

# MOTIVATION & EMOTION

## Extrinsic motivation & goal-setting



**Dr James Neill**  
Centre for Applied Psychology  
University of Canberra  
2015

Image source  
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### Overview



1. Extrinsic motivation (Ch 5)
2. Goal setting & goal striving (Ch 8)



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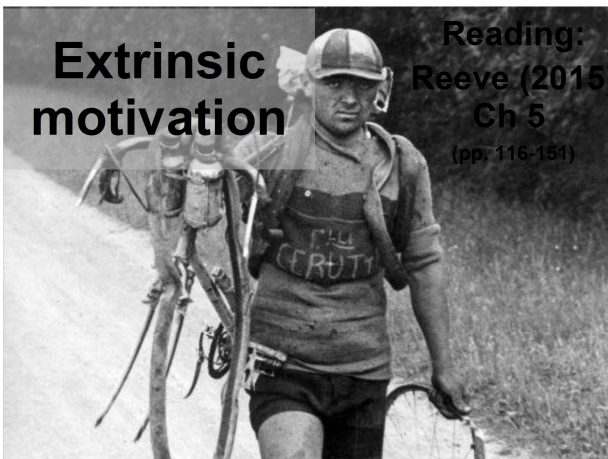
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## Extrinsic motivation



Reading:  
Reeve (2015)  
Ch 5  
(pp. 116-151)

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## Outline – Extrinsic motivation

- Quasi-needs
- Extrinsic motivation
- Incentives, consequences, and rewards
- Hidden costs of reward
- Cognitive evaluation theory
- What makes us feel good about our work?
- Types of extrinsic motivation
- Motivating others to do uninteresting activities

Based on Reeve (2015, pp. 116-117)

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## Quasi-needs

- Ephemeral, situationally-induced wants that create tense energy to engage in behaviour capable of reducing the built-up tension.
- Deficiency-oriented and situationally reactive.
- What we lack, yet need, from the environment in a rather urgent way

### Examples:

- a secure job
- money
- parental approval

Based on Reeve (2015, pp. 119)

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## Extrinsic motivation

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

“**Do** this in order to get **that**” type of motivation

requested behaviour      extrinsic incentive or consequence

“What’s in it for me?” type of motivation

Based on Reeve (2015, pp. 120)

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## 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., "ding" -> put seatbelt on)	1. Reinforcers "Do it" 1. Positive: ↑s action to get more of a desirable quality 2. Negative: ↑s action (escape) to get less of an undesirable quality 2. 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.

Based on Reeve (2015, pp. 120-122)

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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 (2015, p. 124)

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## Managing behaviour by offering reinforcers

Reeve (2015), Figure 5.1 Effect of reinforcement on use of orthodontic device, p. 123)

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## Rewards

How do rewards work?  
Do they facilitate desirable behaviour?

An extrinsic reward  
enlivens positive  
emotion and facilitates  
behaviour because they  
signal opportunity for a  
personal gain.

When events take an  
unexpected turn for the  
better, then **dopamine** is  
released and **Behavioural  
Activation System (BAS)**  
neural activation occurs, as  
the brain inherently latches  
onto the environmental  
signal of the unexpected  
gain.

Based on Reeve (2015, pp. 124-125)

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## 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 (2015, pp. 124-125)

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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 (2015, pp. 128-130)

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

### ■ Short-term:

- Immediate compliance

### ■ Long-term:

- Aggression
- Anti-social behaviour
- Poor mental health
- Poor quality of relationship with parent
- Victim of physical abuse
- More likely to abuse own child
- More likely to get a criminal record

Based on Reeve (2009, Figure 5.3, p 129)

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## Hidden cost of rewards

There are 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 (2015), pp. 130-131)

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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 (2015, pp. 130-131)

