed at the task?
- Do I want to do the task?
- Why do I want to do the task?
Four Basic Questions

- Can I succeed at the task?
- Do I want to do the task?
- Why do I want to do the task?
- What do I need to do to succeed at the task?
These questions relate to my own work on the Eccles et al. Expectancy – Value Model of Achievement – Related Choices.
Engagement

Success Expectations

Ability Self Perceptions

Subjective Task Value

Task Difficulty Perceptions

Short and Long Term Goals Affective Memories and Expectations

Self-Schema
Can I Succeed at the Task?

- Expectations for success
  - Bandura’s sense of personal efficacy
Can I Succeed at the Task?

- **Expectations for success**
  - Bandura’s sense of personal efficacy
  - Related to one’s ability self perceptions and one’s perceptions of the difficulty of the task
  - Also related to students’, teacher’s, clients’, and therapists’ beliefs about intelligences and motivation
Do I Want to Do It and Why?
"Why do you think you cross the road?"
Do I Want to Do It and Why?

- Subjective Task Value
Subjective Task Value

- Interest Value – Enjoyment one gets from doing the activity itself

- Utility Value – Relation of the activity to one’s short and long range goals
PEANUTS

THE ONLY REASON I GO TO SCHOOL IS TO BECOME RICH AND FAMOUS...

WELL, A GOOD EDUCATION CAN BE VERY VALUABLE

EDUCATION?
“She expects me to remember things just because they’re important.”
Subjective Task Value

- **Attainment Value:** Extent to which engaging in the activity confirms an important component on one’s self-schema or increases the likelihood of obtaining a desired future self or avoiding an undesired future self.
“O.K., you be the doctor, and I’ll be the Secretary of Health and Human Services.”
"I don't have to be smart, because someday I'll just hire lots of smart people to work for me."
Subjective Task Value

Cost –

Psychological Costs
- Fear of Success, Fear of Failure,
- Anxiety

Financial Costs

Lost Opportunities to Fulfill Other Goals
or to do Other Activities
“Just do the work. No one cares if you get goose bumps.”
Cost

Loss of opportunity to do something else with one’s time
I’d love to come over and hang out, but now that we’re competing in a global economy I can’t.
Amy Story
Do I Want to Do It and Why?

- Subjective Task Value
- Self-Determination Theory
  - Deci and Ryan
  - Individuals will be most motivated to engage in tasks if they believe they had choice and that they made the decision to be engaged
“Sure — but can you make him drink?”
"We’re encouraging people to become involved in their own rescue."
"Could you give me a little push?"
Do I Want to Do It and Why?

- Subjective Task Value
- Self-Determination Theory
- Goal Theory
Goal Theory

- **Mastery Goals**
  - Learn the material for the sake of learning
  - Focus on improvement over time

- **Performance Approach Goals**
  - Do better than other people
  - Demonstrate one’s ability by getting a good grade

- **Performance Avoidance Goals**
  - Avoid doing worse than other people
  - Avoid failure
Consequences of Goals

- **Mastery Goals**
  - Pick challenging tasks
  - Learn from mistakes
  - Do not make inferences about one’s “stable” ability from performance feedback

- **Performance Avoidance Goals**
  - See failures as sign of lack of “stable” ability (intelligence in the case of school work)
  - So avoid failure at all costs
  - Give up following failure
  - Pick easy tasks
Consequences of Goals

- Performance Approach Goals
  - Not clear, depends on whether combined with Mastery Goals or Performance Avoidance Goals
“Did you think the ladder of success would be straight up?”
Goal 2

Developmental Changes in Motivation
Goal 2

Developmental Changes in Motivation

General declines on all aspects of motivation for school achievement with increasing age and increasing grade level
Goal 2

Developmental Changes in Motivation

General declines on all aspects of motivation for school achievement with increasing age and increasing grade level

Marked accelerations in these declines occur around major school transitions for any students having difficulty prior to the transition
Changes in Motivation Associated with Transition into Middle Grades

