Promoting Optimal Motivation For Behavior Change

Edward L. Deci

University of Rochester

Motivation Concerns the Energy for Action

It is what Moves
People to Behave



The Traditional View. Motivation is unitary

The Differentiated View: There are types of motivation that function very differently



Self-Determination Theory

•Differentiates between autonomous and controlled types of motivation

Autonomous Motivation

•When a person fully endorse a behavior and experiences volition and choice.

Controlled Motivation

•When a person feels coerced or seduced into behaving, with the experience of pressure and obligation.

Outcomes Associated With High Autonomous Motivation

- Greater persistence and maintenance
- Better conceptual learning
- More flexibility and creativity
- Better problem solving
- Higher quality performance
- Better health and well-being
- And these important functional effects hold up
 - Across Genders
 - Across SES
 - Across Cultures
 - Across the Lifespan





Outcomes Associated With High Controlled Motivation

- Compliance or Defiance
- Rigid thinking
- Short-term rote learning
- Algorithmic performance
- Alienation and disaffection
- Shortest path to outcome
- Diminished physical and psychological health





What Autonomy Is Not in SDT

- Autonomy is not independence
- •People can be autonomously dependent but they can also be autonomously independent
- •As well, people can be controlled in their dependence or in their independence



Additional Key Aspect of SDT: The Basic Psychological Needs

Competence

→ Sense of effectance and confidence in one's context

Autonomy

Behave in accord with abiding values and interests; actions would be reflectively self-endorsed

Relatedness

Feeling cared for, connected to, sense of belonging with others



The Concept of Autonomy as Motivation

Autonomous Motivation

- Intrinsically motivated behaviors
- •Extrinsically motivated behaviors that have been fully internalized





Intrinsic Motivation

- Doing an activity because it is interesting and enjoyable
- •Satisfies people's basic psychological needs for autonomy, competence, and relatedness
- It's the prototype of autonomy







Extrinsic Motivation

Doing an activity specifically because it leads to a separate consequence such as a reward, avoidance of punishment, social approval, or attaining a separate goal.







Are Intrinsic and Extrinsic Motivation Additive?

When a person's intrinsically motivated for an activity will adding extrinsic reward enhance the person's motivation?

The First Reward Studies

•Monetary rewards to college students decreased intrinsic motivation for a puzzlesolving activity (Deci, 1971)





Meta-analytic Results of the Effects of Extrinsic Rewards on Intrinsic Motivation

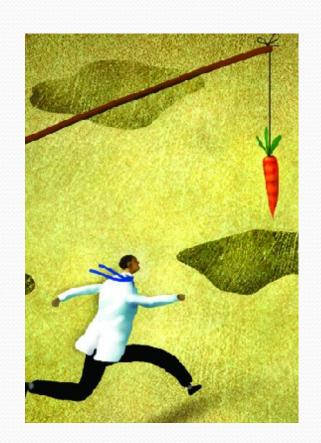
Type of Rewards	Effect Size	# of Studies
Tangible Rewards	-0.34*	(92)

- •The negative effects of tangible rewards on intrinsic motivation appear when the rewards are
- contingent upon doing the task,
- •expected when doing the task, and
- •salient.

Seff-Determination Theo

Why Do Tangible Rewards Undermine Intrinsic Motivation?

Because people have a fundamental human need to be autonomous rather than controlled. Chasing the carrot is being controlled, and thwarts autonomy.





Other Extrinsic Motivators That Have Negative Effects

Threats of Punishment (Deci & Cascio)

Deadlines (Amabile et al.)

Evaluations (Smith)

Competition (Deci et al.)

Why? Because they tend to control people externally and thus undermine autonomy.

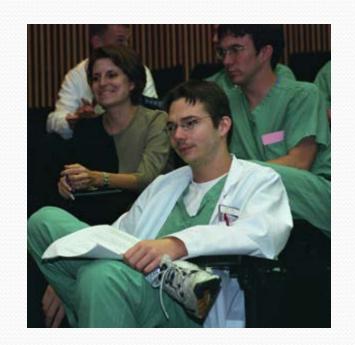


Providing Choice and Acknowledging Feelings

Increase intrinsic motivation

Why?