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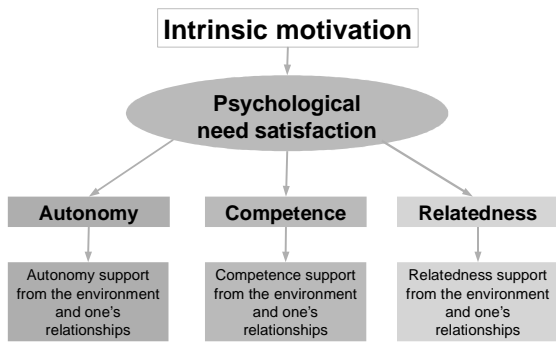
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## Origins of intrinsic motivation



Based on Reeve (2015, Figure 5-4, p. 131)

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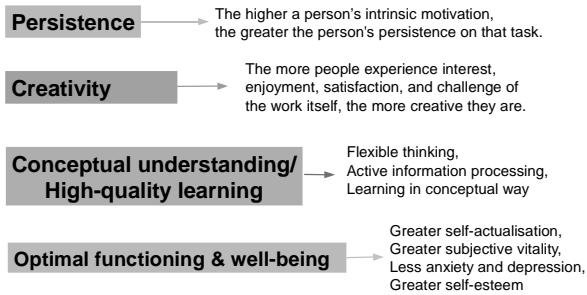
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## Benefits of intrinsic motivation



Based on Reeve (2015, pp. 131-133)

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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 (2015, pp. 137-139)

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## Reasons not to use extrinsic motivation (even for uninteresting endeavors)

**Extrinsic motivators** 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 (2015, p. 138)

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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 (2015, pp. 139-140)

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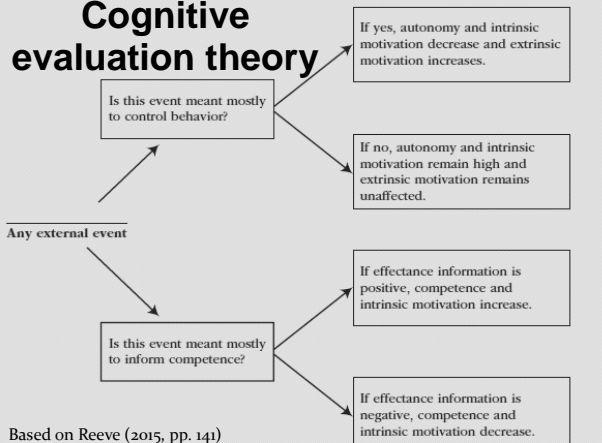
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## Cognitive evaluation theory



Based on Reeve (2015, pp. 141)

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



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# Self-determination continuum showing types of motivation

Based on Reeve (2009, Figure 5.6, p. 143)

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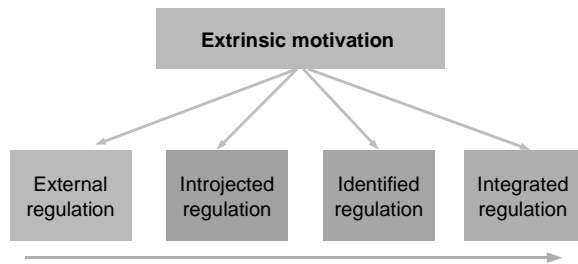
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# Types of extrinsic motivation

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



Based on Reeve (2015, p. 142-147)

Increasing autonomy

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## Types of extrinsic motivation

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

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

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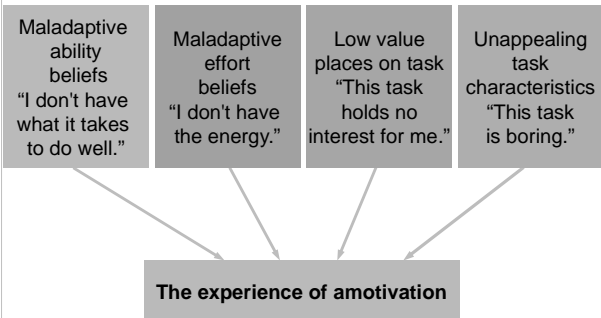
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## Four part experience of amotivation



