

19^{ÈME} CONGRÈS DE L'ASSOCIATION DES CHERCHEURS EN ACTIVITÉS PHYSIQUES ET SPORTIVES

CORUM DE MONTPELLIER
27 AU 29 OCTOBRE 2021



SYMPOSIUM

PROMOTION OF HEALTH IN HIGH PERFORMANCE SPORT

F. d'Arripe-Longueville, V. Filleul, E. Pété, A. Chrétien, S. Lefebvre du Grosriez

Lefebvre du Grosriez S., Isoard-Gautheur S., Cécé V., Martinent G. & Sarrazin P.

When being an elite athlete conflicts or enriches with being a student and vice versa: Psychometric validation of inter-role interactions and consequences on well-being



PRESENTATION PLAN

I. INTRODUCTION

- A. Student-Athletes
- B. Theoretical framework
- C. Literature
- D. Objective & Hypothesis

II. METHOD

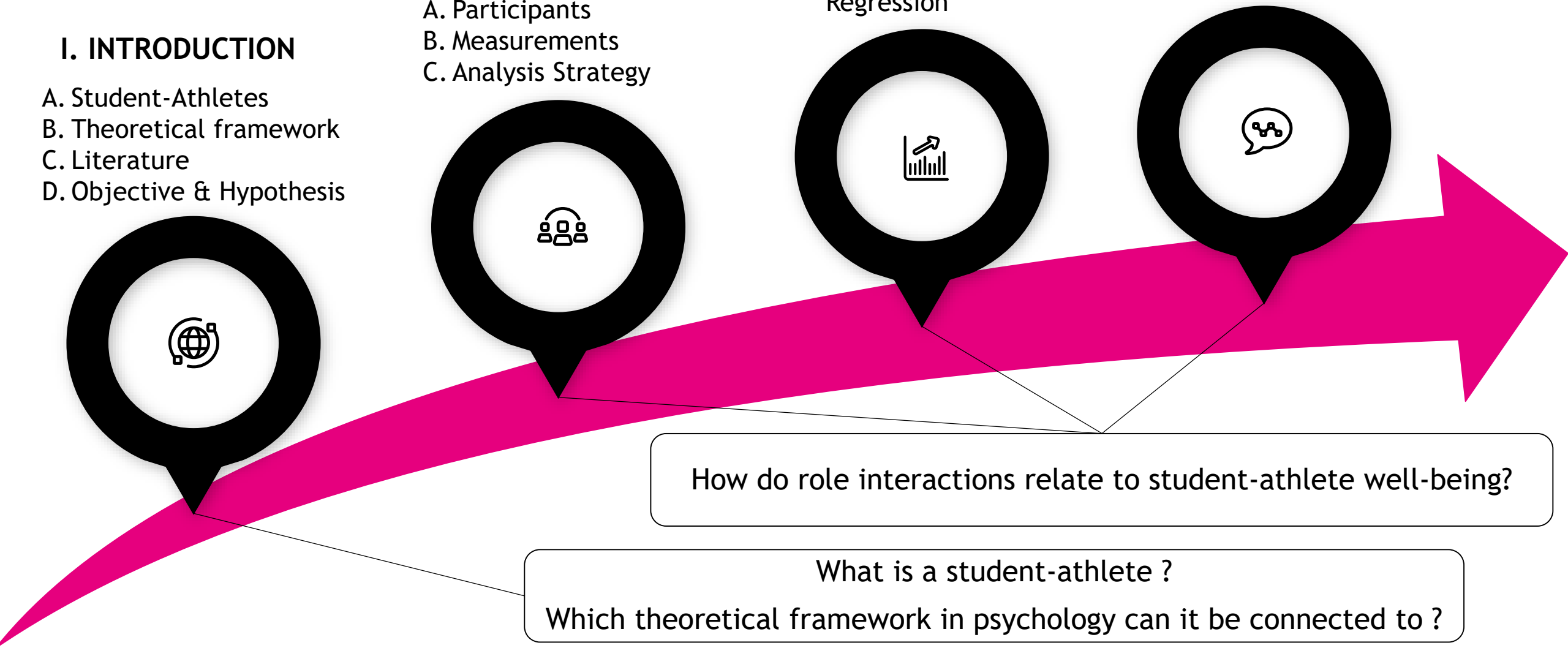
- A. Participants
- B. Measurements
- C. Analysis Strategy

