

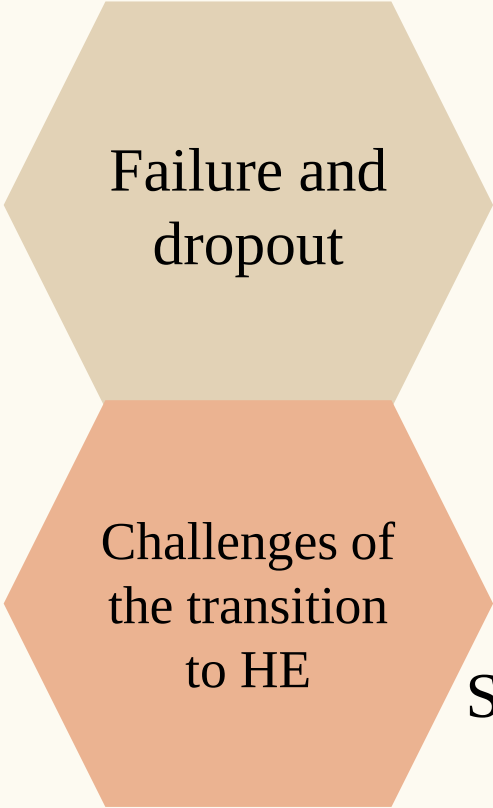
The Role of Instructional Practices across the First-Year Experience:

a Longitudinal Approach of Students' Psychological Needs

Mikael De Clercq (mikael.declercq@uclouvain.be) & Amy Hannuzet (amy.hannuzet@uclouvain.be)



Current issue : academic success in HE



Failure and
dropout

33% of dropout in OECD
(Bargmann et al., 2021)

In the first year of HE in Belgium:

- 22% Dropout (De Clercq & Perret, 2020)
- 41% Failure

Challenges of
the transition
to HE

Several new challenges (Nakhili et al., 2019) :

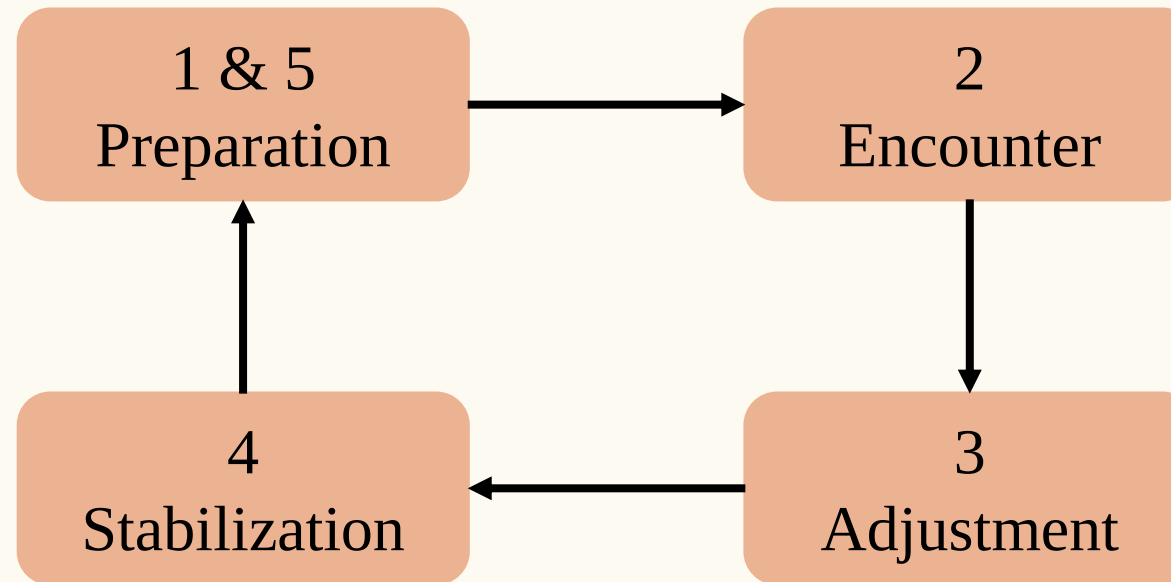
- Autonomous learning
- Social intergration
- Academic integration

