


MOTIVATION & EMOTION

Intrinsic-extrinsic motivations & goal-setting



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Image source 1

Outline – Intrinsic & extrinsic motivation



- Intrinsic & extrinsic motivations
- External regulation of motivation
- Hidden costs of rewards
- Cognitive evaluation theory
- What makes us feel good about our work?
- Types of extrinsic motivation
- Motivating others to do uninteresting activities
- Building interest

Based on Reeve (2009, pp. 142-143) 4

Overview

1. Intrinsic-extrinsic motivations

2. Goal setting

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Intrinsic motivation

The inherent desire to engage one's interests and to exercise and develop one's capacities.

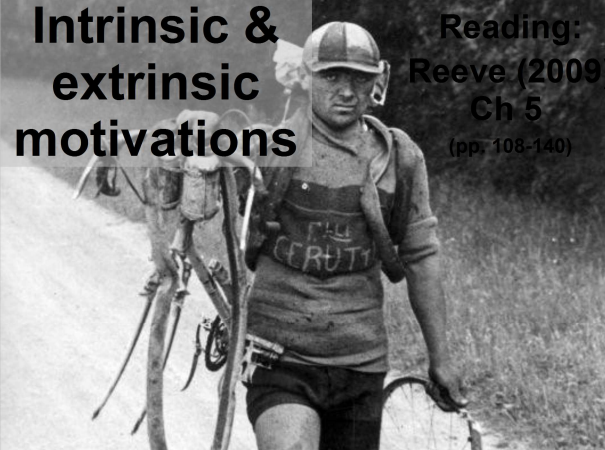
"I am doing this because it is ..." type of motivation

engaged activity interesting, fun, enjoyable, satisfying psychological needs (i.e., autonomy, competence, relatedness)

Based on Reeve (2009, pp. 111-112) 5

Intrinsic & extrinsic motivations

Reading: Reeve (2009) Ch 5 (pp. 108-140)



Origins of intrinsic motivation

Intrinsic motivation

Psychological need satisfaction

- Autonomy: Autonomy support from the environment and one's relationships
- Competence: Competence support from the environment and one's relationships
- Relatedness: Relatedness support from the environment and one's relationships

Based on Reeve (2009, Figure 5.1, p. 112) 6

Benefits of intrinsic motivation

- Persistence** → The higher a person's intrinsic motivation, the greater the person's persistence on that task.
- Creativity** → The more people experience interest, enjoyment, satisfaction, and challenge of the work itself, the more creative they are.
- Conceptual understanding/ High-quality learning** → Flexible thinking, Active information processing, Learning in conceptual way...
- Optimal functioning & well-being** → Greater self-actualisation, Greater subjective vitality, Less anxiety and depression, Greater self-esteem....

Based on Reeve (2009, pp. 112-113)

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What determines a reinforcer's effectiveness?

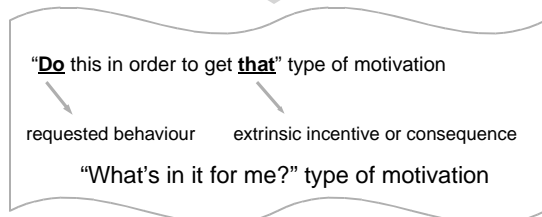
- Quality
- Immediacy
- Person/reinforcer fit
- Recipient's need for that particular reward
- Intensity
- Recipient's perceived value of the reinforcer

Based on Reeve (2009, pp. 114-120)

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Extrinsic motivation

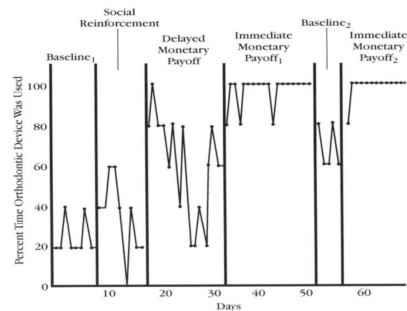
An environmentally created reason (e.g., incentives or consequences) to engage in an action or activity.