Because they enhance people's experience of autonomy





Positive Feedback

Increases intrinsic motivation



Negative Feedback

Decreases intrinsic motivation



Why?

Because we also have a fundamental psychological need to be competent



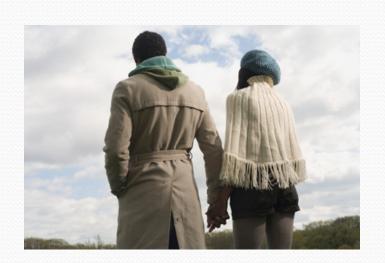
Some activities in our lives are not intrinsically interesting, and that's where extrinsic motivation has to come in





Extrinsic Motivation: Internalization

People tend to internalize aspects of the environment (e.g., extrinsic motivation) that are endorsed by important others.



Why?

Because they have a need for relatedness



Types of Extrinsic Motivation

External Regulation: No Internalization

* Pressured by external contingencies

Introjected Regulation: Partial Internalization

- * Pressured by internal contingencies
- * Not true self-regulation

Identified/Integrated Regulation: Full Internalization

* Feel a sense of full sense of autonomy and choice



Autonomous Motivation

Intrinsic motivation
Identified/Integrated regulation



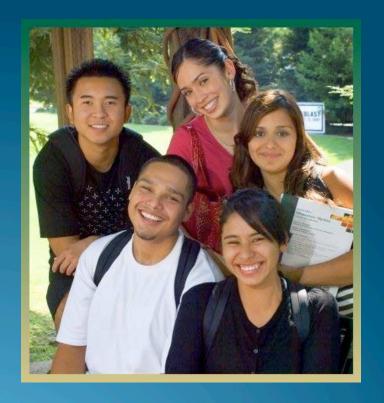
Controlled Motivation

External regulation Introjected regulation





How Can We Foster Greater Internalization and Autonomy?



Basic Need Satisfaction and Internalization

- •The social contexts that maintain intrinsic motivation are close to the same as those that promote internalization of extrinsic motivation
- •They are the conditions that facilitate satisfaction of the basics psychological needs for competence, autonomy, and relatedness



Need-supportive Environments

- Relate from the patients' perspectives
- Encourage them to talk and listen carefully to them
- Offer choices whenever possible
- Give positive & instructive feedback
- Provide a meaningful rationale
- Address how changes can be fit into their lives
- Don't push the patients or tell them what to do





Controlling Social Environments

Pressure people (with coercion or seduction) to act as the practitioner demands, with

- Threats
- Rewards
- Demanding language
- Evaluations and criticism

They undermine autonomous motivation and promote controlled motivation

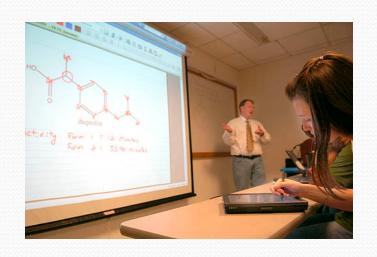




Need Support in Higher Education



Relations of Instructors' Need Support to Students' Motivation and Learning in Organic Chemistry



Change in Anxiety -.32***
Change in perceived Competence .24**
Change in Autonomous motivation .15*
Course Grade (controlling for SATs & GPA) .23**



Need Support in a Course on Biopsychosocial Medical Interviewing

- Need support from instructor in second-year medical interviewing classes
 - More autonomous motivation of students for the course
 - Better learning of course material
 - Better interviewing six months later
 - Value of biopsychosocial approach still evident two years later



