

Dropout and engagement in Vocational Education and Training : A self-determination approach



Source: Calvin & Hobbes

Teaching Practice and the Prevention of Early Drop-out from Vocational Training: Empirical Approach and Proposal for Intervention

International Seminar and Biannual Team Meeting - Palma, November 21-22, 2022

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The Self-Determination Theory

Basic Needs Theory	Organismic Integration Theory	Goal Contents Theory	Cognitive Evaluation Theory	Causality Orientations Theory
<p>Introduces the concept of basic needs. Specifically elaborating on the basic psychological needs of:</p> <p><i>Autonomy, Confidence and Relatedness</i></p>	<p>Clarifies that individuals are inclined towards performing certain behaviours. Focuses on the taxonomy of motivation specifying different types of extrinsic motivation on a scale of autonomy</p>	<p>Distinguishes extrinsic goals from intrinsic goals in accordance with meeting the basic psychological needs</p>	<p>Explains how external events can either facilitate or undermine intrinsic motivation. Focuses on how certain reward structures can detract from an individual's motivation</p>	<p>Focuses on the individual differences of motivation. Specifies between 3 orientation styles:</p> <p><i>autonomy orientated, control orientated, impersonally orientated</i></p>

Source: https://en.wikiversity.org/wiki/Motivation_and_emotion/Book/2020/Self-determination_theory_in_education

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press.
<https://doi.org/10.1521/978.14625/28806>

The Basic Needs Theory: Criteria

- Relate to the psychological (not physical) functioning
- Need satisfaction contributes to development, well-being and adjustment; frustration leads to multiples issues
- Basic needs shape people thinking, acting and feeling
- Existence and relevance of needs are considered universal: across cultures, socio-demographics, etc.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>

Vansteenkiste, M., Ryan, R. M. & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, 44, 1–31. <https://doi.org/10.1007/s11031-019-09818-1>