Based on Reeve (2009, pp. 113-114)

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Managing behaviour by offering reinforcers



Reeve (2009), Figure 5.2 Effect of Reinforcement on use of Orthodontic Device, p. 117)

External regulation of motivation

- Based on operant conditioning
- Incentives precede behaviour
- Consequences follow behaviour

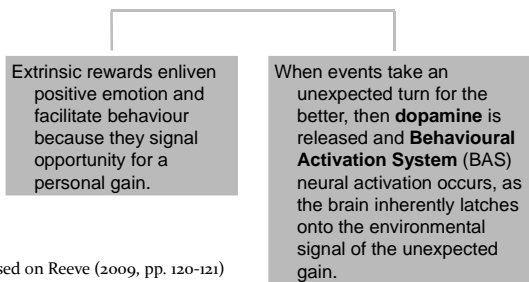
Incentives	Consequences	Rewards
An environmental event that attracts or repels a person toward or away from initiating a particular course of action. (e.g., S: R → C) Situational cue Response Consequence	<ol style="list-style-type: none"> Reinforcers "Do it" <ol style="list-style-type: none"> Positive: ↑s action to get more of a desirable quality Negative: ↑s action (escape) to get less of an undesirable quality Punishers "Stop it": ↓s action to avoid undesirable quality 	Any offering from one person given to another person in exchange for his or her service or achievement. May or may not serve as reinforcers.

Based on Reeve (2009, pp. 114-120)

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Rewards

How do rewards work?
Do they facilitate desirable behaviour?



Based on Reeve (2009, pp. 120-121)

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Do punishers work?

Do they suppress undesirable behaviour?

Research shows that **punishment** is an **ineffective** motivational strategy (popular but ineffective)

"Side effects"

Negative emotionality

- e.g.,
- crying,
 - screaming,
 - feeling afraid

Impaired relationship

between punisher and punishee.

Negative modeling

of how to cope with undesirable behaviour in others.

Based on Reeve (2009, p. 121)

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Do rewards always reduce intrinsic motivation?

Answer: Not always - depends on expectancy and tangibility.

- Expected, tangible (concrete, not verbal or symbolic) rewards ↓ intrinsic motivation.
- But unexpected, non-tangible rewards do not ↓ IM

Based on Reeve (2009, p. 125)

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Immediate & long-term consequences of corporal punishment (Spanking)

■ Short-term:

- Immediate compliance

■ Long-term:

- More aggressive
- More anti-social
- Poorer mental health
- Poorer quality of relationship with parent
- More likely to experience physical abuse
- More likely to abuse own child
- More likely to get a criminal record

Based on Reeve (2009, Figure 5.4, p 122)

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Benefits of incentives, consequences, and rewards

When there is **no** intrinsic motivation to be undermined (uninteresting tasks), rewards can make an otherwise uninteresting task seem suddenly worth pursuing e.g.,



Based on Reeve (2009, pp. 126-128)

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Hidden cost of rewards

The unexpected, unintended, and adverse effects that extrinsic rewards sometimes have on intrinsic motivation, high-quality learning, and autonomous self-regulation.

Using a reward to engage someone in an activity

Intended primary effect

- Promotes compliance (behavioural engagement in the activity)

Unintended primary effect

- Undermines intrinsic motivation
- Interferes with the quality and process of learning
- Interferes with the capacity for autonomous self-regulation

Based on Reeve (2009), Figure 5.5, pp. 121-124)

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Four reasons not to use extrinsic motivation (even for uninteresting endeavors)

Extrinsic motivators still undermine the quality of performance and interfere with the process of learning.

Using rewards distracts attention away from asking the hard question of why a person is being asked to do an uninteresting task in the first place.

There are better ways to encourage participation than extrinsic bribery.

Extrinsic motivators still undermine the individual's long-term capacity for autonomous self-regulation.

Based on Reeve (2009, pp. 127-128)

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Cognitive evaluation theory

- Provides a way for predicting the effects that any extrinsic event will have on motivation.
- Explains how an extrinsic event (e.g., money, grade, deadline) affects intrinsic and extrinsic motivations, as mediated by the event's effect on the psychological needs for competence and autonomy.

All external events have **two functions**:

Control behaviour
Inform competence

Which function is more salient determines how the external event will affect intrinsic and extrinsic motivation.

Based on Reeve (2009, pp. 128-129)

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What makes us feel good about our work?