1.1. Entering HE : a dynamic and temporal process

Model of transition cycles

- Informed choice
- Students readiness
- Positive motivation

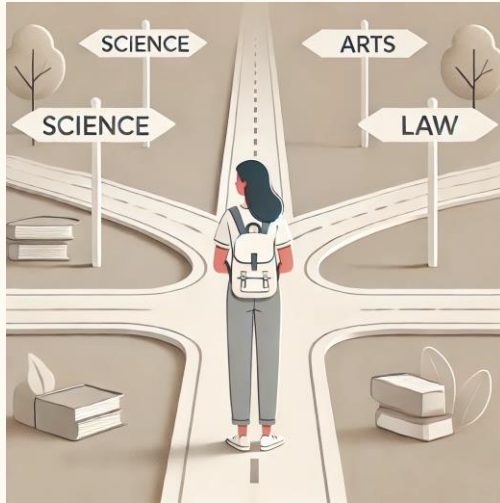
Efficiency,
performance and
fulfillment



Adjustment of
expectations to the
real context of HE

Active adjustment to
the HE context and
requirements

1.2. Three fundamental needs to steer the adjustment process



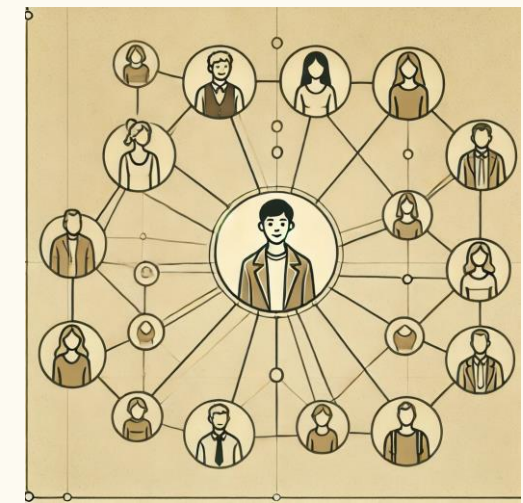
Autonomy

« I feel that my goals and wishes are considered »



Competence

« I feel able to perform in HE »



Relatedness

« I feel connected to other students »

Determine motivation, engagement, perseverance, performance and well-being (Ryan & Deci, 2020)

1.3. Teachers : an important lever of students needs satisfaction... or frustration



Teachers support have a substantial role on students engagement and achievement (De Clercq et al., 2021)

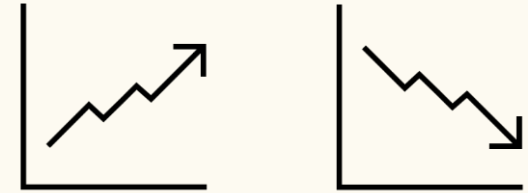
This role is stronger during the encounter phase (De Clercq et al., 2019)

2.1. Aim of the study and method

Three limitations:

→ Research on the first year experience lack of longitudinal approach (Esterhazy & Gijbels, 2021)

→ Little is known about the evolution of students needs during the transition to HE



→ The role of Teachers in the transition process is overlooked (Jacquemart et al., 2023)

This study:

→ (1) A longitudinal investigation of students fundamental needs during the transition to HE

(2) An analysis of the role of teaching practices on the evolution of students needs

2.2. Participants & Measures

Sample:

33,5%   66%
Univ : 52,8%
HE : 47,1%
ESA : 0,1%

Preparation (T1)

N = 1031

June 2023

Encounter (T2)

N = 1170

September 2023

Teaching practices

Adjustment (T3)

N = 257

December 2023

Stabilization
(T4)

N = 237

March 2023

Measures:

- *Students needs : Basic Psychological Need Satisfaction and Frustration Scale* (BPNSFS, Chevrier & Lannegrand (2021))
 - Need for autonomy, competence and relatedness → reliability coefficient [0,72- 0,87]
- Teachers support: *College need support/thwarting questionnaire* (CNSTQ, Gilbert et al., 2021).
 - Needs support and Needs thwarting → reliability coefficients [0,71-0,80]

