

Achievement –  
psychological  
factors

# **Educational psychology**

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# Psychological factors influencing school achievement

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Types of goals

Aspiration level

Attribution style (success x failure)

Self-efficacy

Experiences of failure

Stress (low distress/frustration tolerance)

# Other factors...not included in the presentation

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## FAMILY, CHILD

Health issues (acute or chronic – asthma, Crohn disease...)

Mental health problems (anxiety, phobia, sleep problems)

Home environment (poverty, poor parental attitudes toward school, inadequate study space or time, divorce/separation, conflicts)

Excessive extracurricular activities (professional sport)

Neglect, abuse, violence (at home or elsewhere)

Cognitive problems, learning disabilities

Language/speech issues (not native speaker, low verbal skills)

Sensory impairment – vision, hearing

Peer pressure (for low performance, substance abuse)

## SCHOOL

Inadequate overall funding, facilities, materials, staff...

Classroom size/number of pupils ratio

Safety issues (hostility, prejudice, bullying, violence)

Teachers (not properly educated, unrealistic expectations, not accommodating for individual's needs, excessive testing)

School transitions

School/classroom climate

Commuting distance to the school

# Goals contributing to achievement directly

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Types of goals can be intertwined and set for specific areas.

**Mastery g.-** enjoyment of learning the material, form of **intrinsic** motivation, interest seems to be longer lasting and leads to further curiosity. An Interest and deeper understanding does not necessarily mean good grades.

**Performance g.** – enjoyment of recognition from peers/teachers, extrinsic motivation, performance-oriented students do not learn material as deeply or permanently as students who are more mastery oriented. The advantage in grades occurs both in the short term (individual assignments) and in the long term (overall grade point average).



# Goals contributing to achievement indirectly

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**Avoiding-failure g.** – undermine academic achievement, they are usually a negative byproduct of the competitiveness of performance goals. Avoidance is typical for situations when success seems beyond reach, or not desirable (e.g. gender threat)

In fear of failure self handicapping occurs = deliberate actions and choices that the reduce chances of success (doing minimum of work, procrastination, unrealistic goals).

Voluntary resource on „active procrastination“

**Social goals** - relationships can work both for and against academic achievement:

- ❑ Pleasing the teacher – extrinsic motivation (performance goal in the area of relationship)
- ❑ Relationships with peers – to be personally close (prosocial behaviors of asking and giving help), to impress peers with skills and knowledge (competition decreases collaboration), to fit in/conform (peer pressure for low achievement as a group norm).



# To do:

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Social relationships are valued highly by most students (sometimes the only reason they go to school). Teachers should generally facilitate them, though also **keep an eye** on their nature and their consequent effects on achievement.

Encourage **mastery goals** to support more sustained, thoughtful learning:

- ❖ let students choose specific tasks and assignments
- ❖ take the time to learn their interests (e.g. music)
- ❖ offer them curriculum topics with links to their interests (biology – physiology of the ear, effect of music on the brain; English – lyrics analysis/writing)
- ❖ use formative assessment of individual effort and improvement, avoid comparisons
- ❖ avoid competition in the classroom unless all pupils have balanced chances to succeed
- ❖ promote collaboration on tasks/projects (facilitate communication skills – taking turns listening/speaking, including all voices, how to dis/agree)
- ❖ allow individual projects with sharing/discussion outputs.

# Expectancy and aspiration

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**Expectancy** = cognitive part of motivation, helps to make decisions about goals, direction of energies, curiosity, and activity. ([voluntary reading](#))

- Most individuals will not choose to do a task (even interesting or valuable) or continue in a task when they expect to fail.

**Aspiration** = an ambition, goal, or any kind of desired end that might be achieved through personal effort. Aspiration is a **hope** to achieve.

- Selection of goals is based upon **appraisal of skills and abilities** to achieve them.
- Learners are influenced by group goals and performance and adjust aspirations to these (social comparison plays a role...“But mom, the entire class got bad grades from that test!”)
- **Level of aspiration** – term coined by Kurt Lewin, [original documentary here](#)

# Aspiration – effects of success and failure

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**Repeated success -> increases level of aspiration.** The more we accomplish, the higher our goals. Self-confidence is increased, goals are set realistically and even slightly more difficult than the previous ones, that were already achieved.

**Infrequent failures -> lower the aspiration level** or cause it to rise less rapidly than under conditions of repeated success.

**Continuous failures -> aspirations are very low or missing** (hope is gone) goals are set so low that success is guaranteed, or so high that our inability to achieve them does not produce a feeling of failure (ego-defenses), engaging in self-deception and/or self-sabotage.