III. RESULTS

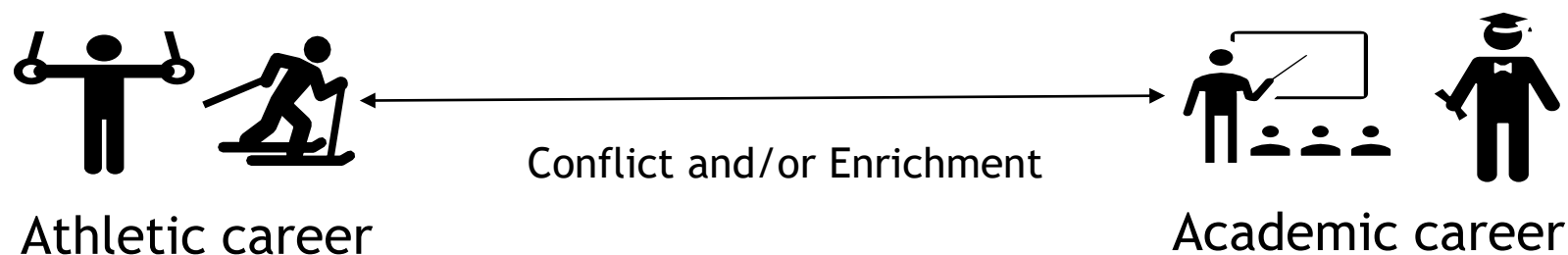
- A. Scale validation
- B. Latent profile & Dummy Variables Regression

IV. DISCUSSION

- A. Conclusion
- B. Limits and futures researchs



I. A. WHAT IS A STUDENT-ATHLETE?



Sport-School Dual Career :

- Athletic career / Academic career
- Managing demands → Role conflict
- Providing resources → Role enrichment

Mental and physical
health / Well-being

Mental and physical health :

- Sport performance
- Academic performance

Sport performance



Academic performance



I. B. THEORETICAL FRAMEWORK

Conflict :

Negative impact of one role on the other = Interference

- Time
- Strain
- Behaviour

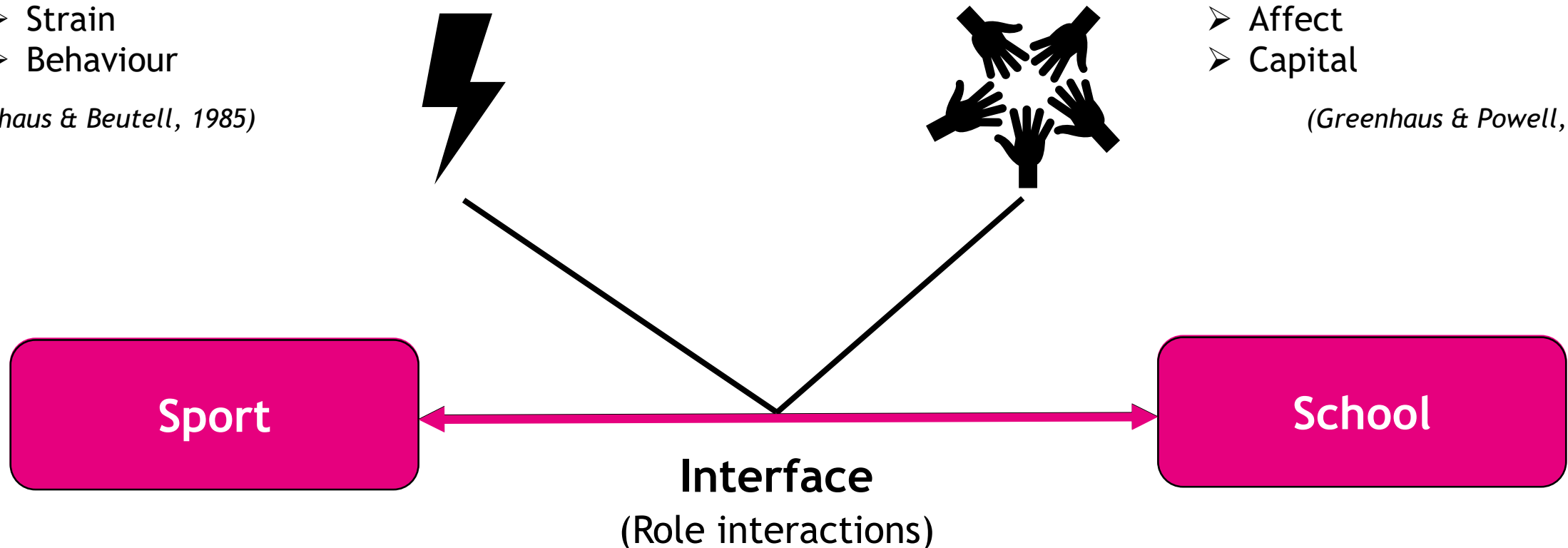
(Greenhaus & Beutell, 1985)

Enrichment :

Positive impact of one role on the other = Facilitation

- Development
- Affect
- Capital

(Greenhaus & Powell, 2006)



I. B. THEORETICAL FRAMEWORK

Conservation Of Resources (COR):

4 groups of valued resources (*Hobfoll, 1989*) : objects, conditions, personal characteristics/resources and energies

Wendling et al. (2018) suggest :

- A link between resources and role conflicts
- Resources modulating the relationship between role conflict and tension

