



The school socioeducational environmental model :

*Background, utility,
evolution*

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Well-being in
Education
Systems**

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Michel Janosz, Ph. D.

École de Psychoéducation
Groupe de recherche sur les environnements scolaires
Université de Montréal

+ Plan

- **Background**
- **The School socio-educational model and questionnaires (SEQ)**
- **Research and intervention utilities of the SEQ.**
- **Evolution of the model and questionnaires**





1. Background- Inspiration

- **Early years as a psycho-educator in schools**
- **The need for a theory and grounded evaluation instruments.**

1. Background

- Early years as a psycho-educator
- Psycho-education : innovative profession (Québec – 1971)
 - Well-being = *child's adjustment potential* (CAP) X
educational potential of environment (family, school) (EPE)
 - Use of the relationship and educational activities (w/ child/parents/teachers) to stimulate the development of CAP and EPE.
 - An ecological, developmental transactional perspective common nowadays.



1. Background

- The need for a theoretical approach and evaluation tools.
- In the late 80's, not so easy to work on the educational environmental side of the problem
 - Drug abuse, delinquency and school dropout in secondary schools were mostly seen as student and family problem by school personnel.
 - Lack of instruments (French) and theoretical model to assess the educational potential of schools. Confusions over construct operationalization (climate, practices, problems).



2. The School socio-educational model and questionnaires (SEQ)

- **Goal** : Better understand the role of the school environment on students well-being and, most importantly, develop a method to support school improvement plans.
- **First step** : propose a theoretical framework to assess the educational potential of schools : the school socioeducational environment model (Janosz, Georges & Parent, 1998).
- **Second step** : develop and validate a questionnaires to assess the core components of the model.
- **Third step** : develop and experiment a method to guide school improvement initiatives using the socio-educational model and questionnaire.
 - Lack of instruments (French) and theoretical model to assess the educational potential of schools. Confusions over construct operationalization (climate, practices, problems).



2. The School socio-educational model and questionnaires (SEQ)

■ Theoretical framework inspirations (multidisciplinary)

- **Criminology** (Gottfredson & Gottfredson, 1985, Hawkins, Catalano & Miller, 1992)
- **Education and Sociology of Education** (Moos, 1979; Purkey & Smith, 1983; Rutter, 1979, 1983),
- **Psychology, Psycho–Education and Educational Psychology** (Bronfenbrenner; Eccles & Migdley, 1989; Gendreau, 1978; Grusec & Hastings, 2015; Wentzel, 2015);
- **Developmental psychopathology** (Cicchetti & Cohen, 1995).



2. The School socio-educational model and questionnaires (SEQ)

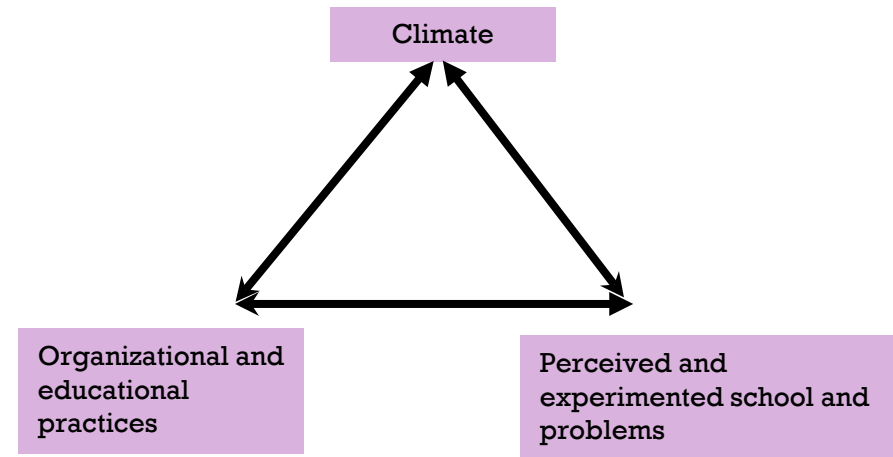
■ Theoretical framework : Educational potential

- *Capacity of the environment to respond to student bio-psycho-social developmental needs.*
- **Five general functions of this response (5s' Principal):**
 - **Safety**
 - **Stimulation**
 - **Supervision**
 - **Support**
 - **Sense (meaning)**