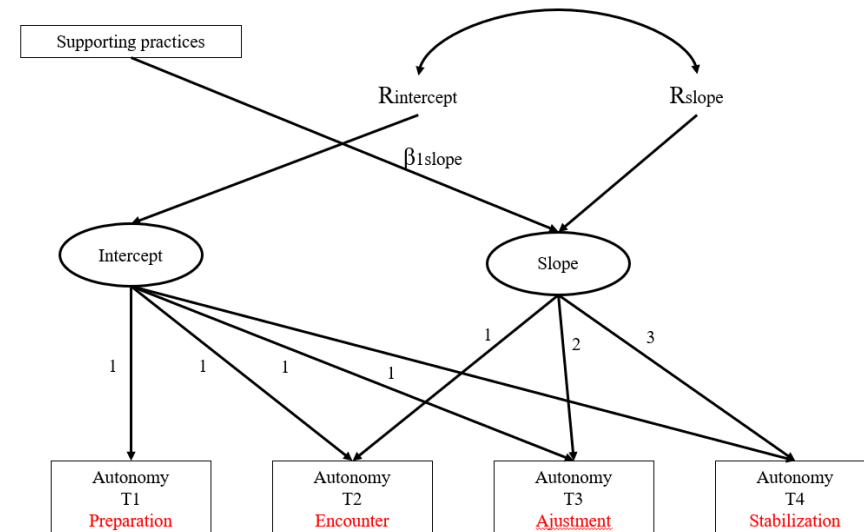
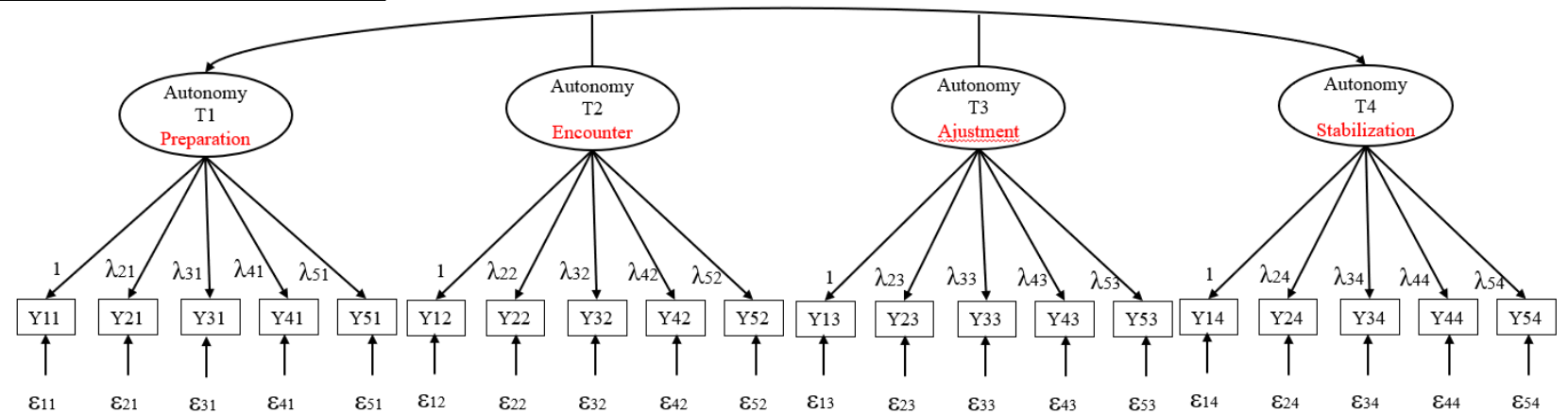
2.3. Analytical procedure

Longitudinal investigation of the needs:

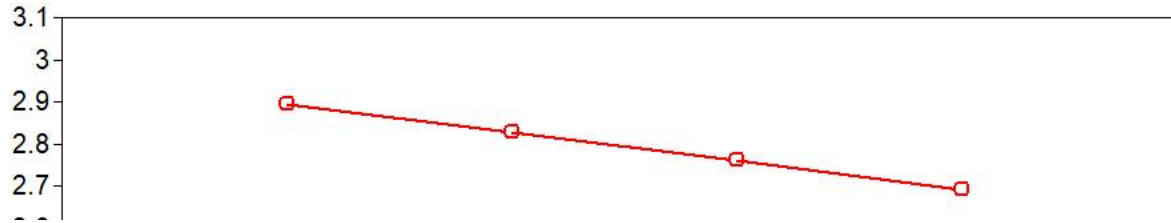
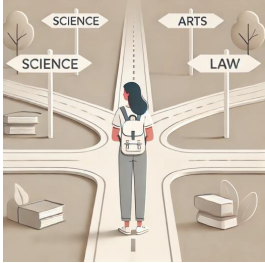
- *Mplus 8*
- Growth linear model
- Preliminary work of validation
 - CFA and invariance