# Attributing success and failure – impact on achievement

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**Attributions** are perceptions about the causes of success and failure

The **fundamental attribution error** (error in social cognition) = individual's tendency to attribute another's actions to their character or personality, while **attributing** their own behavior to external situational factors outside of their control.

Teachers and pupils can be more prone to judgements guided by fundamental attribution error when in stressful situations, when upset and frustrated.

Attributional or explanatory styles = tendencies when inferring causes of a person's behavior or an interpersonal event

## Attributional styles

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**the internal–external dimension** (location of the source of success or failure; see > [locus of control](#))

- internal - means attribution of events to the self, “I succeeded due to my abilities, I am smart.”
- external – “I failed the test, because the teacher made it too difficult, the teacher is stupid“

**the stable–unstable dimension** (whether they tend to attribute events to enduring or transient causes)

- stable – attribution to ability
- unstable – effort put into preparation

**the controllable – uncontrollable dimension** (an attribution is the extent to which the individual can influence the outcome)

- controllable – effort, allocated time to study
- uncontrollable – „luck“, teacher’s mood

## Optimistic and pessimistic explanatory style (Martin Seligman)

	Explanatory Style			
	Pessimistic		Optimistic	
	Failure	Success	Failure	Success
Personalization (Internal vs External)	Internal	External	External	Internal
Permanence (Stable vs Unstable)	Stable	Unstable	Unstable	Stable
Pervasiveness (Global vs Specific)	Global	Specific	Specific	Global

Retrieved (20.12.2020) from: <https://kovamag.com/explanatory-style/>

# ...but sometimes the causes ARE external

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locust in control

“Acceptance of what has happened is the first step to overcoming the consequences of any misfortune.” – William James

[Why Good Societies Are Pessimistic](#)

# To do:

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- Give pupils tasks that allow them a distinct possibility of success - challenging without pushing them beyond their capabilities
- Help pupils to set goals for themselves realistically
- Estimate how much effort/work it will take to get there, foster commitment to the goals
- Monitor progress towards the goal together
- Model how to be patient, when setbacks and frustrations occur
- Let them succeed (repeatedly) but not without their effort
- However, be ready to help – “a task that proves difficult initially may remain difficult indefinitely” (Seifert, Sutton, 2011 p. 119)
- Effort to develop conducive social climate in the class
- Provide materials and tasks of appropriate difficulty
- Standards of assessment must be transparent (what is there to be learned and how it will be graded)
- Foster the belief that competence or ability of changeable, controllable aspect of development (**fixed mindset x growth mindset** (obligatory to watch, voluntary to remember))

# Strive for balance

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# Self-efficacy

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**Confidence** – **Cognitive** judgements of personal abilities and skills

**Self-esteem** – more global **Evaluation** of identity (affective quality)

[https://www.youtube.com/watch?v=wC9S\\_fFMnaU](https://www.youtube.com/watch?v=wC9S_fFMnaU) (5 min, voluntary)

**Self-efficacy** - belief that you can carry out a **Specific** task or reach a specific goal

<https://www.youtube.com/watch?v=xcLKIPTG97k> ( 7 min, obligatory)

Sources of self-efficacy beliefs:

- prior experiences of mastering/failing tasks
- watching others' mastering/failing tasks (social learning)
- messages from others ("You can do it" x "You can't do anything right")
- emotions related to stress and discomfort (emotion regulation)

# Self-efficacy and aspiration level

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<b>Aspiration</b>	<b>High self-efficacy</b>	<b>Low self-efficacy</b>
<b>Choice of tasks</b>	Increasingly difficult	Easier or way too difficult.
<b>Persistence at tasks</b>	Persists more (but may underestimate preparation)	Gives up earlier.
<b>Response to failure</b>	Faster recovery from setback (overconfident to handle more, but doesn't)	More likely to develop fear of failure, learned helplessness

Pupils may have not realistic judgement of their abilities and skills relevant to selected tasks, they misperceive their capacity to persist at task, they don't estimate well what it will take to complete it and for how long they will need work on it.



# Experiencing failure

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Failure is distressing, upsetting and demoralizing experience, which can further demotivate pupils.

Failure changes **perceptions** about oneself, the situation, and the goal.

- ❑ tendency to feel less up to the task (underestimate themselves, assess their abilities and skills worse than they are, although it is unlikely your IQ would deteriorate 20 points after failing an exam).
- ❑ situation seems uncontrollable, stress and emotional response can be strong and paralyze a person (especially if the stakes were perceived as high) > experience of helplessness in the moment
- ❑ unconscious fear of (another) failure sets in – unless brought into consciousness it can result in avoidance and self-sabotage (admitting fear makes people even more vulnerable, but it is the „cure“)

To do: address child's experience of failure, voicing, how it may influence his/hers feelings, thoughts, behaviors, can mitigate some of its crippling effects.