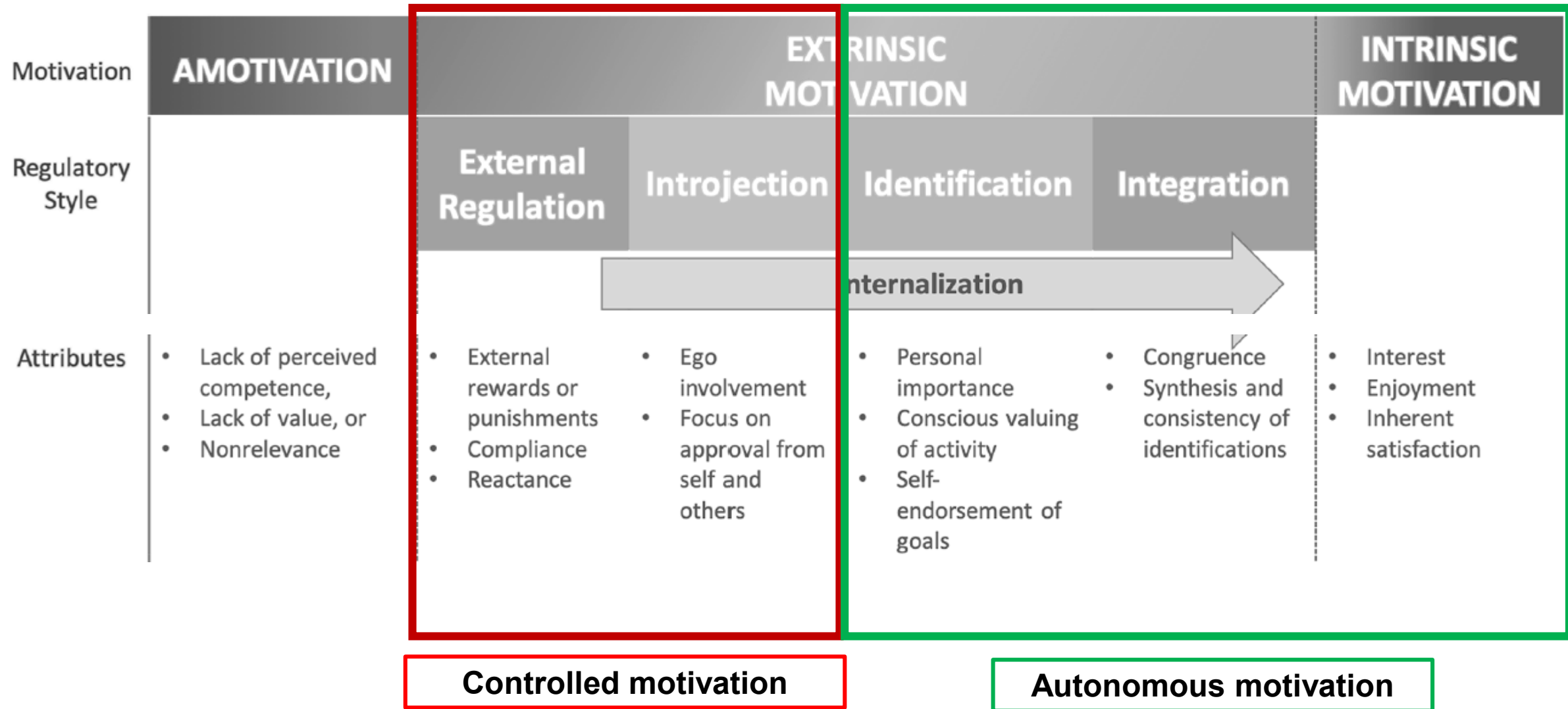
The Basic Needs Theory: Description

	Autonomy	Competence	Relatedness
Definition	Sense of initiative and ownership in one's actions	Feeling of mastery, sense that one can succeed and progress	Sense of belonging and personal connection
A student feels that s/he	... has some choices during classes	... is able to reach teachers' expectations	... has some enriching interactions at school
Sample item	I feel like I am free to decide for myself how to live my life.	Most days I feel a sense of accomplishment from what I do.	People in my life care about me.
Supporting / Undermining factors	Supported by experiences of interest and value; Undermined by experiences of being externally controlled (rewards or punishments)	Satisfied within well-structured environments that afford optimal challenges, positive feedback, and opportunities for progress	Facilitated by respect and caring between individuals

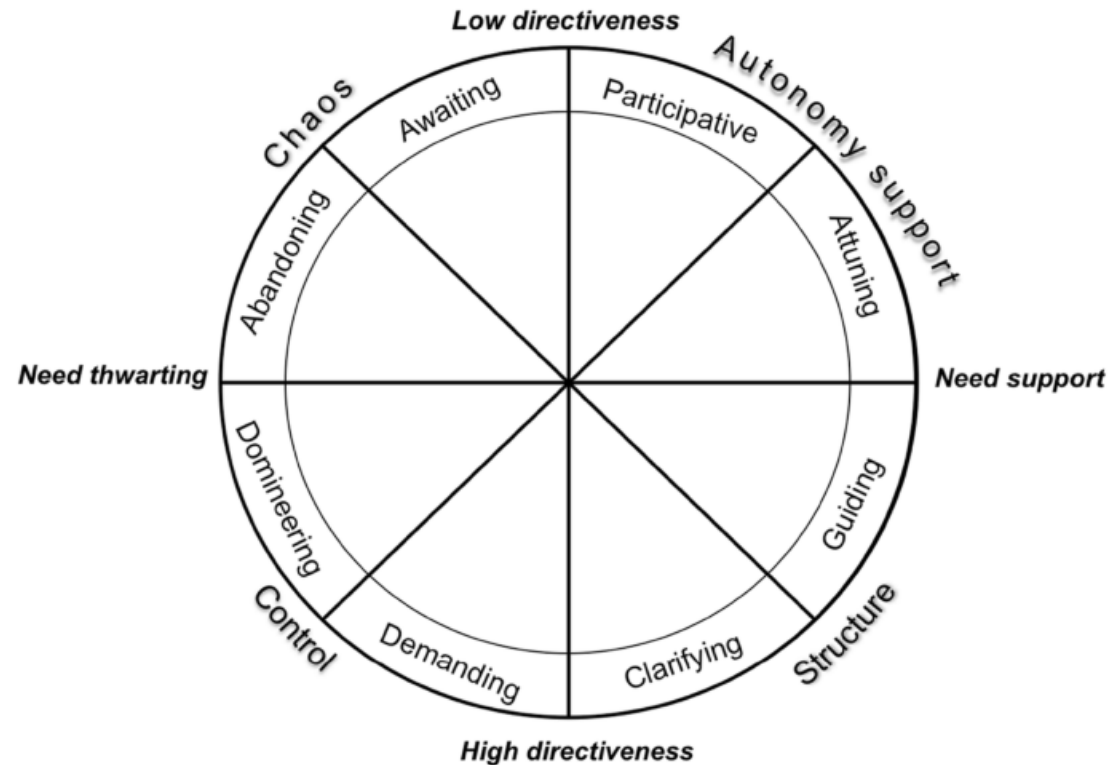
Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>