- Decline in General Interest in School
- Increase in Extrinsic Motivational Orientation
  - Work for Grades and Tests
- Decrease in Intrinsic Motivational Orientation
  - Work for Enjoyment of Subject and Desire to Learn
- Increase in Test Anxiety and in the Relation of Test Anxiety to School Performance and Intrinsic Motivation
Changes in Motivation Associated with Transition into Middle Grades

- Decline in Confidence in Some Academic Disciplines
  - Math and Physical Science for Many Students
  - Literacy-Related Subject Areas for Some Students

- Decline in Subjective Task Value attached to Some Academic Disciplines
  - Math and Physical Science for Many Students
  - Literacy-Related Subject Areas for Some Students
Changes in Motivation Associated with Transition into Middle Grades

- Increase in Endorsement of View that Ability is Stable Entity rather than Incremental Skill (Dweck)

- Increase in Ego-Focused and Performance-Oriented Motivation (Nicholls, Ames, Midgley, Maehr, Elliott)
  - Focus on Doing Better than Others
  - Focus on Avoiding Doing Worse than Other

- Decline in Mastery Motivation
  - Focus on Learning to be Learning
Other Changes

- Declines in general self esteem
- Increases in depression
- Increases in the gender differences in depression
- Increases in involvement in all types of problem behaviors
- Increasing alienation
Why?

- Most common explanations focus on the biological changes associated with puberty or cognitive changes during middle childhood and early adolescence.
- New brain research on changes in frontal lobe during early adolescence.
- Alternatively we could look to shared social transitions.
- For example, let us consider the transition into secondary school.
Few studies available to distinguish between these hypotheses

Roberta Simmons and Dale Blyth’s work

- Compared adolescents moving through two types of school systems in same city
  - K-8, 9-12 (ages 6-14; 15-18) versus
  - 1-6, 7-9, 10-12 (ages 6-12, 13-15, 16-18)

First compared self esteem changes:

- Found transitional effects for girls only
Self Esteem Data From Simmons & Blyth – Girls Only

Self Esteem

School Year

K-8 Girls

JHS Girls
Simmons’ Explanation for Gender Differences

- At this age, girls are at the height of pubertal development
- Stress theories suggest that dealing with multiple changes is more difficult than dealing with single life changes
- Therefore, the Junior High School Transition should be more stressful for girls than for boys
BUT

- On the one hand, her self esteem findings are consistent with this interpretation and
- She has other data showing that the declines in self esteem at this age are directly linked to the number of other life transitions such as geographical moves, marital disruptions, and family deaths
- BUT the gender differences in the patterns of change are not consistent …
SIMMONS & BLYTH

MOVING INTO ADOLESCENCE

NEGATIVE EFFECTS OF K-6, 7-9 STRUCTURE VERSUS K-8 STRUCTURE

1. GIRLS’ SELF-ESTEEM DECLINES

2. GPA DECLINES

3. EXTRACURRICULAR ACTIVITIES DECLINES

4. LEADERSHIP ROLES DECLINE

5. BOYS SENSE OF BEING VICTIMIZED INCREASES

6. FEELINGS OF ANONYMITY INCREASE
Eccles and Midgley Stage Environment Approach

- We argued that it is not the transition itself that matters but the nature of that transition.

- Person Environment Fit theories suggest that
  - People are optimally motivated with there is a good fit between the needs of the individual and the opportunities provided by the environments in which they must work, live, and study
  - Bad fits lead to less than optimal motivation and mental health problems
What are these needs?