Dan Ariely

TED Talk (20 mins)

Start at 9:54

http://www.youtube.com/watch?feature=player_detailpage&v=5aH2Ppjpcho#t=594



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Cognitive evaluation theory

1. External events that influence PLOC affect intrinsic motivation:

↑ external PLOC → ↑ EM and ↓ IM
↑ internal PLOC → ↓ EM and ↑ IM

2. External events that influence competence affect intrinsic motivation:

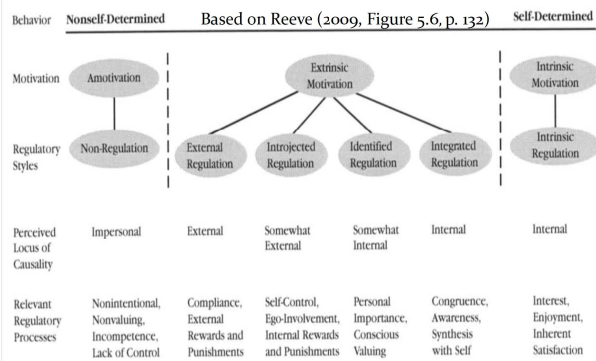
↓ competence → ↑ EM and ↓ IM
↑ competence → ↓ EM and ↑ IM

3. The relative salience of whether an event is mostly controlling or mostly informational determines its effect on I & E motivation.

Based on Reeve (2009, Table 5.1, p. 129)

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Self-determination continuum showing types of motivation



Cognitive evaluation theory

Any external event (Rewards)

Controlling function

"If you do X, then you get Y."

- Decreases intrinsic motivation
- Interferes with quality of learning
- External regulation increases
- Self-regulation undermined

Informational function

"Because you were able to do X, that means you are effective, competent."

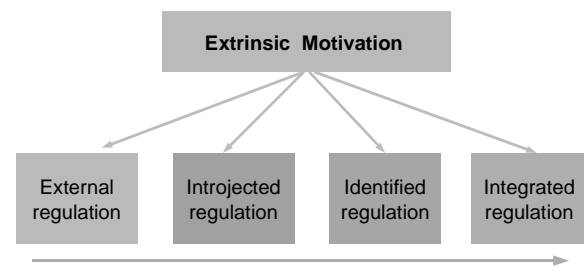
- Increases intrinsic motivation
- Enhances high-quality learning
- Enhances self-regulation

Based on Reeve (2009, pp. 129-130)

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Types of extrinsic motivation

Self-Determination Theory posits that different types of motivation can be organised along a continuum of self-determination or perceived locus of causality.



Based on Reeve (2009, pp. 131-133)

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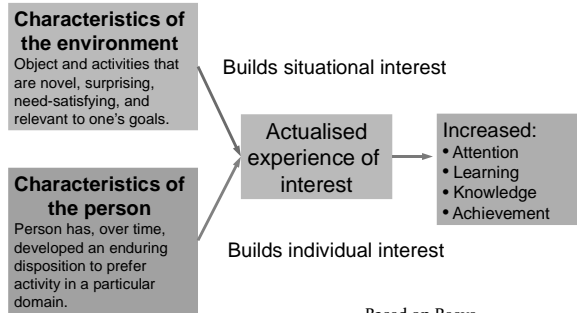
Types of extrinsic motivation

Four Types of Extrinsic Motivation, Illustrated by Different Reasons of "Why I Recycle"

Type of Extrinsic Motivation	External Contingency At Stake	The reason I recycle is...	Illustrative Quotation
External Regulation	Incentives, consequences	"to get a consequence."	"I recycle to make 5 cents on each can."
Introjected Regulation	Avoid guilt, boost self-esteem	"because I should."	"I recycle because I ought to, if I am going to feel good (rather than guilty) about myself."
Identified Regulation	Valuing, sense of importance	"because it is important."	"I recycle because it is important for a cleaner environment."
Integrated Regulation	Value congruence	"because it reflects my values."	"I recycle because it reflects and expresses who I am and what I believe."