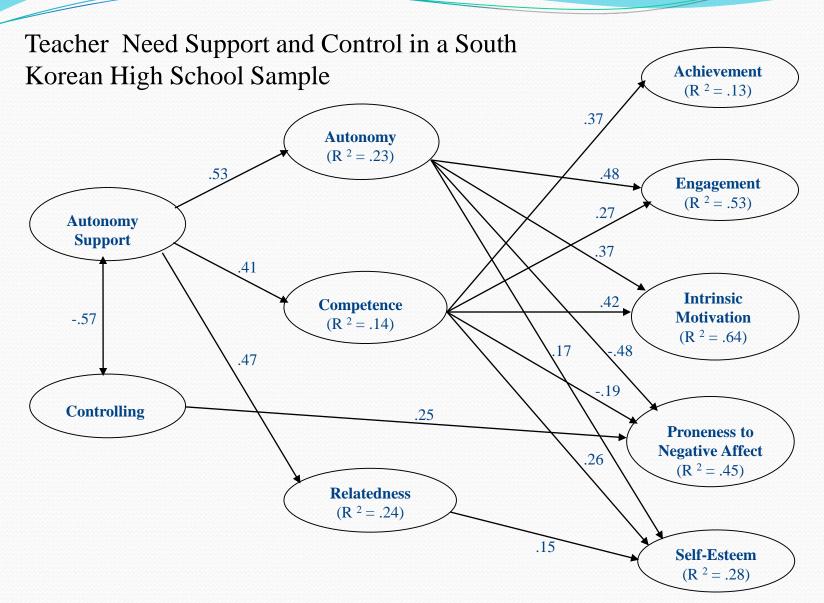
Need Support in Rotations and Selection of Residencies

- Need support of preceptor in third year clerkships in internal medicine and surgery
 - Predicted which residency the students would select in their fourth year controlling for their second-year reports of the likelihood of their going into each field



Cross-Cultural Considerations







Need Support For Health Behaviors

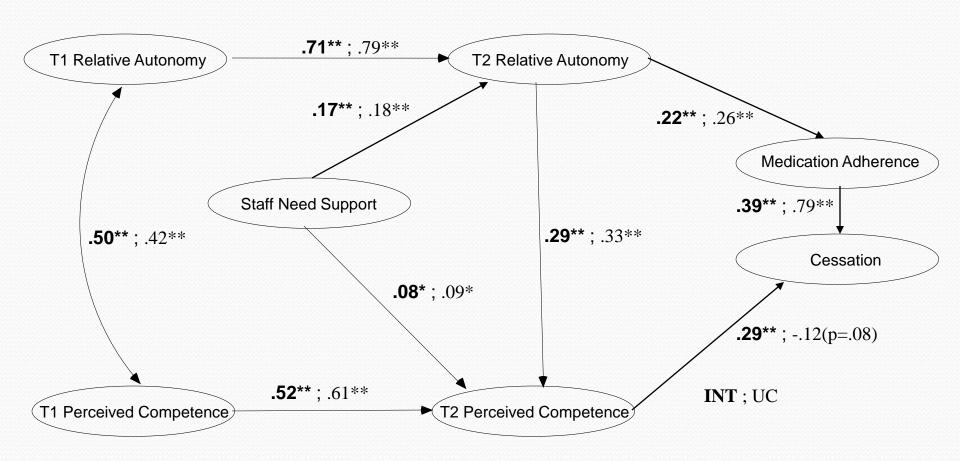


Smokers Health Study

- •No pressure to quit
- •The aim is for them to make a true choice
- •Listen to patients' perspectives and problems
- Provide advice as information, not as control
- •Relate to patients' life values
- •Skills building where needed
- •Invited significant others for a meeting