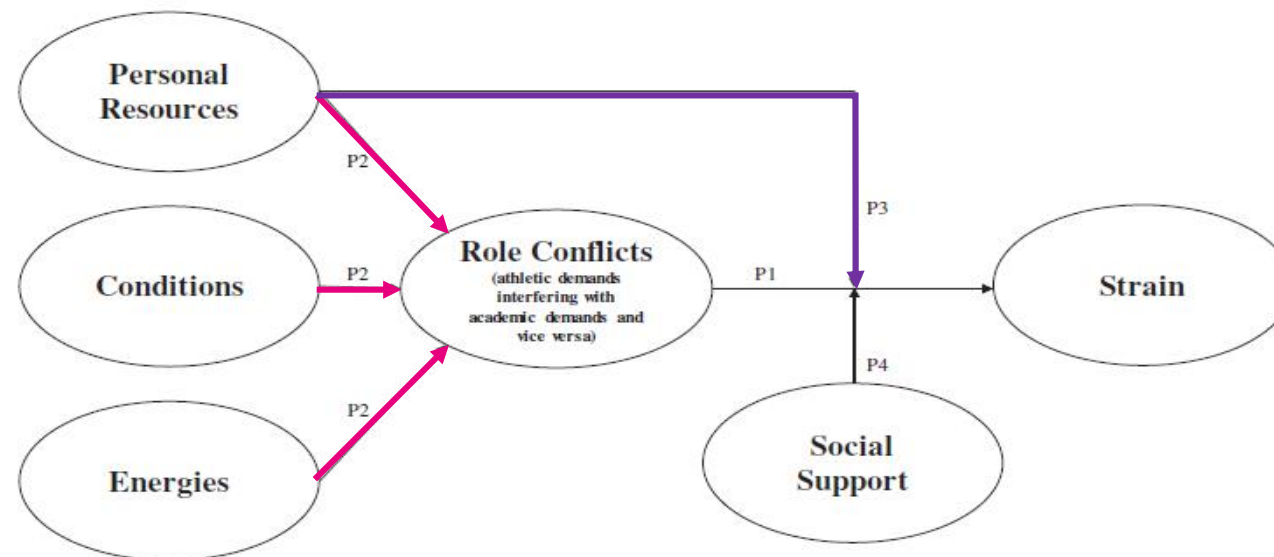


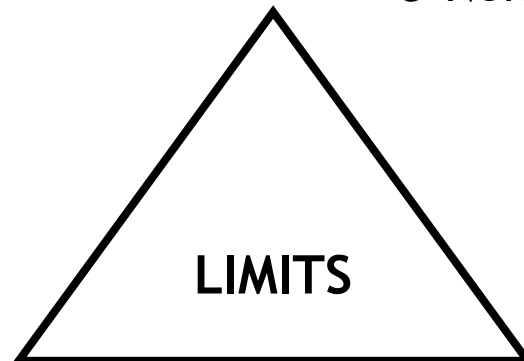
Figure 1. Proposed COR conceptual model of student-athletes' role conflicts and resulting strain.

I. C. STUDENT-ATHLETE LITERATURE

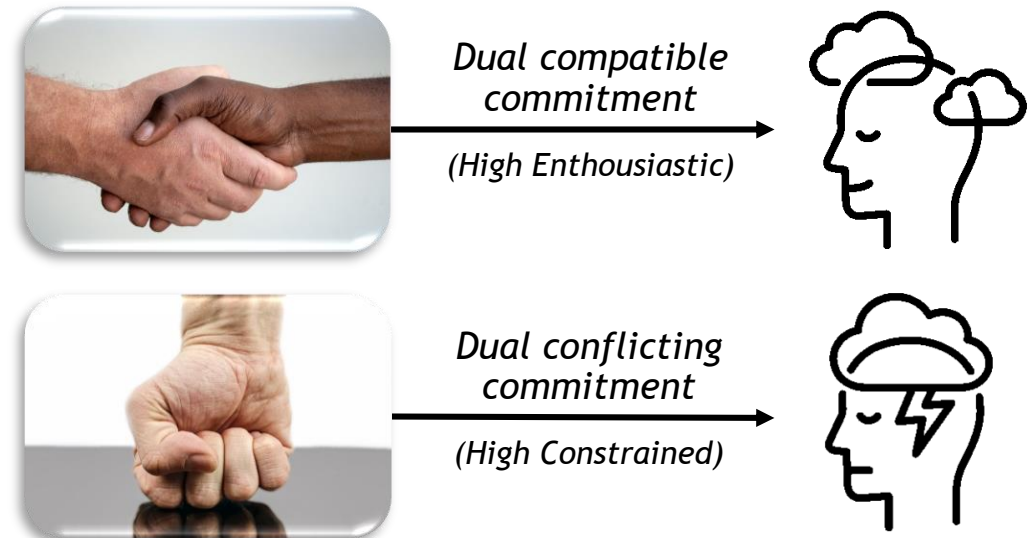


Di Lu et al. (2018) :
Identity conflict when at least one
of the two identities is high