Vansteenkiste, M., Ryan, R.M. & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, 44, 1–31. <https://doi.org/10.1007/s11031-019-09818-1>

The Motivational Taxonomy (Organismic Integration Theory)



The teachers' motivational styles (Cognitive Evaluation Theory)



Autonomy support (vs Control)

- Provide rationales for learning
- Use informative language
- Be patient to allow for different learning times
- Recognize and accept expressions of negative emotions

Structure (vs Chaos)

- Explain what is expected of apprentices before they begin a task
- Give clear and precise instructions (explicit)
- Indicate how apprentices are expected to meet expectations
- Provide individualized feedback and suggestions on how the learner can improve

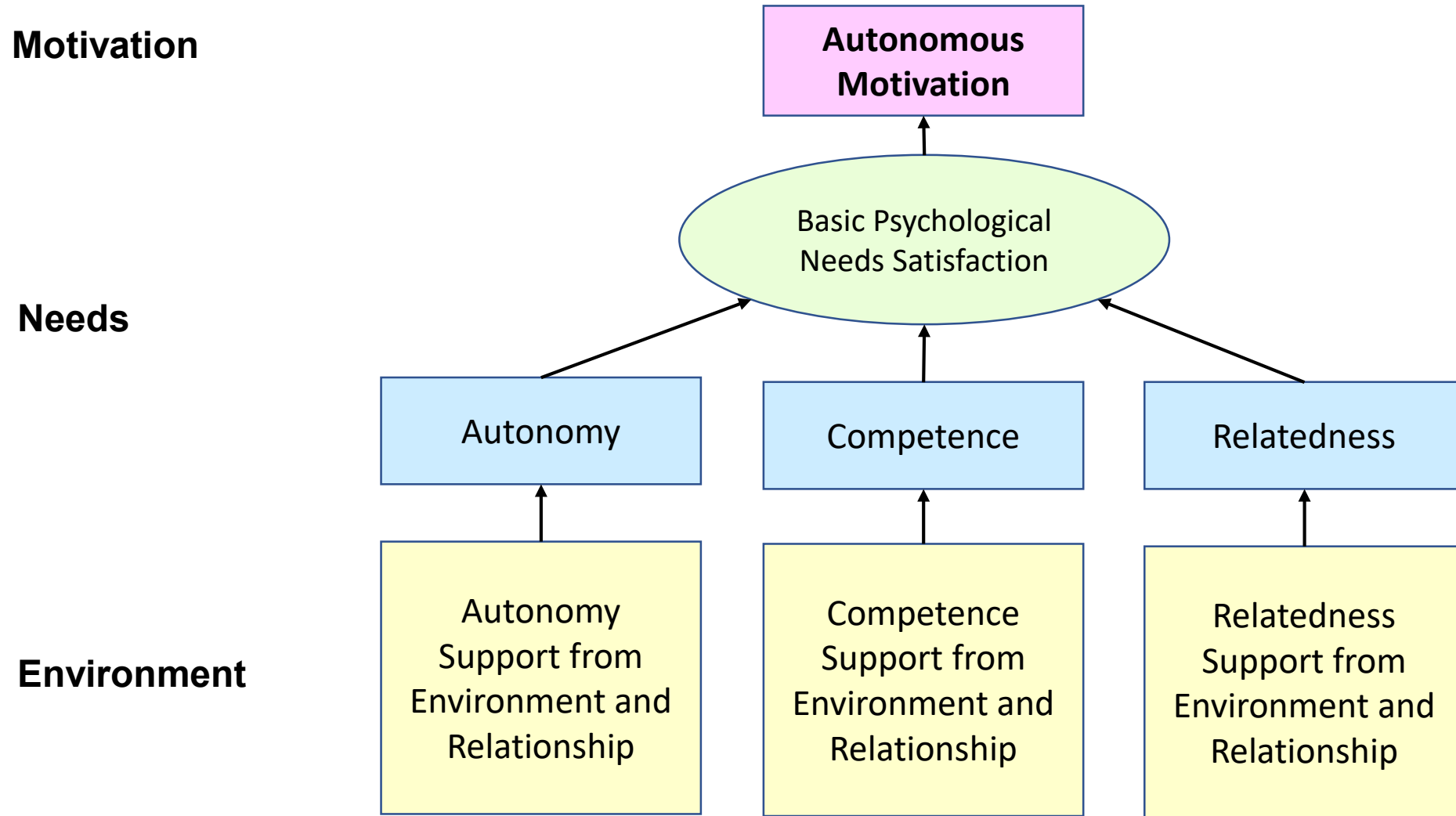
Relatedness support

- Facilitate connections between the course materials and student life;
- Show openness to prevent student self-silencing;
- Ask for student feedback