+ 2. The School socio-educational model and questionnaires (SEQ)

■ Theoretical framework : Components

- A framework theoretically sound and relevant to guide intervention
- Three main components
 - School climate
 - School practices
 - School problems





2. The School socio-educational model and questionnaires (SEQ)

■ Theoretical framework : School climate

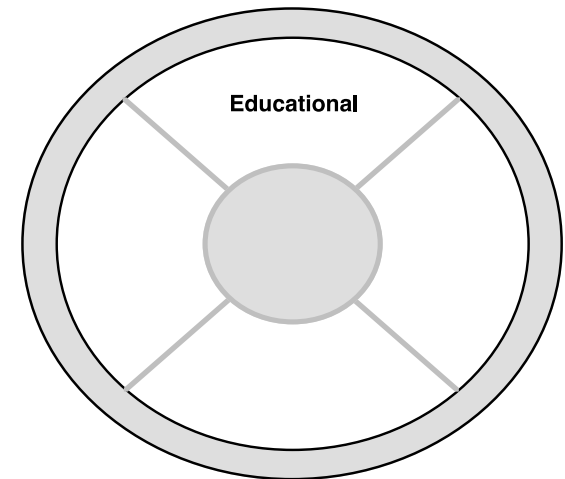
- Reflects perceived norms and values of the school; what is commonly done and accepted by others.
- Communicates the environment's normative expectations of individuals.
- Guides school members' interpretation of situations and orients their actions.
- School members are socialized within a specific climate and internalize organizational standards.



2. The School socio-educational model and questionnaires (SEQ)

■ Theoretical framework : School climate

- We hypothesized that norms can vary according to different aspects of the school experience: social climate, educational climate, climate of security-safety, climate of justice-fairness and climate of belonging.
- School climate is not so tangible nor directly under the control of teachers and educators, as it relies on broad impressions and feelings.





2. The School socio-educational model and questionnaires (SEQ)

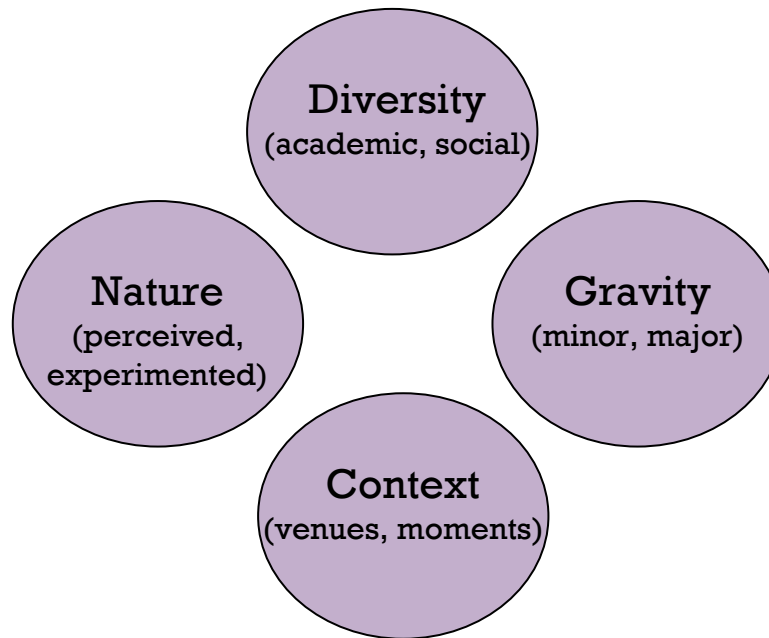
■ Theoretical framework : School problems

- Learning, behavioral, psychological and social problems are not independent. (SEQ: misbehavior in school, school violence...)
- The importance to assess the nature, diversity and gravity of the problems.
- The need to investigate the perceptions of problems as well as real experienced events (e.g. victimization, aggressiveness, witnessing violence).