CONFLICT
=
NEGATIVE IMPACT



Snyder (1985): Dual compatible commitment
vs Dual conflicting commitment



O'Neil et al. (2021): 4 different commitment
profiles related to well-being

IDENTITY & COMMITMENT
≠
ROLE INTERACTIONS

I. C. WORK-FAMILY LITERATURE

Carlson et al. (2000, 2006): Conflict and enrichment are differently related to well-being

MacDermid (2003)

Frone (2003)

Enrichment is more than the opposite of conflict

Carlson et al. (2006)

Greenhaus & Powell (2006)



**TWO WORK-FAMILY INTERFACE
COMPLEMENTARY COMPONENTS**

INTEREST

**ROLE INTERACTIONS
RELATED TO WELL-BEING**

I. D. OBJECTIVE & HYPOTHESIS

Assessing the interactions between roles and their relationship on the well-being of student-athletes



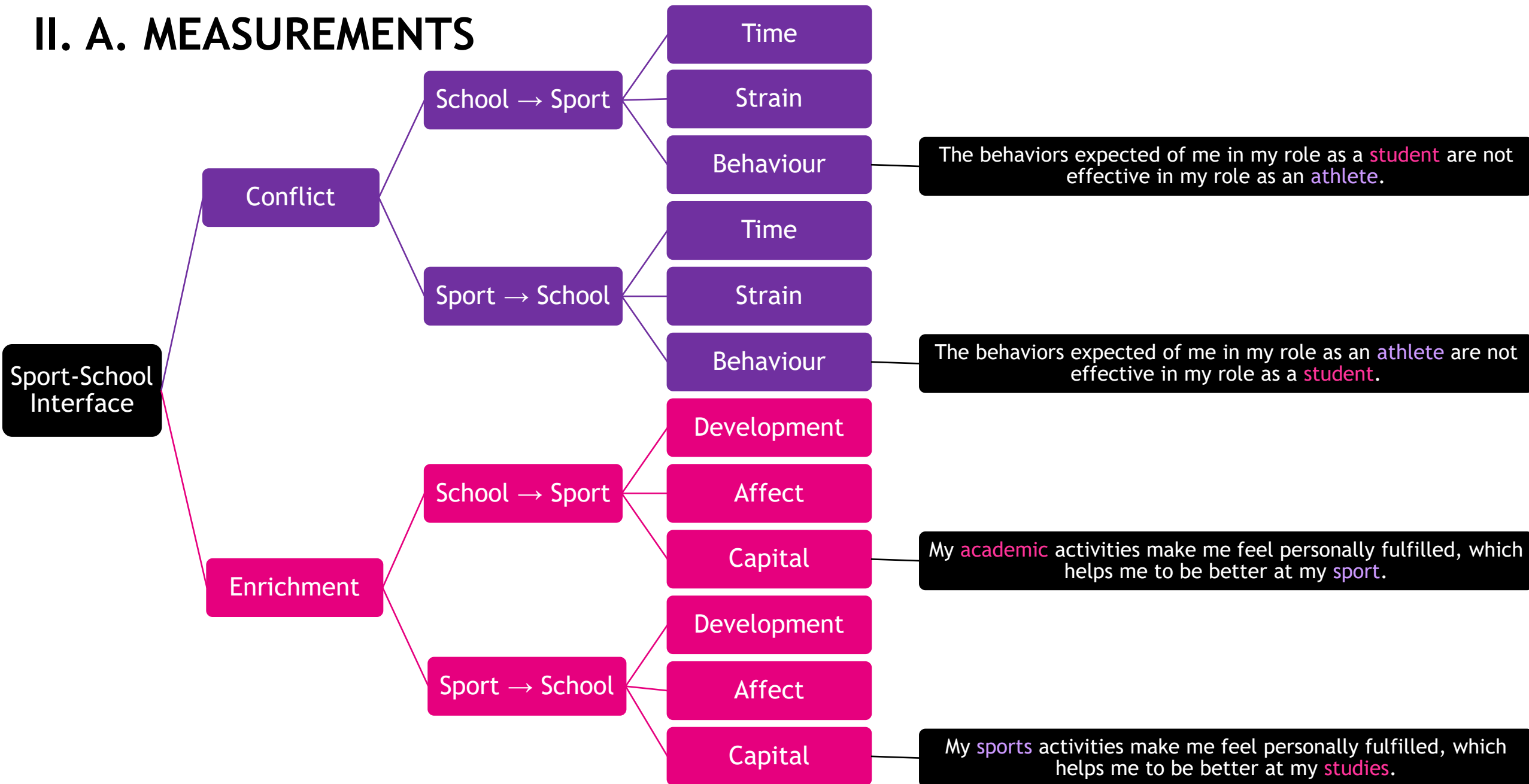
- 1) Conflict and Enrichment (form the work-family interface) are valid and measurable in the sport-school context.
- 2) Sport-School conflict and enrichment predict sport well-being, negatively and positively respectively.