- Develop a student-centered classroom

Aelterman, N., Vansteenkiste, M., Haerens, L., Soenens, B., Fontaine, J. R. J., & Reeve, J. (2019). Toward an integrative and fine-grained insight in motivating and demotivating teaching styles: The merits of a circumplex approach. *Journal of Educational Psychology*, 111(3), 497–521. <https://doi.org/10.1037/edu0000293>

Escandell, S., & Chu, T. L. (Alan). (2021). Implementing relatedness-supportive teaching strategies to promote learning in the college classroom. *Teaching of Psychology*. <https://doi.org/10.1177/00986283211046873>

Teacher's motivational styles, students' basic needs, and autonomous motivation



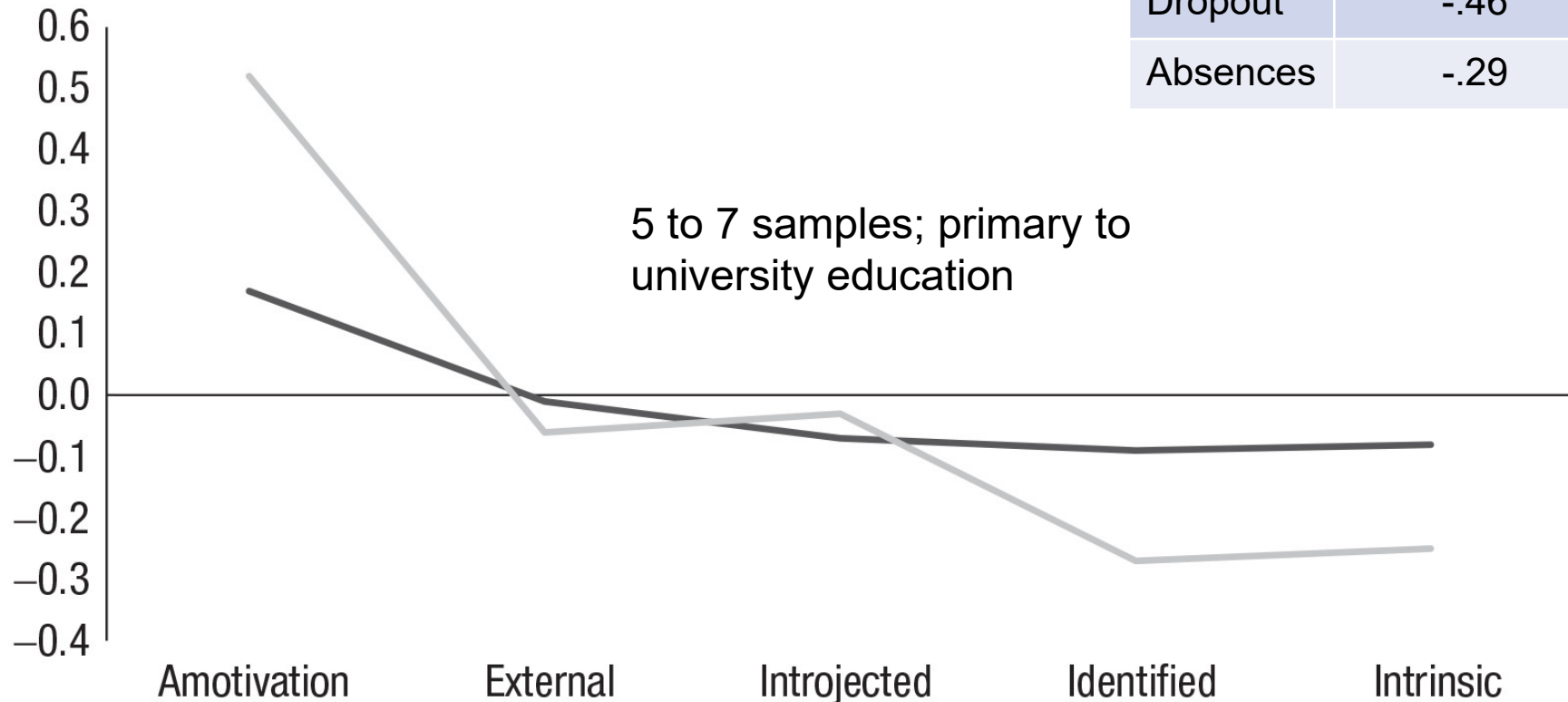
Bureau, J. S., Howard, J. L., Chong, J. X. Y., & Guay, F. (2022). Pathways to student motivation: A meta-analysis of antecedents of autonomous and controlled motivations. *Review of Educational Research*, 92(1), 46–72. <https://doi.org/10.3102/00346543211042426>