Based on Reeve (2009, Table 5.2, p. 133)

Building interest in a particular domain



Based on Reeve (2009), Figure 5.8, p. 137) **28**

Motivating others to do uninteresting activities

Ways to promote more autonomous types of extrinsic motivation

e.g.,

Providing a rationale

Explain why the uninteresting activity is important and useful enough to warrant one's volitional engagement

Building interest

First catch one's situational interest in an activity and then hold that initial interest over time by developing an individual interest in the activity.

Based on Reeve (2009, pp. 135-137)

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I-E motivation summary

- Intrinsic (internal) & extrinsic (external) motivations
- External regulation of motivation — Incentives, Consequences, Rewards
- Hidden costs of rewards
- Cognitive evaluation theory
- Types of extrinsic motivation — External Regulation, Introjected Regulation, Identified Regulation, Integrated Regulation
- Motivating others to do uninteresting activities
- Building interest in a particular domain

Based on Reeve (2009, pp. 142-143)

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Explanatory rationales enhance effort by cultivating an identified regulation

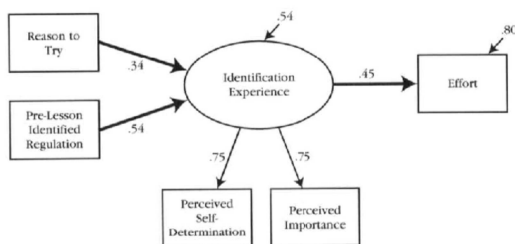


Figure 5.7 Explanatory Rationales Enhance Effort (by Cultivating an Identification Experience)

Source: From "Providing a Rationale in an Autonomy-Supportive Way as a Strategy to Motivate Others During an Uninteresting Activity," by J. Reeve, H. Jang, P. Hardre, & M. Omura, 2002, *Motivation and Emotion*, 26, 183-207. Copyright 2002, Plenum Press.

Based on Reeve (2009, Figure 5.7, p. 136)



Outline – Goal setting & goal striving

- **Plans**
 - Discrepancy
 - Plan-action sequence
 - Corrective motivation
 - Two types of discrepancy
- **Goal setting**
 - Goal-performance discrepancy
 - Difficult, specific goals enhance performance
 - Feedback
 - Goal acceptance
 - Criticisms
 - Long-term goal setting
- **Goal striving**
 - Mental simulations: Focusing on action
 - Implementation intentions
 - Goal pursuit: Getting started
 - Goal pursuit: Persisting and finishing
- **Creating an effective goal-setting program**

Based on Reeve (2009, pp. 205)

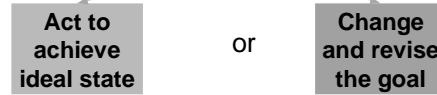
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Corrective motivation

More recent view is that **discrepancy** between actual and ideal states does not automatically trigger an action sequence. Instead, the discrepancy creates a **“corrective motivation”**, i.e., a desire to reduce the discrepancy by either:

- Taking action to pursue the ideal state or
- Changing the goal or
- Withdrawing from the goal

Discrepancy between actual and ideal



Based on Reeve (2009, pp. 209-210)

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Discrepancy between present and ideal states

Present state represents the person's current status of how life is going. Ideal state represents how the person wishes life was going.



- When the present state falls short of the hoped-for ideal state, a discrepancy is exposed.
- It is the **discrepancy** - rather than the ideal state per se – that has motivational properties.
- Discrepancy creates the sense of wanting to change the present state so that it will move closer and closer toward the ideal state.

Based on Reeve (2009, pp. 210-211)

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Two types of discrepancy

Discrepancy reduction

Based on the discrepancy-detecting feedback that underlies plans and corrective motivation.

Discrepancy reduction corresponds to plan-based corrective motivation.

Discrepancy reduction is reactive, deficiency overcoming, and revolves around a feedback system.

Discrepancy creation

Based on a “feed-forward” system in which the person looks forward and proactively sets a future, higher goal.

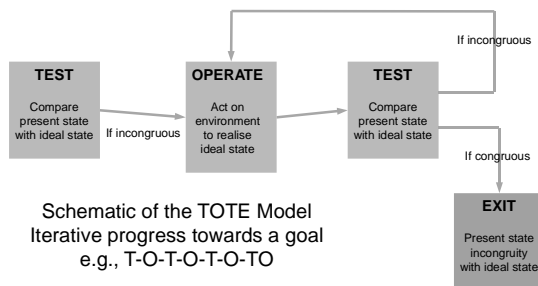
Discrepancy creation corresponds to goal-setting motivation.