Analysis of the role of teaching practices:

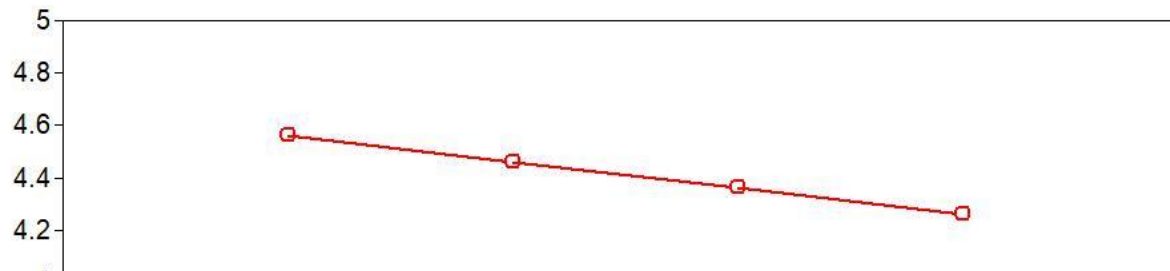
- *Mplus 8*
- Model including teachers need support during the encounter
- Another model including teacher need thwarting during the encounter



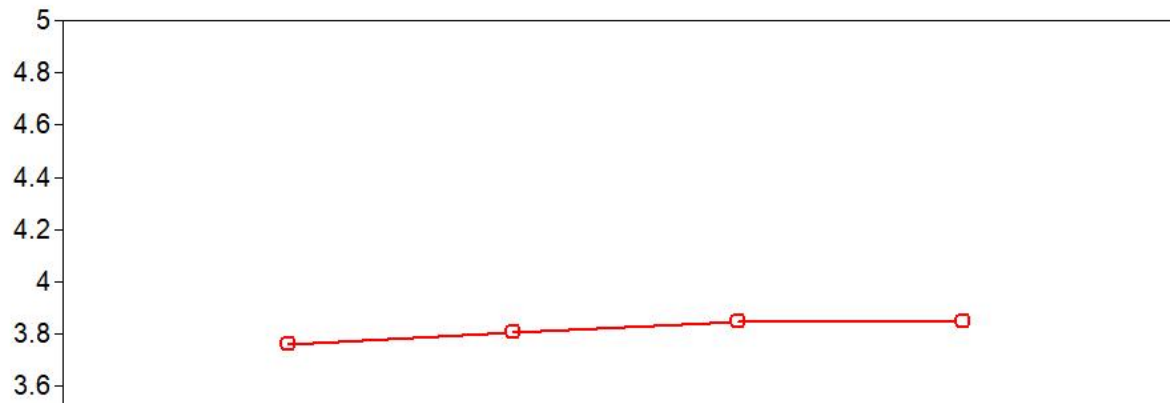
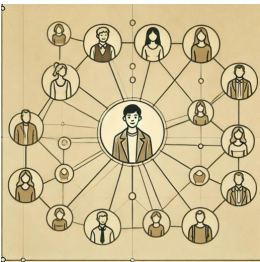
3.1. What about the evolution to psychological needs?



Linear **decrease** of satisfaction of students' autonomy
($\beta = -0.352$; $p < .001$)



Linear **decrease** of satisfaction of student competence
($\beta = -0.411$; $p < .001$)



Quadratic **increase** of satisfaction of student relatedness
($\beta = 0.139$; $p < .023$)

« You can count on me »
« If you want to succeed
you have to outperform
other students »



Supporting practices significantly support the evolution of the three needs

- **Reduce the decrease of Autonomy** ($\beta=0.501$; $p<.001$)
and Competence ($\beta=0.574$; $p<.001$)
- Reinforce the increase of Relatedness ($\beta=0.202$; $p=.014$)