Reeve, J. (2018). *Understanding motivation and emotion* (7th ed.). Wiley.

Correlations Motivation – Dropout intention and Absenteeism

— Absenteeism
— Dropout Intention

	Autonomous motivation	Reading comprehension	Problem solving
Dropout	-.46	-.14	-.11
Absences	-.29	-.11	-.08

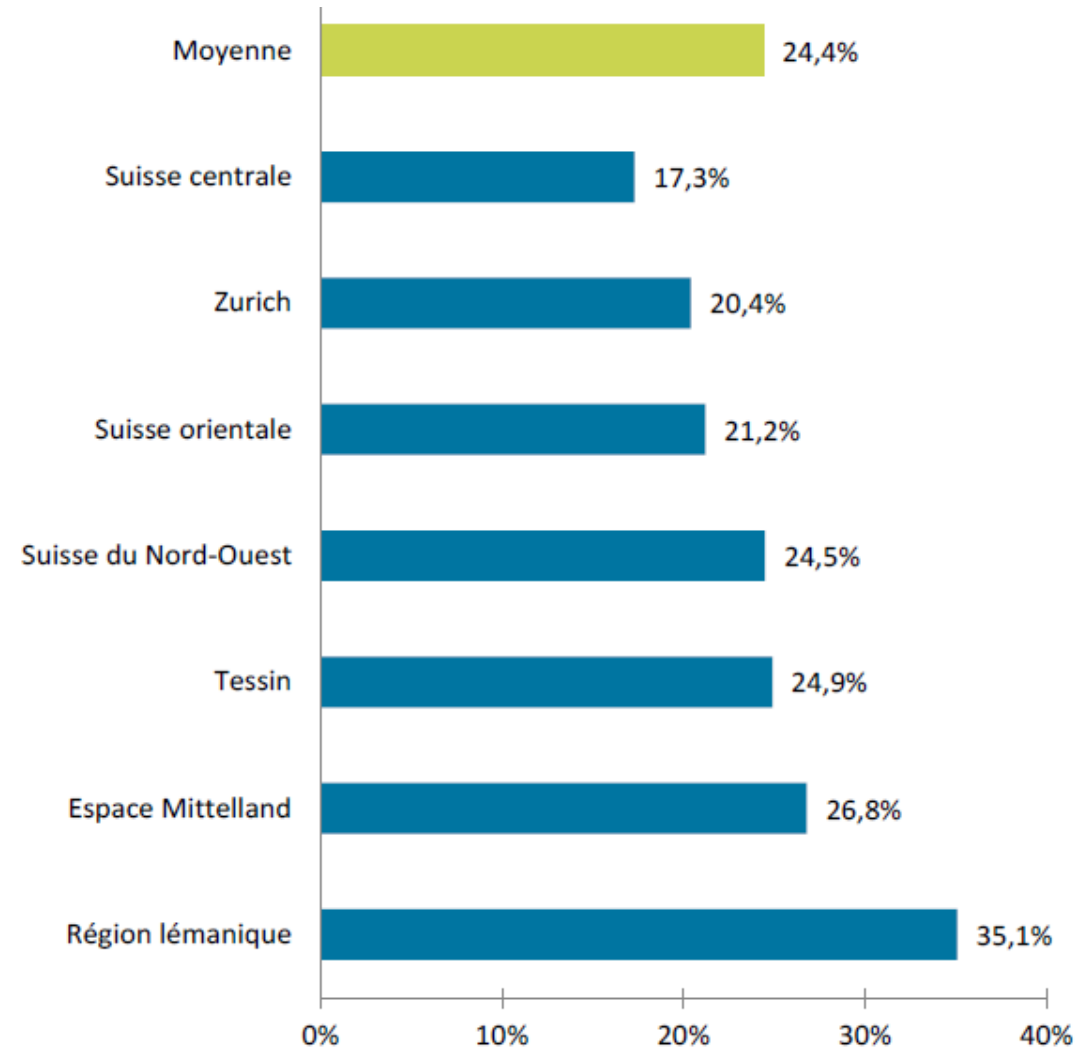


Blanchard, C., Pelletier, L., Otis, N. & Sharp, E. (2004). Rôle de l'autodétermination et des aptitudes scolaires dans la prédiction des absences scolaires et l'intention de décrocher. *Revue des sciences de l'éducation*, 30(1), 105–123. <https://doi.org/10.7202/011772ar>

Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student Motivation and Associated Outcomes: A Meta-Analysis From Self-Determination Theory. *Perspectives on Psychological Science*, 16(6), 1300–1323. <https://doi.org/10.1177/1745691620966789>

Dropping-out of VET programmes

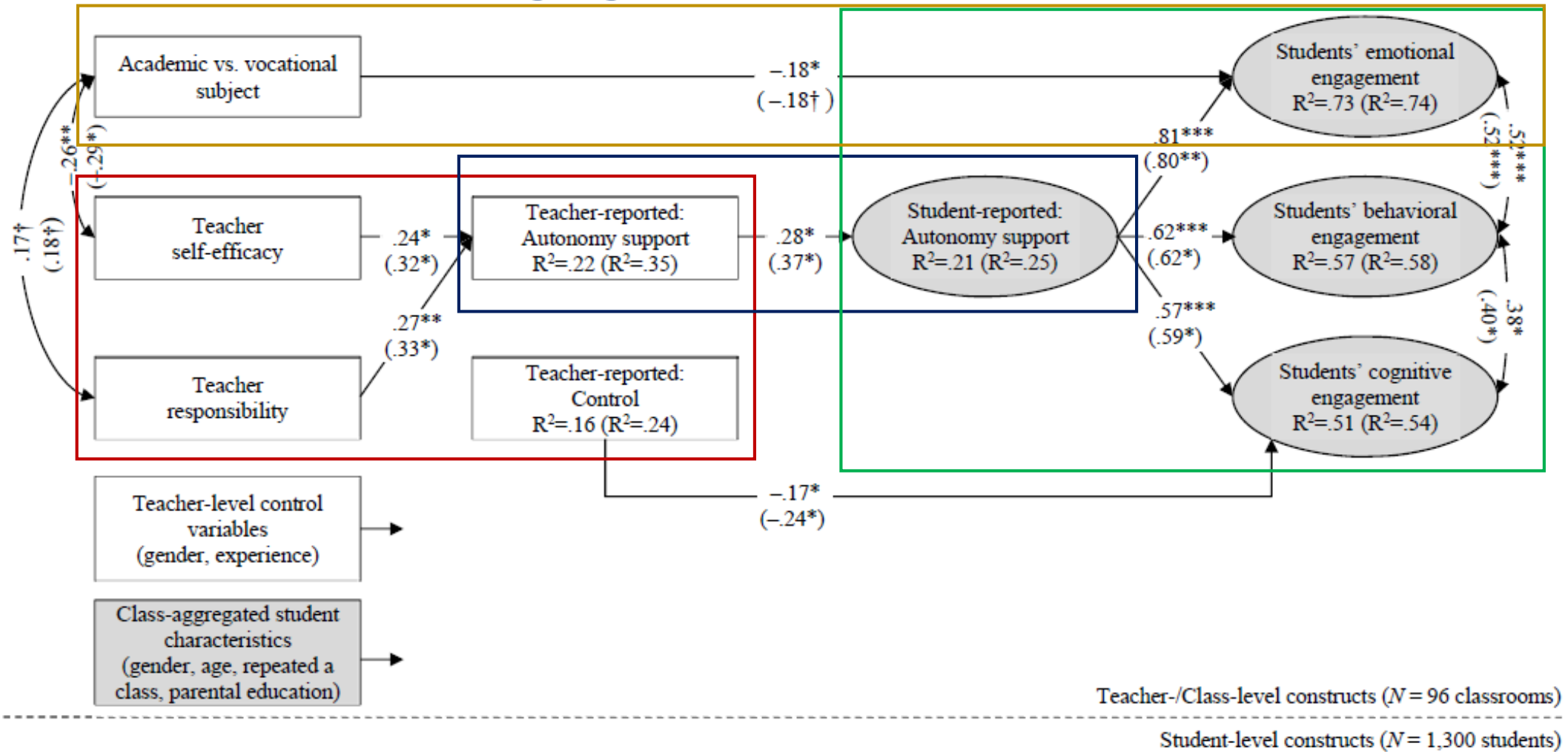
- The Swiss Dual VET system
- In Switzerland: 24.4% of VET contracts are prematurely terminated
- Main reasons relate to:
 - a) The apprentice (motivation, aspiration, competences)
 - b) The training company (e.g., quality of training)
 - c) The economy (e.g., economic situation)
 - d) The occupation (e.g., working conditions, demand)