Based on Reeve (2015, pp. 146-147)

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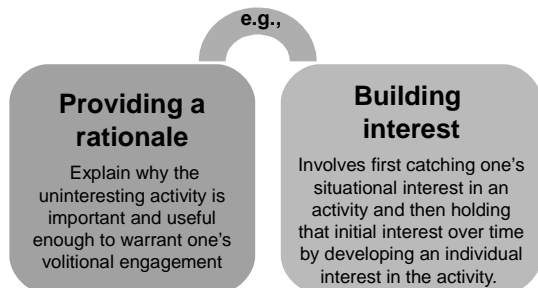
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## Motivating others to do uninteresting activities

Ways to promote more autonomous types of extrinsic motivation



Based on Reeve (2015, pp. 147-149)

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## Building interest in a particular domain

### Characteristics of the environment

Object and activities that are novel, surprising, need-satisfying, and relevant to one's goals.

Builds situational interest

### Characteristics of the person

Person has, over time, developed an enduring disposition to prefer activity in a particular domain.

Builds individual interest

Actualised experience of interest

Increased:  
• Attention  
• Learning  
• Knowledge  
• Achievement

Based on Reeve (2015), pp. 147-149) **28**

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## Extrinsic motivation summary

- Extrinsic (external) motivation
- External regulation of motivation
- Hidden costs of rewards
- Cognitive evaluation theory
- Types of extrinsic motivation
- Motivating others to do uninteresting activities
- Building interest in a particular domain

Incentives  
Consequences  
Rewards

External Regulation  
Introjected Regulation  
Identified Regulation  
Integrated Regulation

Based on Reeve (2015, pp. 149-150)

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## Goal setting & goal striving

Reading:  
Reeve (2015)  
Ch 8  
(pp. 213-238)



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# Outline – Goal setting & goal striving

- Plans
  - Discrepancy
  - Affect and feelings
  - Two types of discrepancy
  - Corrective motivation
- Goal setting
  - Goal-performance discrepancy
  - Difficult, specific goals enhance performance
  - Feedback
  - Goal acceptance
  - Criticisms
  - Long-term goal setting
- Goal striving
  - Mental simulations
  - Implementation intentions
- Goal disengagement

Based on Reeve (2015, p. 213)

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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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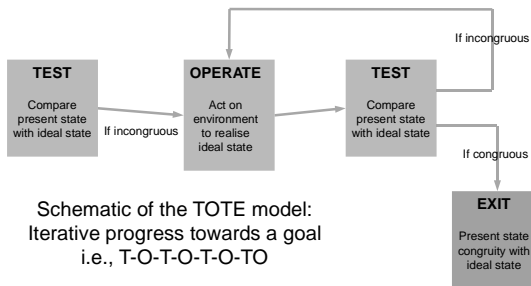
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# Plans: The TOTE unit

The cognitive mechanism by which plans energise and direct behaviour towards an "ideal state".



Schematic of the TOTE model:  
Iterative progress towards a goal  
i.e., T-O-T-O-T-O-TO

Based on Reeve (2015, Figure 8.1, p. 216)

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## Plans: Discrepancy

### Discrepancy between actual and ideal

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 (2015, pp. 218-219)

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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 (2015, pp. 219-220)

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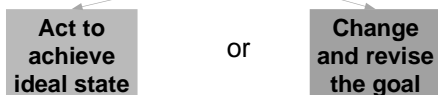
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## Corrective motivation

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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## 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 (2015, pp. 220-221)

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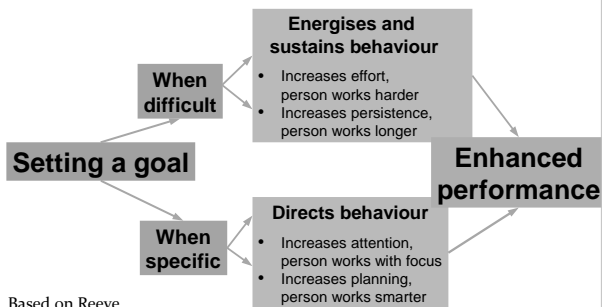
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## How difficult and specific goals raise performance to remove goal-performance discrepancies



Based on Reeve (2015), Figure 8.2, pp. 224)

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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 feelings of pride, satisfaction, or competence that the task itself cannot generate.