- **Connell, Deci & Ryan**
  - Competence – Mastery, Challenge
  - Emotional Support – Belonging, Attachment
  - Autonomy – Personal Control

- **Other needs**
  - Mattering – Making a meaningful difference
  - Responsibility – Being a contributing member of one’s social group
  - Identity – Knowing one’s place in one’s social context
  - Engagement – Challenge and Enjoyment
Stage Environment Fit

- Perhaps the motivational changes seen during this age period reflect the fact that we force young people to move from a good fitting elementary school environment to a poor fitting secondary school environment.
Environmental Changes in School Level Characteristics

- Increase in School Size
- Increase in Curricular Departmentalization
- Increase in Formal Bureaucratic Structures
“Personally, I think this new attendance system stinks.”
<table>
<thead>
<tr>
<th>CRSE</th>
<th>LOC</th>
<th>TCHR</th>
<th>TM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHMTRY</td>
<td>ZRG</td>
<td>GLT</td>
<td>8:00</td>
</tr>
<tr>
<td>SPNSH</td>
<td>PQ22</td>
<td>BRPL</td>
<td>9:00</td>
</tr>
<tr>
<td>STFILL</td>
<td>PLRT</td>
<td>ZGLY</td>
<td></td>
</tr>
<tr>
<td>OMTRY</td>
<td>FLND</td>
<td>SNRT</td>
<td></td>
</tr>
<tr>
<td>LNCH</td>
<td>CFTR</td>
<td>HLKL</td>
<td></td>
</tr>
<tr>
<td>BLGY</td>
<td>BLP</td>
<td>THP</td>
<td></td>
</tr>
<tr>
<td>TRGY</td>
<td>VSH</td>
<td>JVR</td>
<td></td>
</tr>
</tbody>
</table>

Basically, Bob didn't have a clue what courses he was taking or where he was supposed to be.
These types of building level changes lead to other changes at both the building and classroom level:

- Decrease in Teachers’ Trust of Students
- Increase in Teachers’ Concern with Control
- Decrease in Teachers’ Sense of Efficacy
- Decrease in Opportunity for Close Student-Teacher Relationships to Form
Students at Milfoil High weren’t too fond of the new hall passes.
In Turn

- Decrease in Student Autonomy
- Decrease in Student Participation in Classroom Decision Making
Other Building Level and Classroom Level Changes

- Focus on Sorting and Testing
  - More Rigorous Grading Practices Based on Normative Performance

- Increase in Use of Extrinsic Motivational Strategies

- More Whole Class Instruction Techniques

- More Ability Grouping
All of which are likely to lead to increases in

- Students’ Focus on Ability as a Stable Entity
- Students’ Performance- rather than Mastery-focused Motivation
Conclusions

- Research suggests that there are systematic differences in the building level and classroom level environmental characteristics of 6th grades in elementary schools and 7th grades in junior high schools.

- Furthermore, these changes are directly at odds with the developmental needs of early adolescence.
DEVELOPMENTAL CHARACTERISTICS
OF EARLY ADOLESCENTS

- Increased Desire for Autonomy
- Increased Salience of Identity Issues
- Continuing Need for Safe Environment in which to explore Autonomy and Identity
- Increased Peer Orientation
- Increased Importance of Heterosexuality
- Increased Self-Focus and Self-Consciousness
- Increased Cognitive Capacity with Movement toward Formal Operational Thought
- Physical and Hormonal Changes Associated with Pubertal Development
Other Transitions

- We see similar effects with the high school transition
- Particularly for ethnic and racial minority students
  - Stereotype Threat (Claude Steele)
  - Discrimination experiences (Michelle Fine)
  - Supportive role of Racial Identity (Carol Wong, Jacque Eccles)
- And for students who are doing poorly academically (Michelle Fine, Niobe Way)
Some researchers see it with the college transition

- Again particularly for ethnic and racial minority students —
  - Stereotype Threat (Claude Steel)
  - Racial Discrimination Sensitivity (Geraldine Downey)
  - Supportive role of Racial Identity (Robert Sellers, Tabbye Chavous)
- And other groups who are also in the minority
  - Social Class ,
These same principles apply in organizational settings

There are social contextual features that are likely to influence people’s motivation and mental health