Autonomy support and control at the vocational school and training company

	Examples of Autonomy Support	Examples of Control
Vocational School	<p>The teachers are great because they listen to us. [F; 3rd year; Retail]</p> <p>The teachers are available when you do not understand, you can always call on them or send them emails when something is not understood. [F; 1st year; Retail]</p> <p>Some teachers are not listening enough to our needs and opinions [F; 3rd year; Retail]</p>	<p>There is a lot to do at home, which gives me the impression that the teachers do not realize that we also work the rest of the week. [M; 2nd year; Technical]</p> <p>There must be trust and no need to fill out absence forms in order to be justified. [F; 1st year; Retail]</p> <p>School should not treat people as if they were 'children' (having detention when you are 22 years old). [F; 1st year; Retail]</p>
Training Company	<p>We learn to manage ourselves on our own. [F; 3rd year; Retail]</p> <p>My trainer trusts me and lets me handle tasks myself. My trainer considers me sufficiently qualified to undertake a large part of the work. [M; 3rd year; Technical]</p> <p>I have the freedom to work as an employee and not as an apprentice. They value the work we do. [F; 2nd year; Retail]</p>	<p>Apprentices are considered incompetent. [M; 2nd year; Technical]</p> <p>People think we are here to do the unwanted work, while we are actually here to be trained. [M; 2nd year; Technical]</p> <p>I am not a mover or a cleaner. [M; 3rd year; Technical]</p>

How teachers' motivational styles explain VET students' engagement in school?



Teacher-/Class-level constructs (N = 96 classrooms)

Student-level constructs (N = 1,300 students)

Intentions to stay in the same professional domain after graduation

	Intention to Stay in the Same Field after Graduation		Intention to Prematurely Terminate the Apprenticeship Contract	
	β	p	β	p
Autonomous Motivation	.17	< .01	-.28	< .001
Future-Oriented Motivation	-.33	< .001	.11	.15
Social Proximity Motivation	.43	< .001	-.05	.53
R ²	.17		.08	

Jan, D. (2022). *L'importance des cours interentreprises dans la formation des apprenti·e·s : dans le domaine du commerce de détail en produits nutritifs et stimulants*. Travail de Master. Université de Fribourg . <https://doi.org/10.51363/unifr.lma.2022.001>

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How to explain apprentices' school engagement?