2. The School socio-educational model and questionnaires (SEQ)

■ Theoretical framework : School problems



Descriptive parameters of school problems

In the SEQ

Indiscipline
Violence
Gangs
Access to
drugs

* Motivation,
academic
performance, risk
of dropping out



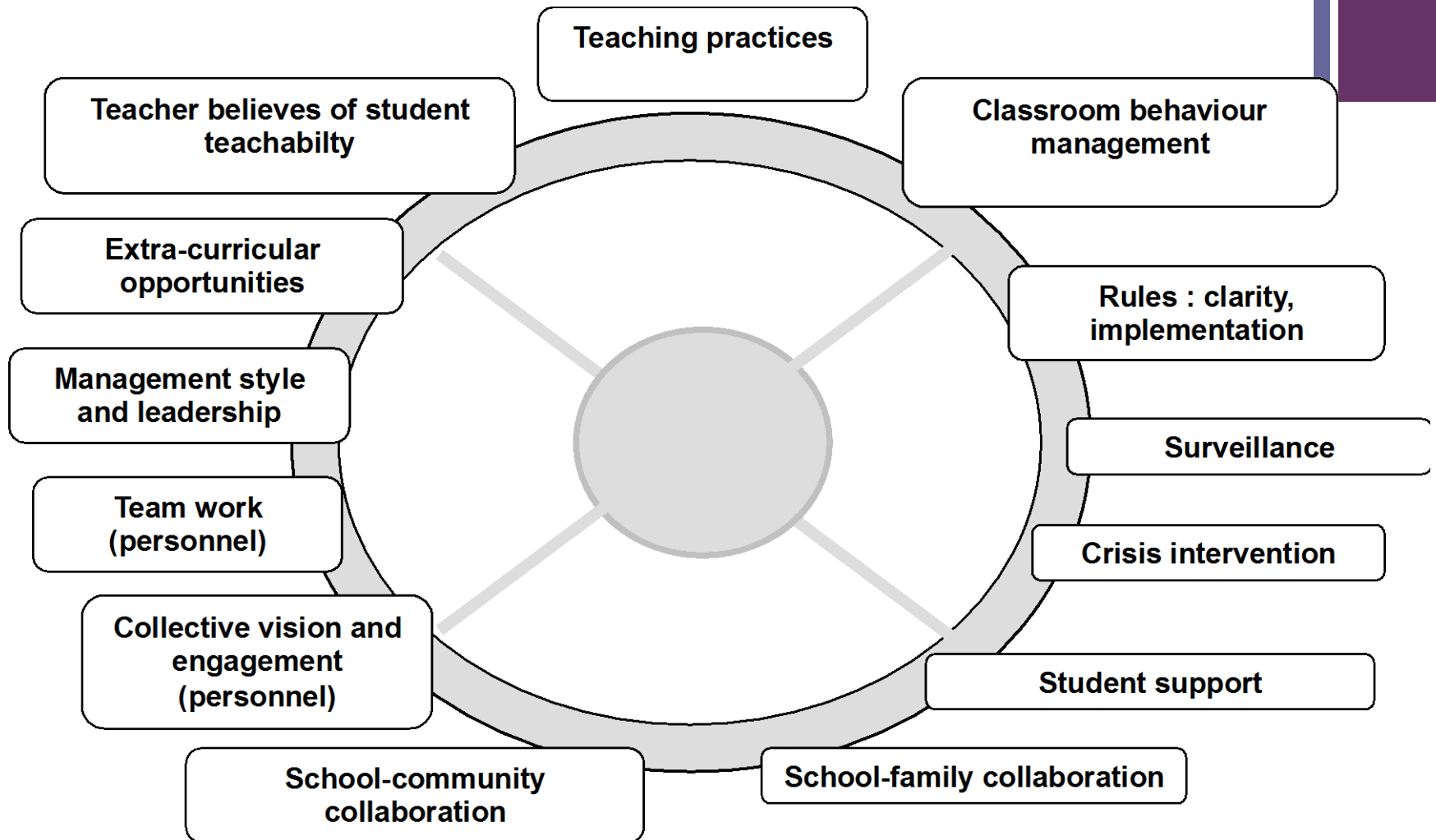
2. The School socio-educational model and questionnaires (SEQ)