II. A. MEASUREMENTS



- SSIS (Sport-School Interactions Scale, validation in progress) ————— Role interactions
 - AAIS (Athletic and Academic Identity Scale, Yukhymenko, 2014) ————— Role salliance
 - Feeling of load (sport and school) ————— Context evaluation
 - ABO-S (Athlete Burnout Scale, Isoard-Gautheur et al., 2018)
 - AEQ (Athlete Engagement Questionnaire, Lonsdale et al., 2007)
- } Sport Well-being

II. A. MEASUREMENTS



II. B. PARTICIPANTS

363 student-athletes : 50,41% ♀ ; 81,54% between 18 et 21 years old

Academic level : 80,72% first and second academic years

Athletic level : 27,5% departmental et regional, 42,28% national et 27,23% international/Olympic

Academic time : 25,69 hours per week ($\sigma = 11,87$)

Athletic time : 11,71 hours per week ($\sigma = 6,40$)

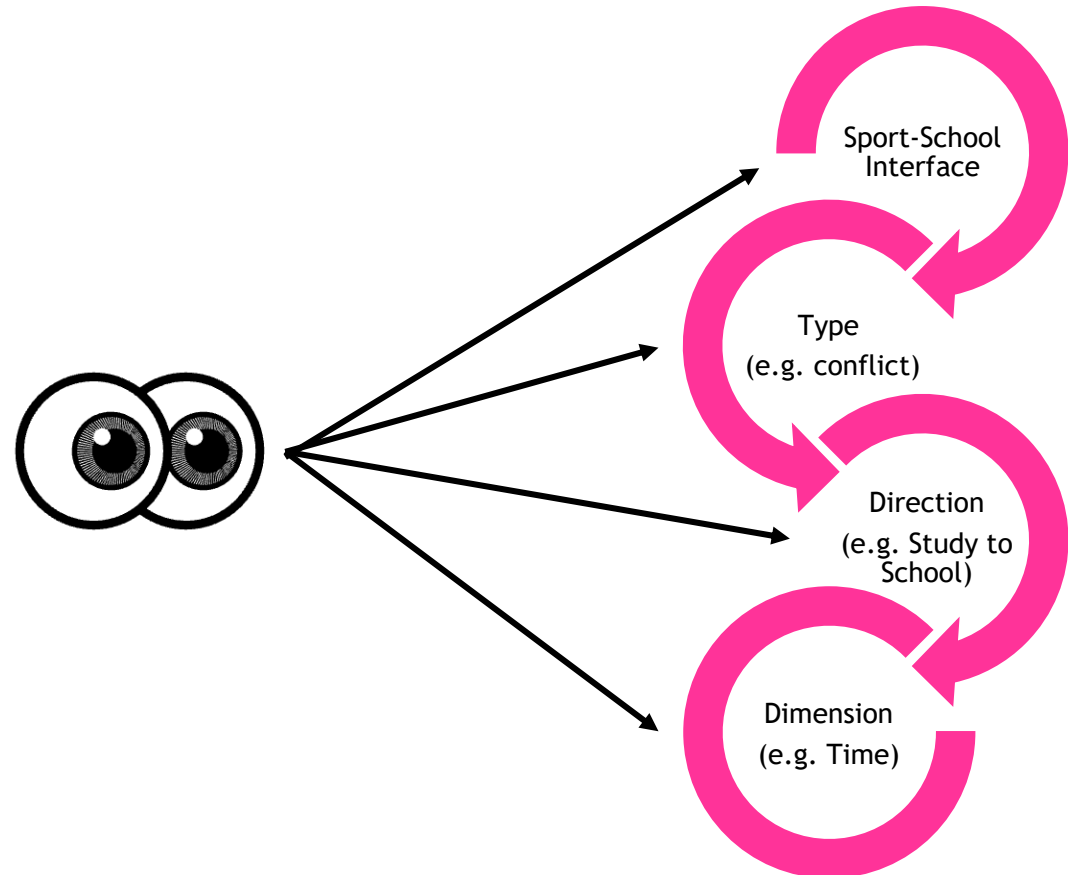
II. C. ANALYSIS STRATEGY

A. Scale validation (SSIS)

- (Hierarchical) Confirmatory Factorial Analysis
- Exploratory Structural Equation Modelling
- Bifactor Models
- ...