Based on Reeve (2009, p. 214)

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## Should I make my goals public?

Common wisdom is that sharing goals helps people to achieve them because it creates social expectation.

However, when you tell someone your goal, 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.

**Derek Sivers:**  
**Keep your goals to yourself (3:15 mins):**

[http://www.ted.com/talks/derek\\_sivers\\_keep\\_your\\_goals\\_to\\_yourself](http://www.ted.com/talks/derek_sivers_keep_your_goals_to_yourself)

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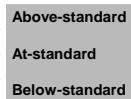
## Feedback

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



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

Based on Reeve (2015, p. 225)

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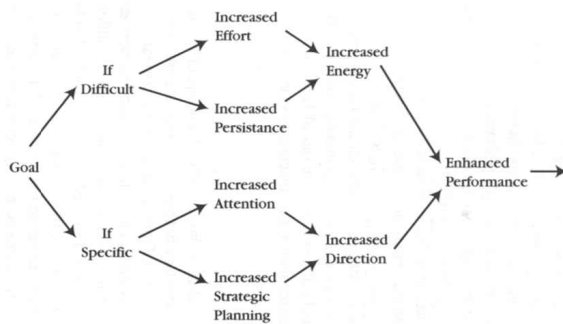
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## Summary of the goal-setting process



Reeve (2015, Figure 8.3 (part), p. 226)

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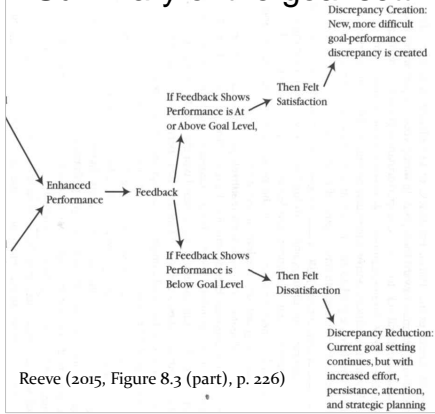
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## Summary of the goal-setting process



Reeve (2015, Figure 8.3 (part), p. 226)

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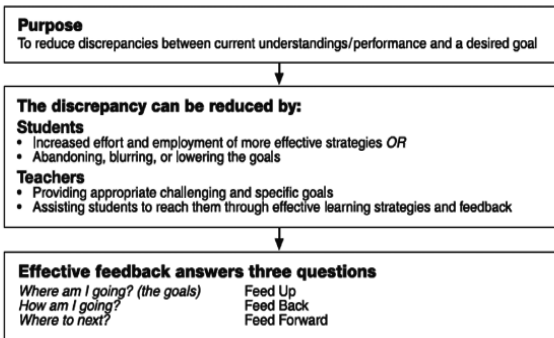
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## A model of feedback to enhance learning (From Hattie & Timperley (2007, Figure 1))




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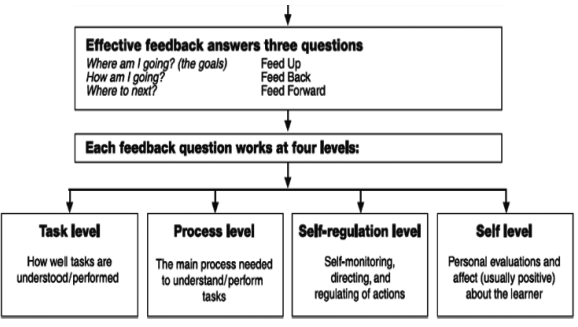
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## A model of feedback to enhance learning (From Hattie & Timperley (2007, Figure 1))




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### 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

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### 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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### Goal processes:

Variables that moderate the goal-performance relationship

- Goal-acceptance (vs. goal rejection)
- Goal choice
  - Ideal goal
  - Actual goal
  - Minimal goal
- Short- vs. long-term goal setting

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## Goal acceptance: Four 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) 49

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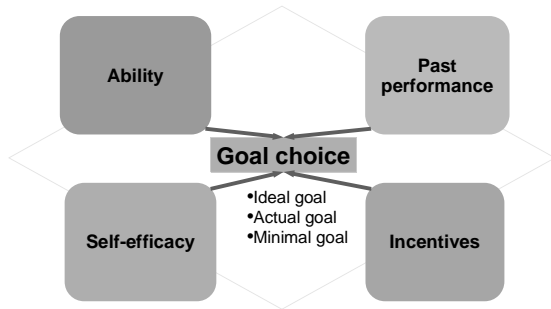
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## Goal choice: Four predictors

Each predictor provides independent contributions



Based on Reeve (2015)

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## Short- vs. long-term goal setting

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

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 (2015, pp. 227-228)

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# Dangers & pitfalls in goal-setting

1	<b>Increased Stress</b>	<i>*Goals seen as too difficult</i> <i>*Goal overload</i> <i>*Goal conflict</i>
2	<b>Possibility for Failure</b>	<i>*Difficult goals may lead to sub-goal performance and therefore to detrimental emotional consequences associated with failure.</i>
3	<b>Non-goal Areas Ignored</b>	<i>*The purpose of goal is to focus attention and action in certain directions. So non-goal areas are intentionally devalued.</i>
4	<b>Short-Range Thinking</b>	<i>*Proximal vs. Distal goal-setting debate.</i>
5	<b>Cheating</b>	<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	<b>Undermines Intrinsic Motivation</b>	<i>*If task is interesting, short-term goals are typically experienced as controlling and undermine intrinsic motivation (IM).</i> <i>*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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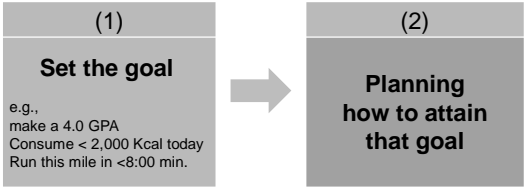
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# Implementation intentions

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

## Implementation Intentions

### A 2-step process



Based on Reeve (2009, pp. 230-235)

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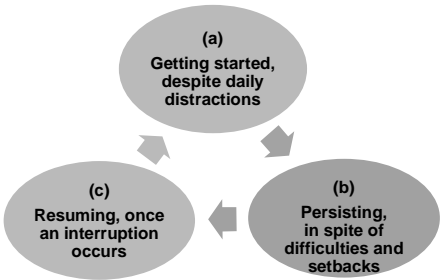
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# Implementation intentions

(2) Planning how to attain the goal



Based on Reeve (2015, pp. 230-235)

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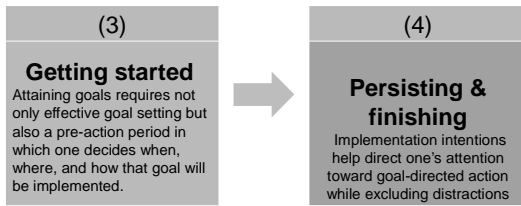
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## Implementation intentions

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

### Goal pursuit



Based on Reeve (2015, pp. 230-235)

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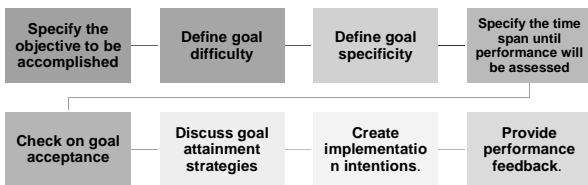
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## Putting it all together

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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## 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.

Note: Image credits are in the slide notes

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## Open Office Impress

- This presentation was made using Open Office Impress.
- Free and open source software.
- <http://www.openoffice.org/product/impress.html>



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