■ Theoretical framework : School practices

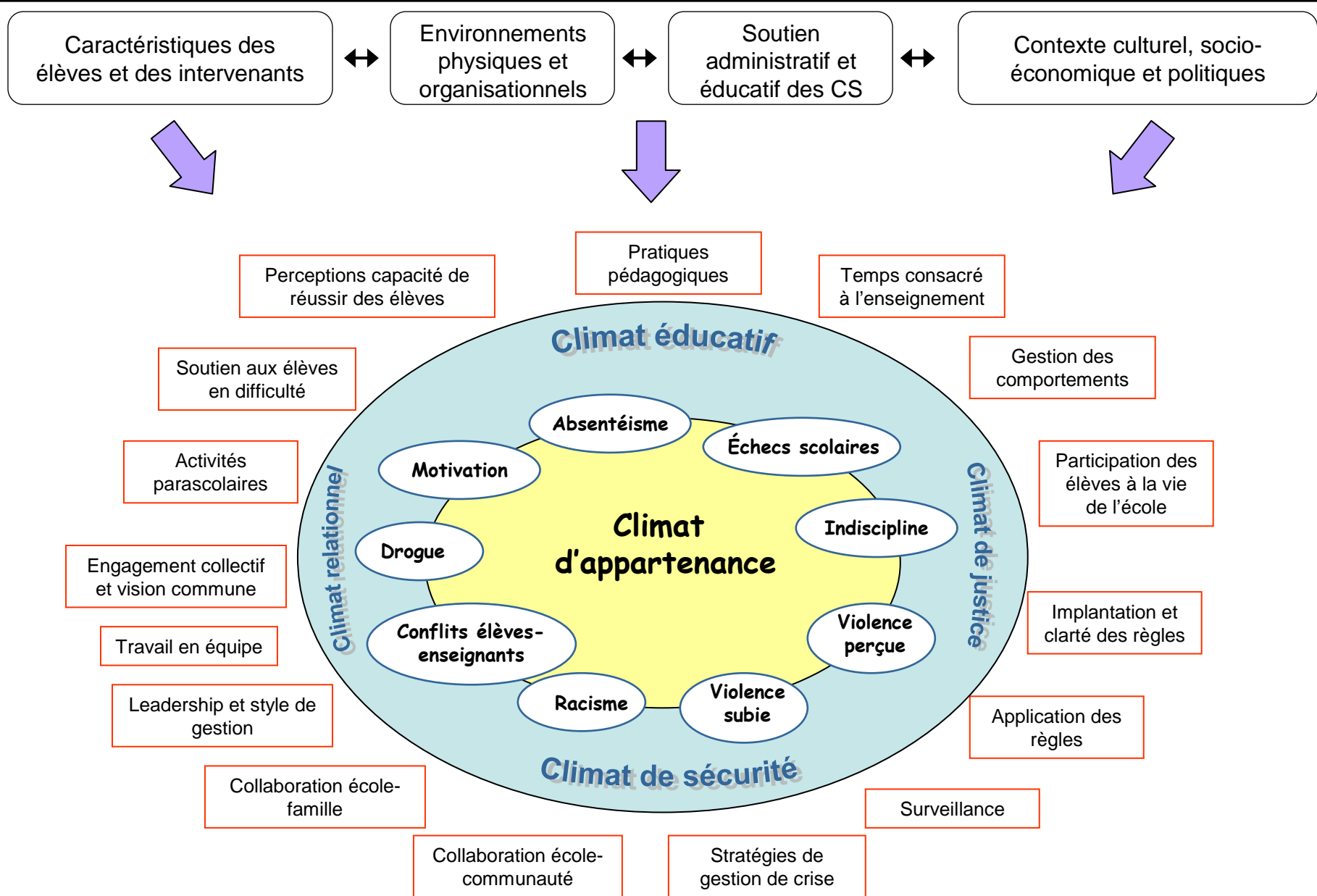
- Significant targets for intervention
- What adults / educators do.
- What is under the direct control of educators.
- What affect directly behavior and learning.