Thwarting practices have the opposite effects on the needs

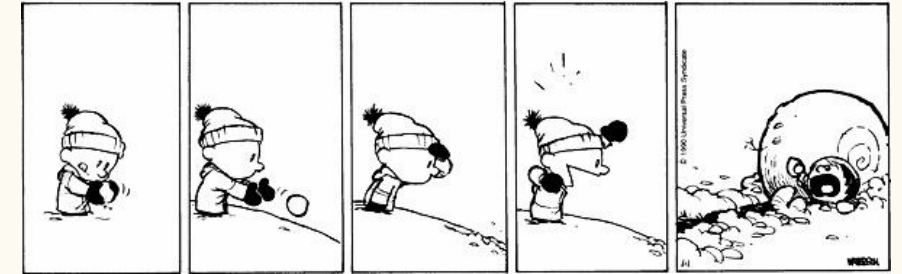
- Autonomy ($\beta=-0.245$; $p=.014$),
- **Competence** ($\beta=-0.358$; $p<.001$),
- Relatedness ($\beta=-0.224$; $p=.010$),

- **Need for competence is the most strongly related to teaching practices**

4.1. – Take Home Messages

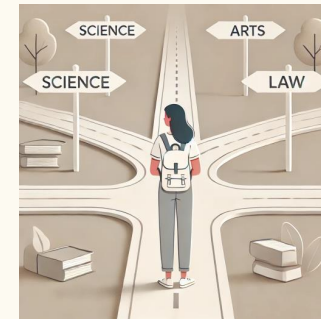
1. Importance of teacher support during the first weeks

- Strong effect on Autonomy and Competence
- Support practices have stronger effects than thwarting ones



2. First year experience is challenging for Students needs

- Transition shock (Jenert et al., 2017)
- Help students to gain confidence
 - Mastery experience or verbal persuasion (Bandura, 2003)
- Provides students with choice opportunities



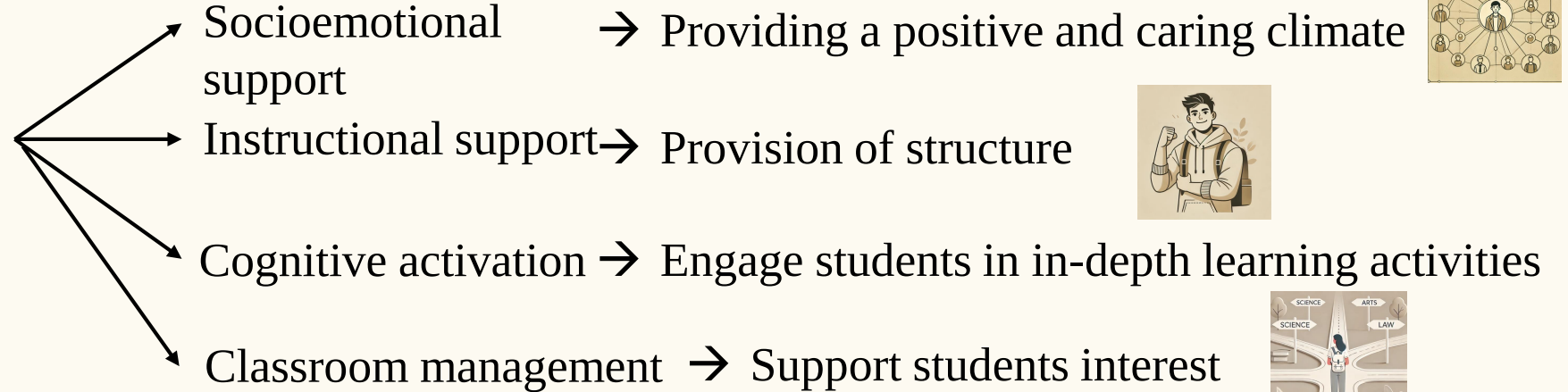
4.2. Limitations and futures perspectives

1. Investigation of self-reported perceptions of teaching practices

2. Lack of specificities in the analysis of teaching practices



(Jacquemart et al., 2023)



3. Lack of investigation of direct predictors/indicators of success

→ What is the role on the evolution of engagement or on academic success?



THANK YOU FOR
YOUR ATTENTION !