Voluntary resource

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De Castella, K., Byrne, D., & Covington, M. (2013, April 29). **Unmotivated or Motivated to Fail? A Cross-Cultural Study of Achievement Motivation, Fear of Failure, and Student Disengagement.** *Journal of Educational Psychology*. doi:10.1037/a0032464 (Retrieved 20.12.2020)

[https://www.researchgate.net/publication/255779892\\_Unmotivated\\_or\\_Motivated\\_to\\_Fail\\_A\\_Cross-Cultural\\_Study\\_of\\_Achievement\\_Motivation\\_Fear\\_of\\_Failure\\_and\\_Student\\_Disengagement](https://www.researchgate.net/publication/255779892_Unmotivated_or_Motivated_to_Fail_A_Cross-Cultural_Study_of_Achievement_Motivation_Fear_of_Failure_and_Student_Disengagement)

*Figure 1.* The quadripolar model as a function of fear of failure and success orientation. Adapted by De Castella, Byrne, and Covington (2013) from *Making the Grade: A Self-Worth Perspective on Motivation and School Reform* (p. 40), by M. Covington, 1992, Cambridge, England: Cambridge University Press. Copyright 1992 by Cambridge University Press.

# Achievement and stress

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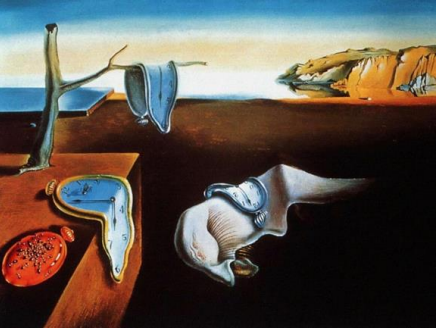
**Stress** = the physiological or psychological response to internal or external stressors. Stress involves changes affecting nearly every system of the body, influencing how people feel and behave. (APA)

**See lecture 3 Biology of emotions, ANS regulation (stress -> fight-flight-freeze);** experiencing ACEs results in overall higher levels of arousal of ANS; and Attachment and Learning behaviors resource

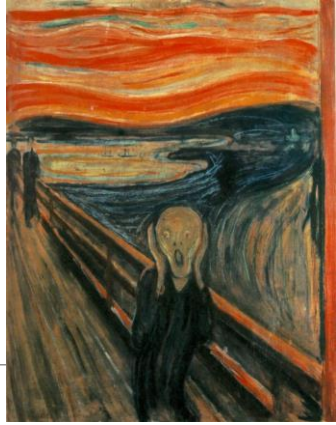
**Stressful situations** = events that are perceived as endangering one's physical or psychological well-being. The stressfulness of an event depends on how we interpret it.

Characteristics of stressful situations:

- ▶ unpredictability (unreadable, confusing, unclear, unstructured)
- ▶ currently unsolvable
- ▶ lack of perceived control (unmanageable)
- ▶ endangering (physically and/or psychologically)



# Types of stress - eustress, distress



## EUSTRESS

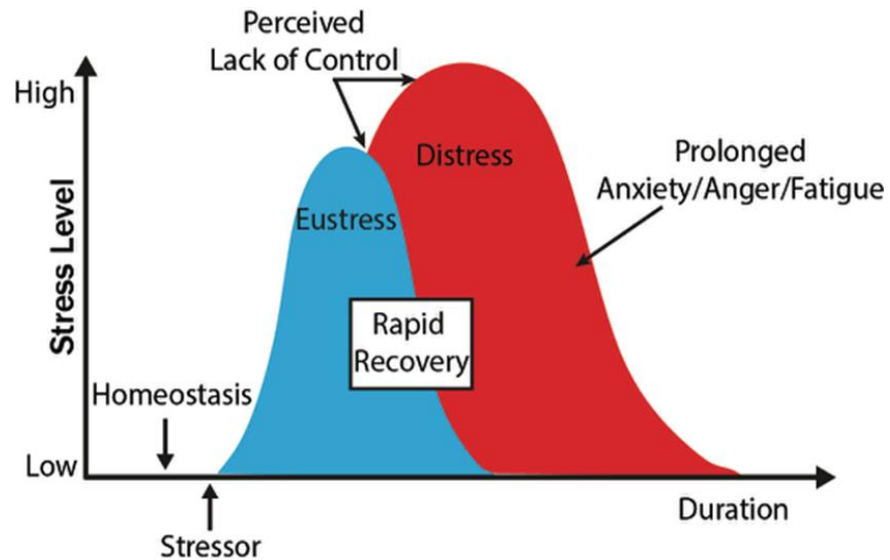
A positive response to stressor (self-efficacy, hope and challenge, meaning of the goal).