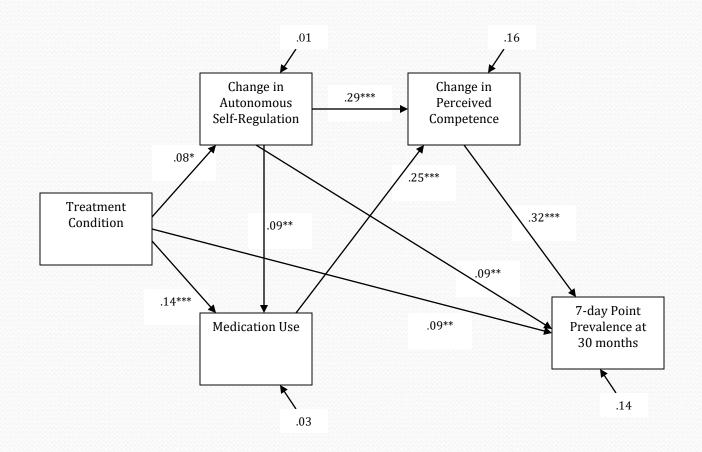


Smoker's Health Study 6 Month Outcomes



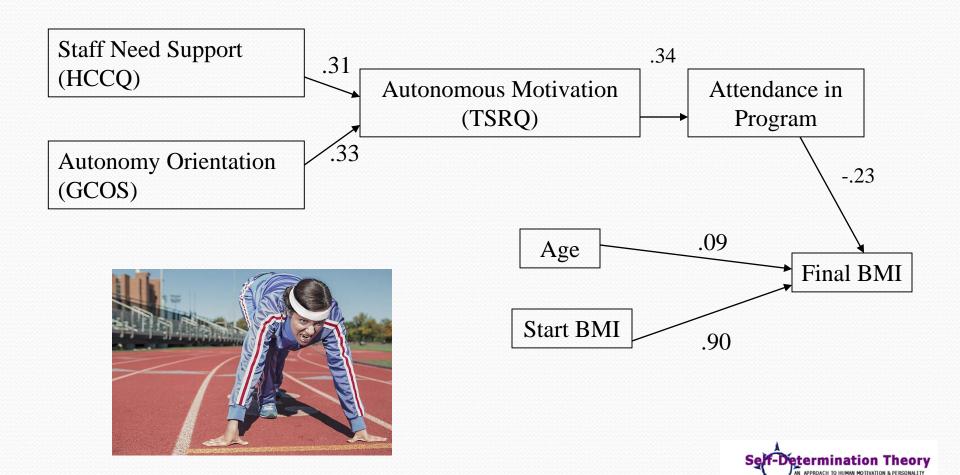


Structural Equation Model Predicting 30-Month Abstinence for Treatment Condition and Changes in Motivation





Motivation for Weight Loss



Motivation for Medication Adherence in Adult Outpatients

19			
	200	90	
72			

Need Support (HCCQ)

Controlled Motivation

Autonomous Motivation

2 Day Pill Count	14 Day Count	Self- Rpt.	Composite Adherence
.24**	.17*	.03	.18*
05	10	13	11
.41***	.52***	.57***	.59***

* p < .05, ** p < .01, *** p < .001



Need support and autonomous motivation predicting other healthy behaviors

- Reduction of fat intake for patients with elevated LDL-C
- Treatment success for methadone patients
- Glucose control in patients with diabetes
- Treatment success for alcoholics



Need Support in Psychotherapy

Autonomous Motivation in Three Therapies

Sixteen-week manualized treatments for patients with major depression using:

- •Cognitive Behavioral Therapy
- •Interpersonal Therapy
- •Pharmacotherapy with clinical management

Therapists' Autonomy Support and Patients' Autonomous Motivation were assessed



Autonomous Motivation and Therapeutic Change

In Each Treatment Approach,

- •Therapists' autonomy support predicted patients' autonomous motivation for therapy
- Patients' autonomous motivation predicted remission and also a decrease in patients' depressive symptoms



Autonomous Motivation and Audiology

Some Investigators Using SDT in Audiology Research

Jason Ridgway

Louise Hickson

Christopher Lind



- Hearing aid information sought by 253 clients
- Autonomous and Controlled motivation for hearing aid adoptation was assessed for these clients
- Autonomous motivation predicted hearing aid adoption within six months, but controlled motivation did not



Follow-up Study

- Assessed autonomy support, autonomous motivation, and perceived competence for 216 individuals who had some interest in a hearing device
- A device as adopted by 125 of the individuals
- Autonomy support from the practitioner predicted greater perceived competence by the participants, which in turn predicted greater adoption and greater satisfaction.
- Both autonomous motivation and perceived competence play important parts in promoting use of hearing aids.



Applied Relevance

The importance of basic psychological need support has also been confirmed across cultures for

- Parenting
- Special education
- Sport and physical activity
- Work motivation
- Virtual worlds
- Music
- Close personal relationships
- Space travel
- •Etc.

Summary

- Autonomous and controlled motivations are very different.
- Need support promotes autonomous motivation.
- Autonomous motivation yields enhanced learning, performance, persistence, and psychological & physical well-being.



http://selfdeterminationtheory.org