Discrepancy creating is proactive, growth pursuing, and revolves around a “feed-forward” system.

Based on Reeve (2009, p. 211)

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The Test-Operate-Test-Exit (TOTE) unit



Based on Reeve (2009, Figure 8.1, p. 208)

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Goal setting

A goal is whatever an individual is trying to accomplish.

(1) **Standard**
a definition of what adequate performance is

A reference point for guiding subsequent mental & physical action so that one can evaluate adequacy for one's performance.

Defines the cross-over point between satisfaction and dissatisfaction.

(2) **Incentive**
a performance criterion for reinforcement

A target to aim for - usually with an external object to aim for such as money or a high grade.

Based on Reeve (2009, pp. 211-212)

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Goal-performance discrepancy

People with goals outperform people without goals

Goals can be self-created or accepted (from others)

Based on Reeve (2009, p. 212)

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Should I make my goals public?

Derek Sivers: Keep your goals to yourself:

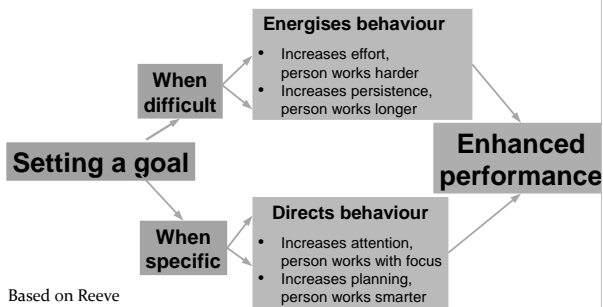
http://www.ted.com/talks/lang/eng/derek_sivers_keep_your_goals_to_yourself.html

Common wisdom has that sharing goals helps you achieve them because it creates social expectation. However, when you tell someone your goal, and they acknowledge, the mind is tricked into feeling that it's already done. and then you're less motivated to do the actual hard work.

Therefore, if you're going to tell someone your goals, make sure to do so in such a way that you derive no satisfaction from doing so.

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How difficult and specific goals raise performance to remove goal-performance discrepancies



Based on Reeve (2009), Figure 8.2, pp. 213-214

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Feedback

The fundamental importance of feedback or knowledge of results

Feedback documents the performer's progress towards goal attainment.

(1) Feedback defines performance

Therefore, instructive to future goal setting efforts

Above-standard
At-standard
Below-standard

(2) Feedback acts as a reinforcer (or punisher)

Based on Reeve (2009, p. 215)

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Additional goal mechanisms

Why do goals work to increase performance?

Goals clarify performance expectations.

Goals counteract apathy, boredom.

Goals make feedback important.

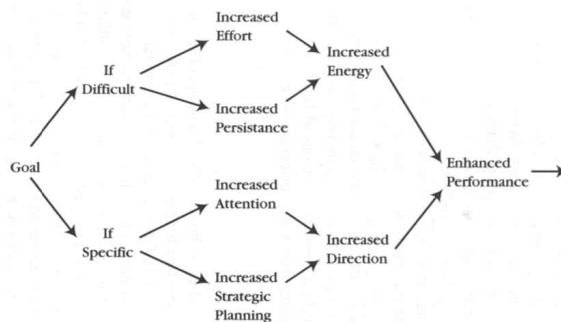
Without goals, performance can be emotionally unimportant.

Goal attainment can generate feeling of pride, satisfaction, or competence that the task itself cannot generate.