Hierarchical multiple regressions for predicting school engagement

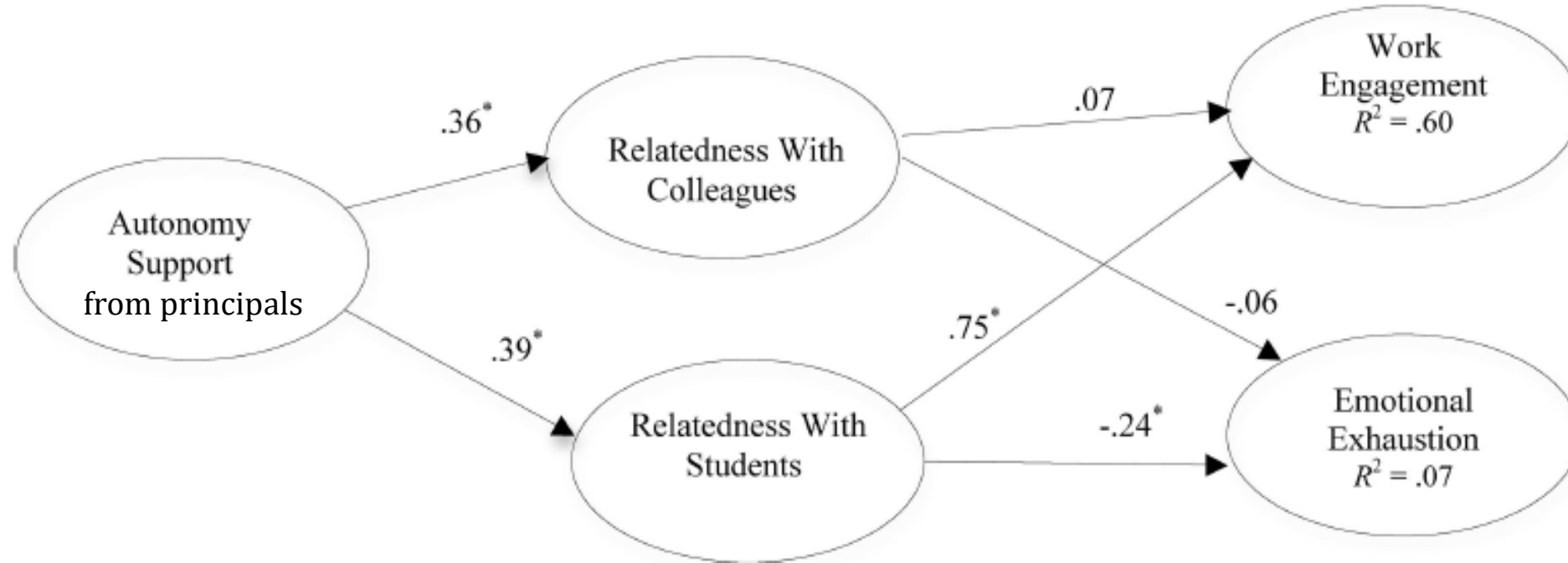
Individual characteristics

Motivational aspects

Perceived training quality

Predictor	Model 1	Model 2	Model 3
	β	β	β
Hair and beauty care	.03	-.01	-.06
Aministration	-.31***	-.28***	-.01
Retail management	-.17**	-.13**	-.03
1st year of training	-.13**	.11**	.07*
3rd year of training	-.06	-.02	-.02
Age	-.16***	-.13***	-.02
Male	-.17***	-.21***	-.18***
Perceived competence		.28***	.14***
Choice by default		-.14***	-.06*
Theory-practice links			.29***
Contacts between learning sites			-.02
Portfolio			.07*
Being considered as an adult			.25***
Workload at school			-.02
Controlling motivational style			.08*
Teaching practices			.22***
Social relationships in school			.10***
R ²	.12	.23	.53

Supporting teachers' autonomy also matters



Conclusions

- Need satisfaction is a key factor to understand engagement/dropout → How much do VET schools/training company care about autonomy, competence and relatedness?
- How to satisfy each of the basic needs in VET context?
- Autonomous motivation is another key → How much do teachers and trainers know about the quality of motivation?
- Teachers need autonomy support and sense of efficacy to, in turn, support students' needs
- Understanding the road from teachers' need to student motivation is necessary



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