These are likely to influence engagement in therapy ala previous speakers
THANK YOU

WWW.RCGD.ISR.UMICH.EDU/GARP
Michigan Study of Adolescent Life Transitions (MSALT)

U of M Affiliated Investigators:

- **Waves 1-4**
  - Jacque Eccles
  - Carol Midgley
  - Allan Wigfield
  - Jan Jacobs
  - Connie Flanagan
  - Harriet Feldlaufer
  - David Reuman
  - Doug MacIver
  - Dave Klingel
  - Doris Yee
  - Christy Miller Buchanan

- **Waves 5-8**
  - Jacque Eccles
  - Bonnie Barber
  - Lisa Colarossi
  - Deborah Jozefowicz
  - Pam Frome
  - Sarah Lord
  - Robert Roeser
  - Laurie Meschke
OVERVIEW OF DESIGN AND SAMPLE:
Michigan Study of Adolescent Development – MSALT

DESIGN: On-going Longitudinal Study of One Birth Cohort
Data Collected in Grades 6, 7, 10, 12;
and again at Ages 20 and 25
Data Collected from Adolescents,
Parents, and School
Survey Forms and Observations

SAMPLE: Nine School Districts
Approximately 1,200 Adolescents
Approximately 90% White
Approximately 51% Female
Working/Middle Class Background
### MSALT Study Design

<table>
<thead>
<tr>
<th>W1</th>
<th>W2</th>
<th>W3</th>
<th>W4</th>
<th>W5</th>
<th>W6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6th Grade</td>
<td>7th Grade</td>
<td>10th Grade</td>
<td>12th Grade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Students**
- N=3135
- N=1492
- N=1384

**Districts**
- N=12
- N=6
- N=9

**Classrooms**
- N=117
- N=131
- ----
- ----
First, I’ll summarize the teacher differences we found between 6th and 7th grade teachers (before and after the junior high school transition).

Second, I’ll summarize the relation of these changes to changes in the students’ school-related motivation for mathematics.
Teacher Beliefs

![Bar chart showing comparison between Sixth Grade and Seventh Grade beliefs in Trust, Control, and Efficacy.](image-url)
Observed Classroom Environment

![Graph showing observed classroom environment for 6th and 7th grades. The categories are Whole Class, Coop., and Compare. The y-axis represents the scores ranging from 20 to 45. The graph compares the scores for 6th and 7th grades with bar charts for each category.]

- **Whole Class**: 6th Grade scores are higher than 7th Grade, with a score of 45. 7th Grade scores range from 20 to 30.
- **Coop.**: 6th Grade scores are higher than 7th Grade, with a score of 30. 7th Grade scores range from 15 to 25.
- **Compare**: 6th Grade scores are higher than 7th Grade, with a score of 25. 7th Grade scores range from 10 to 20.
Teacher Rates Student Decision-Making Opportunities

- Where Sit
- Classwork
- Making Rules
- Do Next

Percent Yes

6th Grade
7th Grade
Relation of Teacher Sense of Efficacy to Student Expectations for Own Performance in Math

- Created Four Groups of Students Based on Change in Teachers’ Sense of Efficacy as They Moved from 6th to 7th Grade
  - LOW TO LOW = 35%
  - HIGH TO HIGH = 14%
  - HIGH TO LOW = 38%
  - LOW TO HIGH = 13%
Teacher Sense of Efficacy and Students’ Self Expectations

- Found Significant Effects Primarily for Those Students for Whom Their 6th Grade Teachers had the Lowest Performance Expectations
Teacher Sense of Efficacy and Students’ Self Expectations

![Graph showing the relationship between teacher sense of efficacy and students’ self expectations over different terms and years. The graph includes data for 6th and 7th grades in both the fall and spring. The x-axis represents the terms and years, while the y-axis represents the sense of efficacy scores. The graph shows distinct trends for different groups.]
Teacher Sense of Efficacy and Students’ Self Expectations

Graph showing the comparison of teacher sense of efficacy and students' self-expectations from Fall 6th to Spring 7th.
Perceived Teacher Support and Students’ Intrinsic Valuing of Math
Conclusions

- Changes in students’ school-related motivation are directly linked to the nature of the changes the students experience in their classroom environments as they make the junior high school transition.