Based on Reeve (2009, p. 214)

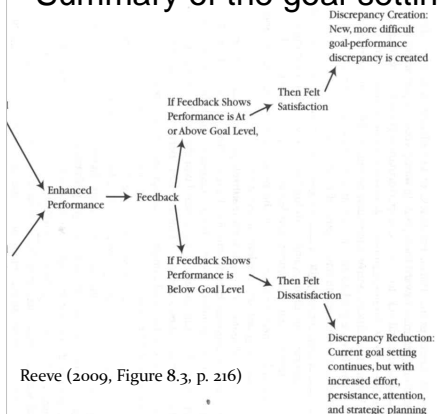
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Summary of the goal-setting process



Reeve (2009, Figure 8.3, p. 216)

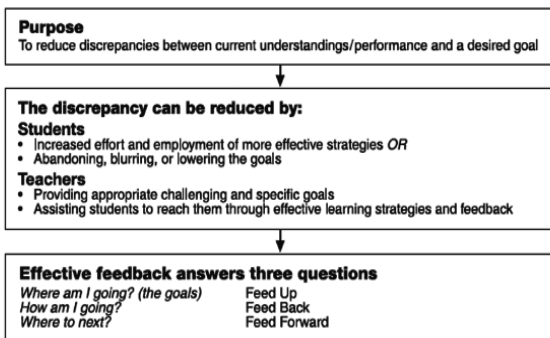
Summary of the goal-setting process



Mean effect-sizes from over 500 meta-analyses of various influences of achievement

Influence	No. of effects	Effect-Size
Feedback	139	1.13
Students' prior cognitive ability	896	1.04
Instructional quality	22	1.00
Instructional quantity	80	.84
Direct instruction	253	.82
Acceleration	162	.72
Home factors	728	.67
Remediation/feedback	146	.65
Students disposition to learn	93	.61
Class environment	921	.56
Challenge of Goals	2703	.52
Bilingual programs	285	.51
Peer tutoring	125	.50
Mastery learning	104	.50
Teacher in-service education	3912	.49
Parent involvement	339	.46
Homework	110	.43
Questioning	134	.41
OVERALL EFFECTS	500,000+	.40

A model of feedback to enhance learning (From Hattie & Timperley (2007, Figure 1))



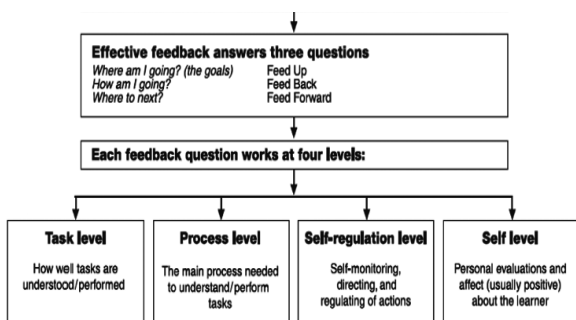
Feedback to enhance learning

Hattie & Timperley (2007)

- Feedback is the single most important predictor of achievement
- Feedback alone is not sufficient – effective instruction is also needed
- Feedback is powerful – but it can be helpful or harmful

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A model of feedback to enhance learning (From Hattie & Timperley (2007, Figure 1))



Goal processes:

Variables that moderate the goal & performance relationship
Goal acceptance (vs. Goal rejection)

4 factors

- Perceived difficulty of the imposed goal
 - There is an inverse relationship between goal difficulty and goal commitment
- Participation in the goal setting process
 - A negotiated goal with flexibility and give-and-take facilitates participation and internalisation of the goal
- Credibility of person assigning the goal
- Extrinsic incentives

Based on Reeve (2009, pp. 217-220) 48

Goal processes:

Variables that moderate the goal & performance relationship Short-term vs. long-term goal setting

- Short-term goal e.g., Pass Exam X
- Long-term goal e.g., Become a school teacher

Problems with Long-Term Goals (LTGs)

- 1 With LTGs, there is a prolonged period of time in which performance goes unreinforced. Therefore, goal commitment can be expected to decrease.
- 2 LTGs don't provide/generate immediate performance feedback.

Therefore, performer may benefit by translating a long-term goal into a series of short-term goals.

This solution is especially necessary if the long-term goal is a relatively uninteresting task to perform.