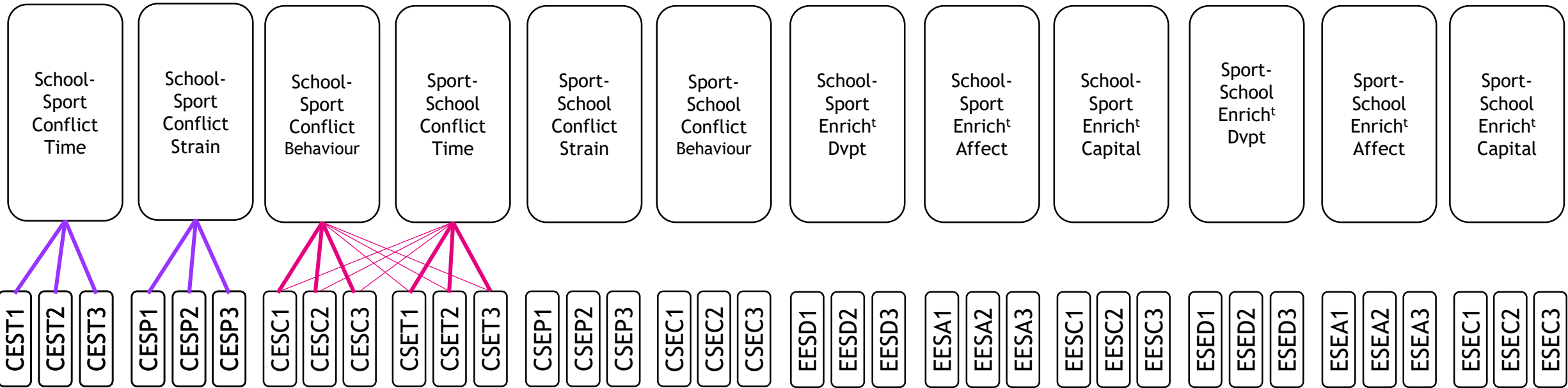
B. Sport-School Interface and Sport Well-Being

- Latent Profiles Analysis
- Multiples regression analysis



III. A. SCALE VALIDATION

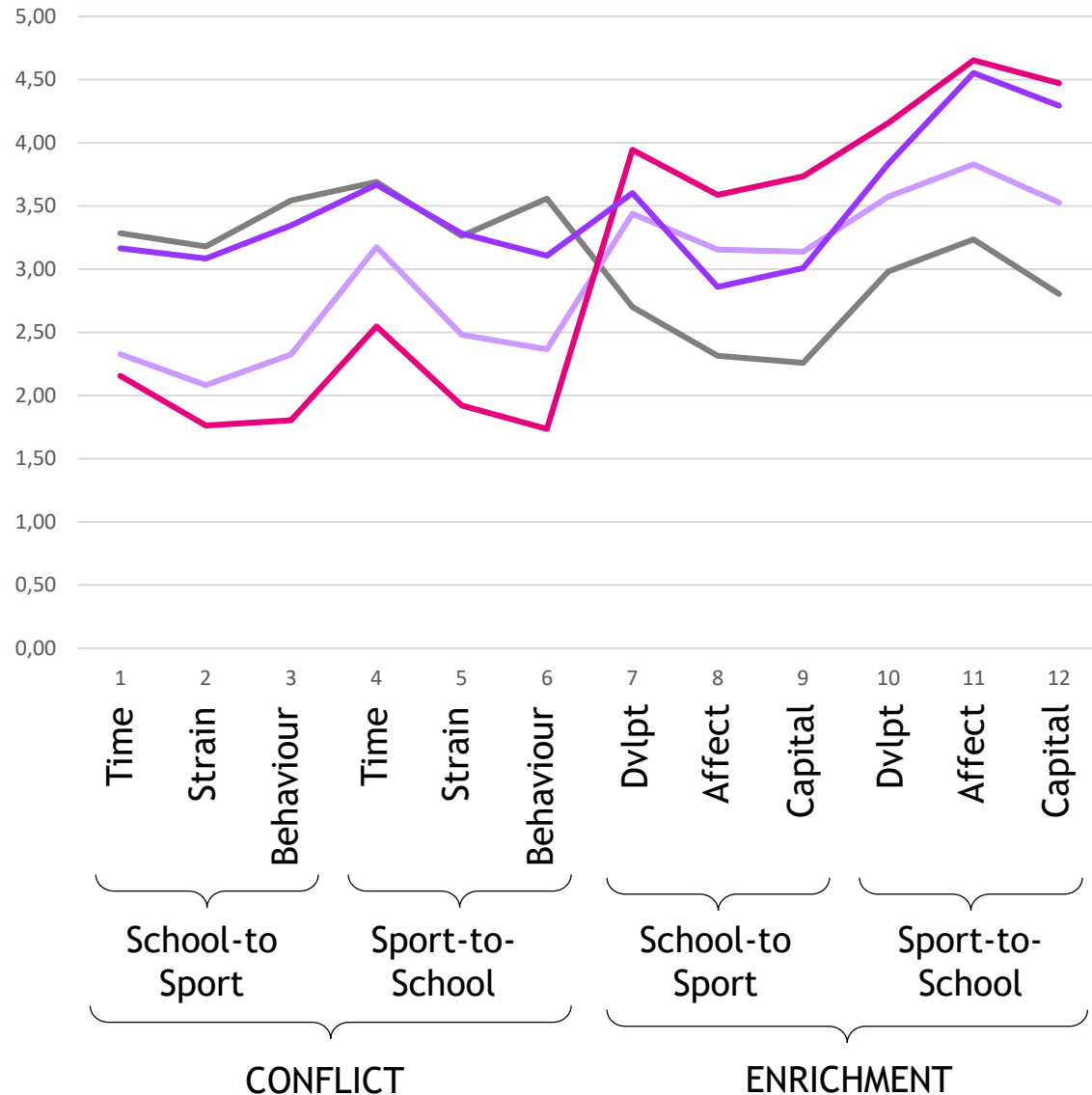
FIT INDICES										
Models	χ^2	df.	CFI	TLI	AIC	BIC	ABIC	RMSEA	90%CI RMSEA	SRMR
CFA	1352,283	741	0,926	0,914	35840,829	36639,734	35992,508	0,047	0,043-0,051	0,047
ESEM	529,491	393	0,983	0,964	35587,624	37749,368	35998,050	0,031	0,023-0,037	0,014