Please don't hesitate to ask questions
mikael.declercq@uclouvain.be

References:

- Bandura, A., Lecomte, J., & Carré, P. (2003). Auto-efficacité : le sentiment d'efficacité personnelle. De Boeck
- Bargmann, C., Thiele, L., & Kauffeld, S. (2022). Motivation matters: Predicting students' career decidedness and intention to drop out after the first year in higher education. *Higher Education*, 1-17.
- Chevrier, B. & Lannegrand, L. (2021). Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS) : validation de l'adaptation française auprès d'étudiants de première année. *Psychologie française*, 66(3), 289-301.
- Deci, E. L., & Ryan, R. M. (Eds.). (2004). *Handbook of self-determination research*. University Rochester Press.
- Cordeiro, P. M., Paixão, M. P., Lens, W., Lacante, M., & Luyckx, K. (2015). Cognitive- motivational antecedents of career decision-making processes in Portuguese high school students: A longitudinal study. *Journal of Vocational Behavior*, 90, 145-153
- De Clercq, M. D., & Perret, C. (2020). Étude exploratoire des obstacles à la transition universitaire selon le vécu d'étudiants français et belges. *Éducation et socialisation. Les Cahiers du CERFEE*, (58).
- De Clercq, M., Michel, C., Remy, S., & Galand, B. (2019). Providing freshmen with a good "starting-block". *Swiss Journal of Psychology*.
- De Clercq, M., Galand, B., Hospel, V., & Frenay, M. (2021). Bridging Contextual and Individual Factors of Academic Achievement: A Multi-Level Analysis of Diversity in the Transition to Higher Education. *Frontline Learning Research*, 9(2), 96-120.
- De Clercq, M., Michel, C., Remy, S., & Galand, B. (2019). Providing Freshmen with a Good "Starting-Block": Two Brief Social-Psychological Interventions to Promote Early Adjustment to the First Year at University. *Swiss Journal of Psychology*, 78(1-2), 69-75.
- De Clercq, M., Roland, N., Brunelle, M., Galand, B. & Frenay, M. (2018). The Delicate Balance to Adjustment: A Qualitative Approach of Student's Transition to the First Year at University. *Journal of the Belgian Association for Psychological Science*, 58(1), 67-90.
- Esterhazy, R., and D. Gijbels. 2021. "Widening the Methodological Lens on the Investigation of Diversity in the Transition to Higher Education: A Discussion." *Frontline Learning Research* 9 (2): 179-185.

References:

- Gilbert, W., Bureau, J. S., Poellhuber, B., & Guay, F. (2021). Predicting college students' psychological distress through basic psychological need-relevant practices by teachers, peers, and the academic program. *Motivation and Emotion*, 45(4), 436- 455.
- Jacquemart, J., De Clercq, M., & Galand, B. (2023). Mieux comprendre les pratiques enseignantes en classe dans l'enseignement supérieur: proposition d'un cadre de référence. *Formation et profession: Revue scientifique internationale en éducation*, 31, 1.
- Jacquemart, J., De Clercq, M., & Galand, B. (2024). The black box revelation of instructional practices: a mixed study of the transition to Higher Education. *European Journal of Higher Education*, 1-22.
- Janke, S., Messerer, L. A., & Daumiller, M. (2022). Motivational development in times of campus closure: Longitudinal trends in undergraduate students' need satisfaction and intrinsic learning motivation. *British Journal of Educational Psychology*, 92(4), 1582-1596.
- Jenert, T., Brahm, T., Gommers, L., & Kühner, P. (2017). How do they find their place? A typology of students' enculturation during the first year at a business school. *Learning, culture and social interaction*, 12, 87-99.
- Nakhili, N., Lima, L. & Le Hénaff, B. (2019). Les bons lycéens dans l'enseignement supérieur en France : réussite et difficultés d'une population scolairement triée. In Observatoire national de la vie étudiante (Ed.), *Regards croisés sur les expériences étudiantes* (pp. 113-128). La documentation française.
- Mastrokoulou, S., Kaliris, A., Donche, V., Chauliac, M., Karagiannopoulou, E., Christodoulides, P., & Longobardi, C. (2022, 03/28). Rediscovering Teaching in University: A Scoping Review of Teacher Effectiveness in Higher Education. *Frontiers in Education*, 7, 861458.
- Nicholson, N. (1990). The transition cycle: Causes, outcomes, processes and forms. On the move: *The Psychology of Change and Transition*, 46(), 83-108.
- Paivandi, S. (2016). Autour de la posture d'accompagnement à l'université. *Recherche et formation*, (81), 95-115.
- Trautwein, C., & Bosse, E. (2017). The first year in higher education—critical requirements from the student perspective. *Higher education*, 73, 371-387.