- The patterns of results are consistent with our Stage – Environment Fit Theory or rather our Stage – Environment Misfit Theory

- These findings have implications for the ways in which the No Child Left Behind legislation is implemented. I leave this for our discussion.
Thank You!
For more information see:
www.rcgd.isr.umich.edu/garp
Individual Differences

- Already Noted That We Only Got the Impact of the School Transition for Students’ Self Expectations for the Low Ability Students

- Are There Other Individual Differences that Might Effect Susceptibility to the Junior High School Transition Effect?
PROTECTION FACTORS

1. CONFIDENCE IN ONE'S LOOKS
2. CONFIDENCE IN ONE'S POPULARITY
3. LOW PRIOR PROBLEM BEHAVIORS
4. BEING MALE
5. AVERAGE OR BETTER PRIOR ACHIEVEMENT
6. LOW NUMBER OF OTHER SIMULTANEOUS TRANSITIONS
This work suggests that there are both risk factors and protective factors:

- **Risk Factors**
  - Low Prior Achievement
  - Test Anxiety
  - Social Anxieties

- **Protective Factors**
  - Confidence in One’s Academic and Social Abilities
Figure 1  THE EFFECT OF STUDENTS' ACADEMIC AND NON-ACADEMIC BELIEFS ON POST-TRANSITION SELF-ESTEEM (WAVE 3)

ACADEMIC
- Confidence in academic ability
- Scared by math
- Nervous during math tests
- Nervous when grades handed out
- Don't like being called on
- Embarrassed when teacher corrects

NON-ACADEMIC
- Estimate of one's good looks
- Confidence in friend making
- Estimate of one's popularity
- Confidence in sports ability
- Worry will lose friend
- Worry kids not like doing
- Worry not popular
- Wonder what others think of you

VARIANCE EXPLAINED IN POST-TRANSITION SELF-ESTEEM

All of these results were replicated at Wave 4
Other Risk and Protective Factors

- **Family Level**
  - Support for Autonomy versus Excessive Control
  - Close Relationships versus Hostile Relationships
THE EFFECTS OF PARENTS' AND CHILDREN'S PERCEPTIONS OF FAMILY ENVIRONMENT ON CHILDREN'S WAVE 3 SELF-ESTEEM

PROTECTIVE FACTORS

CHILDREN'S PERCEPTIONS
- Parents encourage child to give ideas and opinions
- How often do you take part in family decisions
- How are decisions made in your family?

PARENTS' PERCEPTIONS
- Listening to my child helps me reach better decisions
- How we arrive at decisions
- I trust my child to do what I expect without checking up on him/her

RISK FACTORS

CHILDREN'S PERCEPTIONS
- How strict are your parents?
- I feel my parents treat me more like a little kid
- I have a lot of fights with my parents about their rules and decisions for me.
- My parents get upset if I disagree with them when their friends are around

PARENTS' PERCEPTIONS
- My child often argues about my rules and decisions

VARIANCE EXPLAINED IN POST TRANSITION SELF-ESTEEM (WAVE 3)

Highlighted Items Replicated in Wave 4
### Table 1
Change in Total Variance Explained in post-transition Self-Esteem