Based on Reeve (2009, pp. 219-220)

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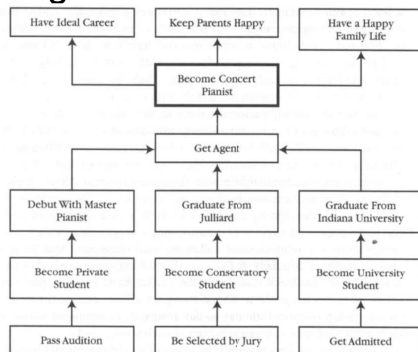
Dangers & pitfalls in goal-setting

1	Increased Stress	<i>*Goals seen as too difficult *Goal overload *Goal conflict</i>
2	Possibility for Failure	<i>*Difficult goals may lead to sub-goal performance and therefore to detrimental emotional consequences associated with failure.</i>
3	Non-goal Areas Ignored	<i>*The purpose of goal is to focus attention and action in certain directions. So non-goal areas are intentionally devalued.</i>
4	Short-Range Thinking	<i>*Proximal vs. Distal goal-setting debate.</i>
5	Cheating	<i>*Goals, when made public and when involving extrinsic incentives, can create performance pressure and prompt efforts at cheating rather than effort at skill development.</i>
6	Undermines Intrinsic Motivation	<i>*If task is interesting, short-term goals are typically experienced as controlling and undermine intrinsic motivation (IM). *If task is uninteresting, short-term goals can create competence feedback and increase intrinsic motivation.</i>

Based on Reeve (2009, pp. 218-219)

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A long-term goal as a complex cognitive lattice structure



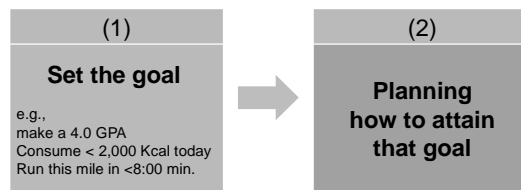
Based on Reeve (2009, Figure 8.4, p. 220)

Implementation intentions

A specific goal-directed action, initiated at an anticipated future outcome

Implementation Intentions

A 2-step process

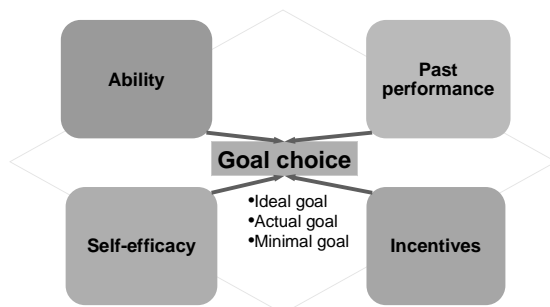


Based on Reeve (2009, pp. 222-224)

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Four predictors of goal choice

Each predictor provides independent contributions

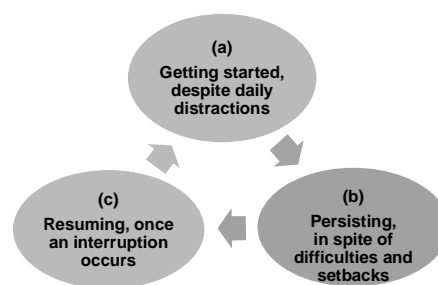


Based on Reeve (2009)

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Implementation intentions

(2) Planning how to attain the goal



Based on Reeve (2009, pp. 222-224)

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Brian Tracy: If you could achieve one goal in 24 hours

<http://www.youtube.com/watch?v=Q6GdnQm0gSE>
(2 minutes)

- List 10 goals for next 12 months
- Pick the one that would most change your life if you could have it in the next 24 hours
- On one page, write everything you can do to achieve that goal
- Do one thing towards that goal every day

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References

- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Reeve, J. (2009). *Understanding motivation and emotion* (5th ed.). Hoboken, NJ: Wiley.

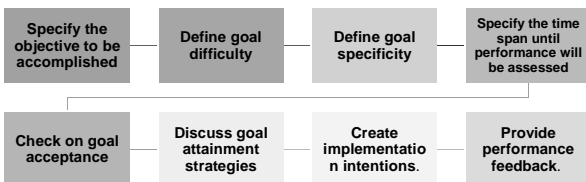
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Putting it all together

Steps in an effective goal-setting program

Sequential steps within the **goal-setting** process



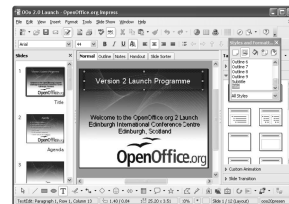
Sequential steps within the **goal-striving** process

Based on Reeve (2009, pp. 225-226)

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Next lecture



Personal control beliefs
(Ch 9)

The self & its strivings
(Ch 10)

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