- short-term and in preferred amounts, stressors can have a positive stimulating effect.

- increased physical activity, enthusiasm or creativity

- stretch - the goal is not too far out of reach but is still slightly more than one can handle, self-efficacy is present.

- can induce flow phenomenon.



## DISTRESS

A negative response to stressor brought about by constant readjustments or alterations in a routine. - feelings of discomfort and overwhelm.

- decrease in performance, errors, failures

Acute stress is an intense stress that arrives and disappears quickly.

Episodic acute stress is when people experience frequent acute stress.

Chronic stress is a prolonged stress that exists for weeks, months, or even years (e.g. bullying, living in polluted areas)

# Reactions to stress

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**Anger and aggression** - the frustration–aggression hypothesis assumes that whenever a person's effort to reach a goal are blocked, aggressive drive is induced that motivates behavior designed to injure the object – or person – causing the frustration. Direct aggression toward the source of frustration is not always possible or wise.

**Apathy and depression** - opposite response to anger is withdrawal and apathy. If the stressful conditions continue and the individual is unable to cope with them, apathy may deepen into depression. Some humans also appear to develop **learned helplessness**, characterized by withdrawal, and inaction (**freezing**), in response to uncontrollable events.

**Cognitive impairment** - in addition to emotional reactions, people find it hard to concentrate and to organize their thoughts logically. They may be easily distracted, and their **performance deteriorates**. Cognitive impairment is either caused by high levels of emotional arousal, which can interfere with the processing of information, or it results from the distracting thoughts (seeking for solutions, worrying about results, negative self talk) (Atkinson, 2000).

# ....learned helplessness

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Learned helplessness was originally studied by the psychologist Martin Seligman (1995).

Helplessness is experienced in frustrating and stressful situations.

Learned helplessness = a perception of complete lack of control in mastering a task. The attitude is similar to depression, a pervasive feeling of apathy and a belief that effort makes no difference and does not lead to success.

In people, learned helplessness leads to characteristic ways of dealing with problems:

- attribute the source of a problem to themselves
- generalize the problem to many aspects of life, and to see the problem as lasting or permanent.

Can optimism be learned as well?

# Frustration tolerance

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To achieve a goal, one usually must make an effort and overcome **obstacles**.

Frustrating situation = reaching the goal is frustrated = thwarted by an obstacle (from daily hassles to existential frustration). The frustration causes tension, which energizes reactions.

Frustration tolerance = ability to tolerate a degree of frustration & unpleasant feelings

- can be decreased in certain conditions: anxiety and depression, chronic stress, ADHD...

Low frustration tolerance

- can lead to unwillingness to do the task
- low persistence
- inability to complete the task due to emotional dysregulation (thoughts: this is unbearable, I can't stand it, negative self talk „I will never finish this, it is too hard“; behavior: impulsive behavior, avoiding the task, wanting instant gratification – low patience, giving up quickly).

## ...reactions to frustration by Saul Rosenzweig

REACTION	EMOTION	REASONING	TENDENCY	DEFENSIVE MECHANISM
EXTRAPUNITIVE	Anger Indignation	Blaming others Condemning others	Heteroaggression	Projection
INTROPUNITIVE	Guilt Humiliation	Self-blame Self-devaluation	Autoaggression	Isolation
IMPUNITIVE	Embarrassment Shame	Blames the situation Bad luck, destiny, vis maior	Erotism (reconcile oneself and others)	Repression

[Rosenzweig, 1934](#) and 80 years later in [fMRI scan](#) ...both articles are voluntary readings



# To do:

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Be aware of self-care practices and model them for children

Generally, when distress and frustration occurs:

- ❖ focus on emotion, name it, sit with it, accept it (promote acceptance of a negative, and unpleasant emotion in a child, don't try to change it into positive or push it away)
- ❖ calm the body: deep breathing into belly, walk around, stretch, „shake off tension“, squeeze some toy, advise the child to wash his/hers face with cold water (dive reflex)
- ❖ address the thoughts - help the child to put the situation into perspective
- ❖ reduce the task into small manageable steps, provide instruction and support.

# Resources

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Seifert, K., & Sutton, R. (2011). Educational psychology. Athens: The Global Textbook Project.

ATKINSON, Rita L. Hilgard's introduction to psychology. Edited by Carolyn D. Smith. 13th ed. Fort Worth: Harcourt College, 2000. xxiii, 768. ISBN 015508044X