<table>
<thead>
<tr>
<th>STEP</th>
<th>Self-esteem Wave 3</th>
<th></th>
<th>Self-esteem Wave 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change R2</td>
<td>Change F</td>
<td>F model</td>
<td>B model</td>
</tr>
<tr>
<td>Step 1</td>
<td>.257</td>
<td>631.9***</td>
<td>631.9***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem 2</td>
<td></td>
<td></td>
<td>.338***</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>.01</td>
<td>25.1***</td>
<td>332.7***</td>
</tr>
<tr>
<td>Ability</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Step 3: Self-Concepts</td>
<td>.034</td>
<td>18.0***</td>
<td>112.3***</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td></td>
<td></td>
<td>.042***</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td>.063***</td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
<td>.032*</td>
<td></td>
</tr>
<tr>
<td>Step 4: Worries</td>
<td>.02</td>
<td>9.05***</td>
<td>66.3**</td>
<td></td>
</tr>
<tr>
<td>Self-conscious: social</td>
<td></td>
<td></td>
<td>-.059***</td>
<td></td>
</tr>
<tr>
<td>Self-conscious: academic</td>
<td></td>
<td></td>
<td>-.041*</td>
<td></td>
</tr>
<tr>
<td>Non-Worried: social</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Non-Worried: academic</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Nervous: english</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Nervous: math</td>
<td></td>
<td></td>
<td>N.S.</td>
<td></td>
</tr>
<tr>
<td>Step 5: Family environment</td>
<td>.02</td>
<td>25.6***</td>
<td>62.4***</td>
<td></td>
</tr>
<tr>
<td>Parent-adolescent mismatch</td>
<td></td>
<td></td>
<td>-.105***</td>
<td></td>
</tr>
<tr>
<td>Democratic decision-making</td>
<td></td>
<td></td>
<td>.069**</td>
<td></td>
</tr>
<tr>
<td>Step 6: Gender</td>
<td>N.S.</td>
<td>N.S.</td>
<td>---</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

**Total R2=.34**

**Total R2=.33**

**Notes:**

1. Column 1 shows variables entered at each step of the multiple regression model.
2. Columns 2 and 3 indicate the changes in R2 and the F value and the significance for each step.
3. Column 4 is the F value for the whole model with each additional step.
4. Column 5 indicates the unstandardized regression coefficient for each variable with all variables in the model.
COPING WITH TRANSITIONS

DIFFICULTY DEPENDS ON

CHARACTERISTICS OF THE TRANSITION

TIMING

DEVELOPMENTAL READINESS

NATURE OF THE NEW SCHOOL ENVIRONMENT

PERSON - ENVIRONMENT FIT

ABRUPTNESS OF THE CHANGE

DISCONTINUOUS VERSUS GRADUAL CHANGE

NORMATIVE VERSUS NON-NORMATIVE

CHARACTERISTICS OF THE INDIVIDUALS

STATUS PRIOR TO SCHOOL TRANSITION

COPING SKILLS

NUMBER OF OTHER STRESSES OR TRANSITIONS

OUTCOME BEING MEASURED
Study 2

- Maryland Adolescent Growth In Context – MADICS

- Look more closely at the impact of classroom characteristics on change in students’ motivation and mental health
Contributors to the Maryland Adolescent Development in Context Study (MADICS)

- Jacquelynne Eccles, PI
- Arnold Sameroff, PI
- W. Todd Bartko
- Elaine Belansky
- Diane Early
- Kari Fraser
- Leslie Gutman
- Yael Harlap
- Katie Jodl
- Ariel Kalil
- Linda Kuhn
- Alice Michael
- Melanie Overby
- Stephen Peck
- Katherine Rosenblum
- Robert Roeser
- Sherri Steele
- Erika Taylor
- Cynthia Winston
- Carol Wong
Sample

Respondent characteristics:
- African-American
- N=625
- Average age = 11 at Wave 1
- Seventh grade at W 1
- 53 % male
- Data being presented today is from waves 1, 3, and 4; Grades 7, 8-9, 11-12

Family background:
- Median Family Income (1993): $50-55,000
- Highest Education: 38% College Degree
- Highest Occupation:
  - 44% Skilled
  - 30% Professional
Longitudinal Mixed Methods