Loading factor : from 0.625 to 0.903

Cronbach's alpha : from 0.78 to 0.89

III. B. LATENT PROFILES ANALYSIS



Profile 1 : High conflict / Low Enrichment

Profile 2 : Moderate mix

Profile 3 : High enrichment / Low conflict

Profile 4 : High mix

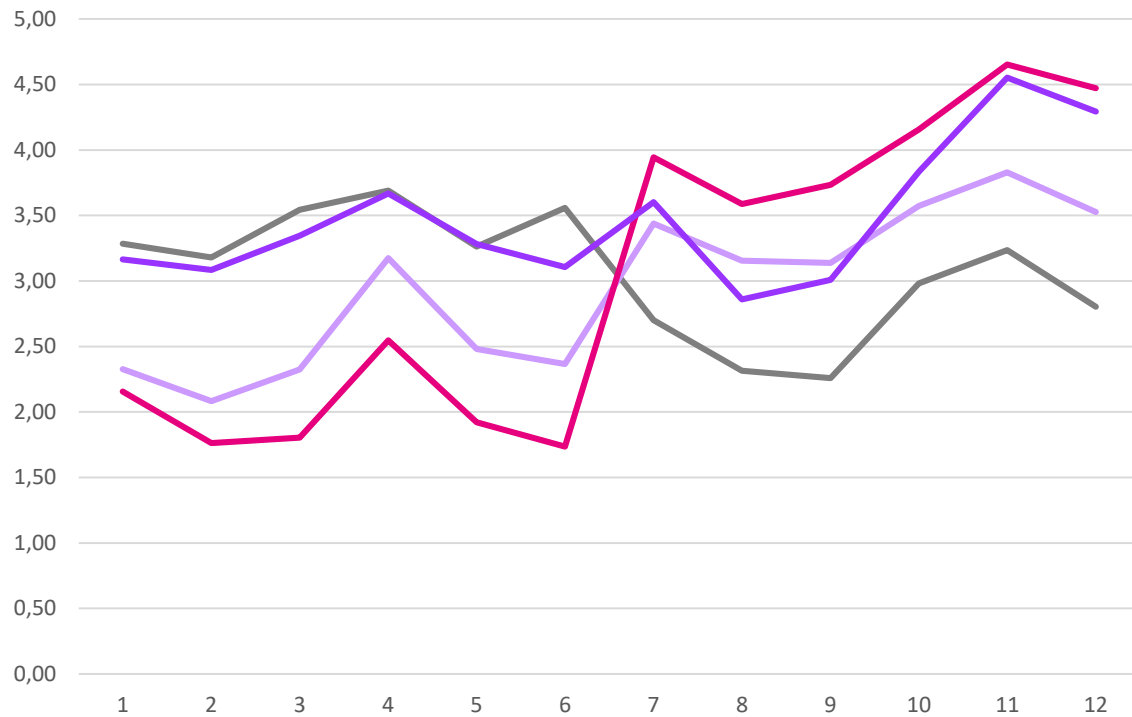
IDENTITIES
FEELING OF
LOAD

BURNOUT ← → ENGAGEMENT

LPA - Burnout			
Profile 1	Profile 2	Profile 3	Profile 4
Higher than 2 et 3	$\chi^2 = 9.90^{***}$	$\chi^2 = 27.52^{***}$	$\chi^2 = 2.46$
$\chi^2 = 27.52^{***}$	$\chi^2 = 6.15^{**}$	Lower than 1, 2 et 3	$\chi^2 = 16.33^{***}$

LPA - Engagement			
Profile 1	Profile 2	Profile 3	Profile 4
Lower than 2, 3 et 4	$\chi^2 = 9.12^{***}$	$\chi^2 = 19.70^{***}$	$\chi^2 = 20.48^{***}$
$\chi^2 = 19.70^{***}$	$\chi^2 = 4.20^*$	Higher than 1 et 2	$\chi^2 = 0.08$