- Face-to-face, in home interviews with youth and their parents which included both close-ended and quite open-ended questions
- Self-administered questionnaires with youth and their parents
- Open-ended phone interviews with youth and their parents
- Repeated intensive interviews with a subset of the youth
# School Achievement, Attendance & Motivation In MADICS

<table>
<thead>
<tr>
<th></th>
<th>7th Grade</th>
<th>8th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Point Average</td>
<td>3.67</td>
<td>3.63</td>
</tr>
<tr>
<td>Days Absent from School</td>
<td>9.35</td>
<td>10.78</td>
</tr>
<tr>
<td>Academic Competence Beliefs</td>
<td>5.36</td>
<td>5.23</td>
</tr>
<tr>
<td>Academic Importance Beliefs</td>
<td>4.05</td>
<td>3.91</td>
</tr>
<tr>
<td>Academic Utility Beliefs</td>
<td>5.49</td>
<td>5.15</td>
</tr>
</tbody>
</table>
School Problem Behaviors
Seventh and Eighth Grade

Percent Mentioning Once in Two Chances

- Sent to Principal’s Office
- Cheated on Tests
- Suspended from School
- Skipped Class
- Brought Drugs/Alcohol
- Expelled from School

Seventh Grade
Eighth Grade
## CONNELL, RYAN DECI, SKINNER MOTIVATION MODEL

<table>
<thead>
<tr>
<th>INFLUENCES</th>
<th>PSYCHOLOGICAL</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL CULTURE</td>
<td>COMPETENCE</td>
<td>STUDENT MENTAL HEALTH</td>
</tr>
<tr>
<td>CLASSROOM</td>
<td>AUTONOMY</td>
<td>STUDENT ENGAGEMENT</td>
</tr>
<tr>
<td>PRACTICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIT</td>
<td>BELONGING</td>
<td></td>
</tr>
</tbody>
</table>
Perceived Middle School Psychological Environment: Conceptualization and Measures.

**School Psychological Environment**

- **Support of Competence**
  - Teacher Expectations
  - Academic Goal Structures

- **Support of Autonomy**
  - Curricular Meaningfulness
  - Student Empowerment

- **Quality of Relationships**
  - Discrimination Experiences
  - Teacher Supportiveness
Quality of Relationships:

✓ **Perceived Teacher Supportiveness (1 item)**

When you have a personal or social problem in school, how often can you depend on your teachers to help you out? (1 = almost never, 3 = sometimes, 5 = almost always)

✓ **Perceived Discrimination by Race (5 items) α = .88**

At school, how often do you feel that:
Teachers think you are less smart than you really are because of your race?
Teachers/Counselors discourage you from taking certain classes because of your race?
You are disciplined more harshly than other kids because of your race?

✓ **Perceived Discrimination by Gender (5 items) α = .82**

At school, how often do you feel that:
Teachers call on you less often than they call on kids of the opposite sex?
Teachers/Counselors discourage you from taking certain classes because of your sex?
You are disciplined more harshly by teachers than kids of the opposite sex?

(1 = never, 3 = a couple of times a month, 5 = every day)
Percentage of Adolescents Reporting Different Phenomenological Risks and Protection Associated with School

Risk Factors

Protective Factors

School Relative Ability Focus
Racial Discrimination in School
Gender Discrimination in School
School Mastery Focus
Meaningful Curriculum
Autonomy Provisions
Teacher Support
Positive Teacher Expectations

% Youth
Change in Psychological Distress and School Motivation by (Risks-Protections) in School Seventh to Eighth Grade
Change in School Problem Behaviors and GPA by (Risk - Protective) Factors in School
Seventh to Eighth Grade

Change in Relative Status (Standard Units)

More Protections <------------------------> More Risks
Indicators of both academic achievement-related outcomes and mental health increase as the number of perceived school-related protective factors increase and decrease as the number of perceived school-related risk factors increase.

Now what about individual differences
The End

Thank You

More details and copies can be found at
www.rcgd.isr.umich.edu/garp/
Thank you