III. B. LATENT PROFILES ANALYSIS



Profile 1 : High conflict / Low Enrichment

Profile 2 : Moderate mix

Profile 3 : High enrichment / Low conflict

Profile 4 : High mix

IDENTITIES
FEELING OF
LOAD

BURNOUT ← → ENGAGEMENT

BURNOUT :

High conflict⁽¹⁾



Moderate mix⁽²⁾

High mix⁽⁴⁾

High enrichment⁽³⁾

ENGAGEMENT :

High enrichment⁽³⁾




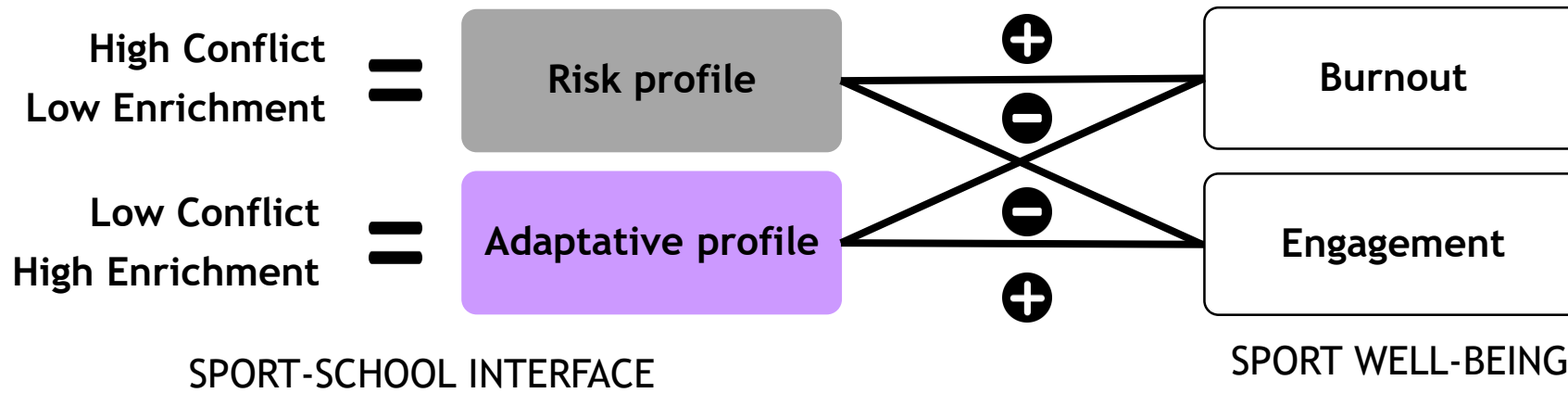
Moderate mix⁽²⁾

High mix⁽⁴⁾

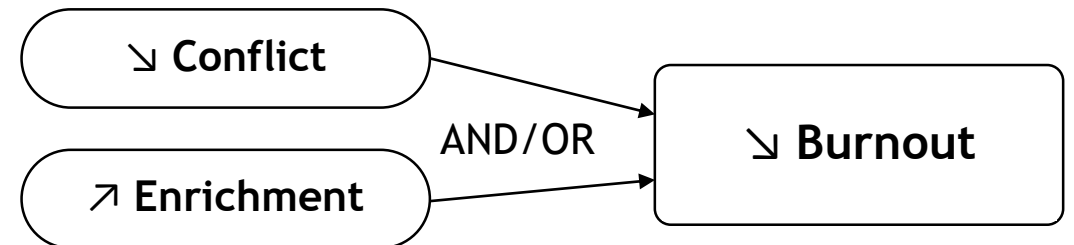
High enrichment⁽³⁾

IV. A. CONCLUSION

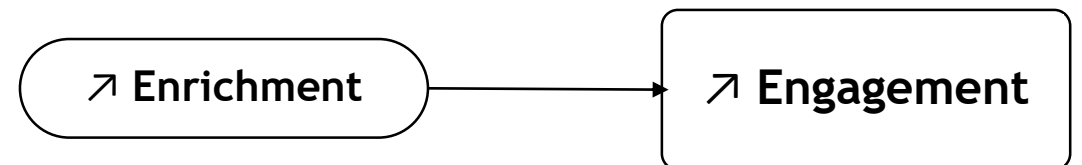
- 1) SSIS seems valid and measurable with French student-athletes. 
- 2) Sport-School Interface is linked to Well-being : 2 opposite profiles and 2 intermediate profiles.



- 3) Burnout could be attenuated by decreasing conflict and/or increasing enrichment.



- 4) Engagement could be increased by improving enrichment whatever the level of conflict.



IV. A. LIMITS

& FUTURE RESEARCH

- Measurement : Sport well-being ————— A global and academic well-being measure
 - Small sample to test our complex model ————— More participants (i.e. Bi-ESEM)
 - Participants with a strong athletic identity ————— More different academic fields and levels
- Study 1
- Cross-sectional study ————— Longitudinal study ————— Study 2



**THANKS FOR YOUR ATTENTION
SOME QUESTIONS?**