2. The School socio-educational model and questionnaires (SEQ)



Educational and organizational practices/attitudes measured in the SEQ



LES COMPOSANTES DE L'ENVIRONNEMENT SOCIOÉDUCATIF – version école secondaire

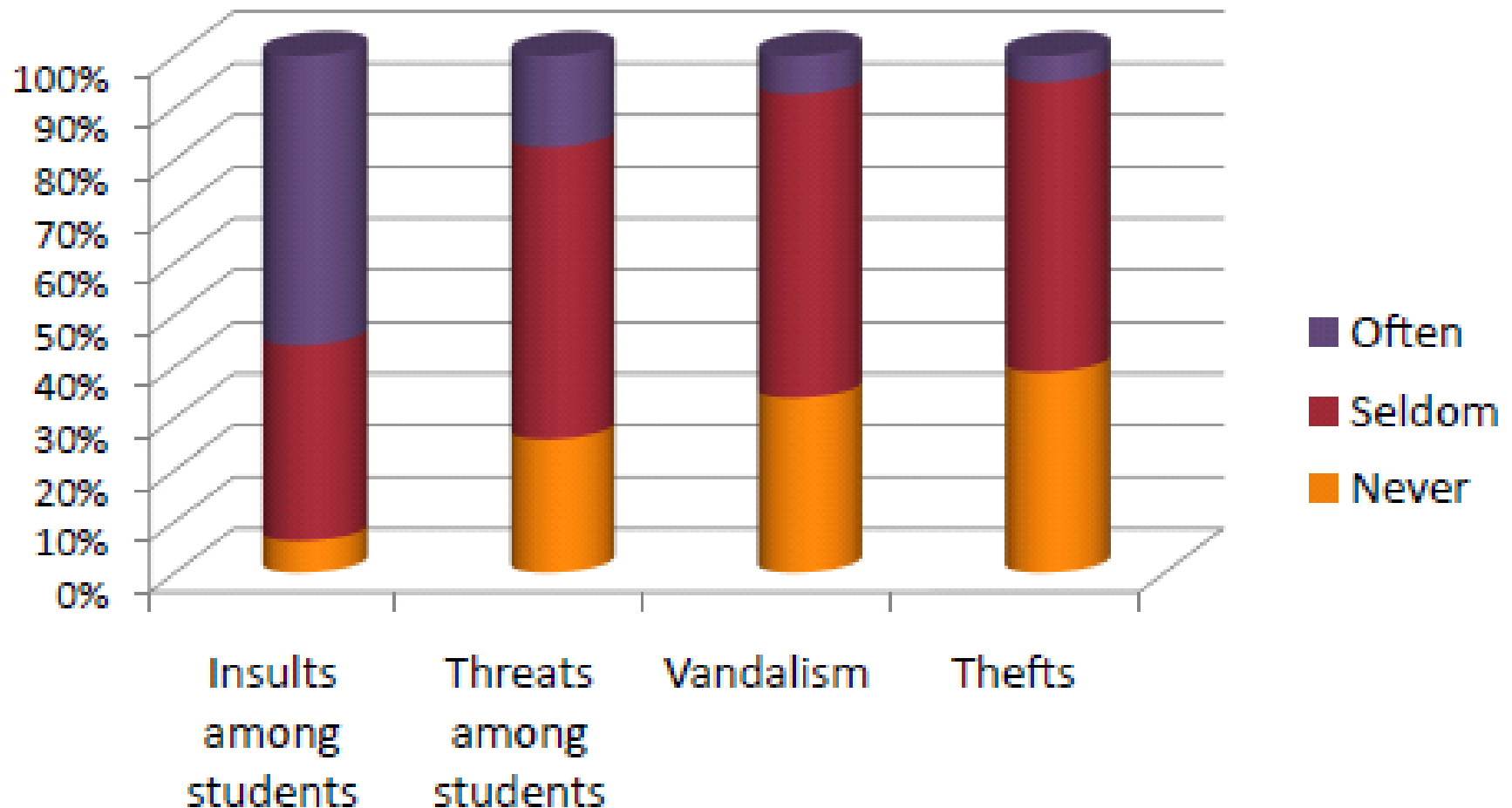


3. Utility the SEQ for RESEARCH

- To understand the influence the school socioeducational environment (SE). Studies demonstrating the
 - Multidimensional nature of school violence exposure.
 - Deleterious effects of witnessing violence.
 - Influence of the SE on depressive moods and school dropout.
 - Influence of SE on teachers beliefs of students' teachability, and the influence of those beliefs' on student adjustment.
 - Influence of SE on teachers' professional fatigue and sense of accomplishment (burnout); and the influence of teachers' exhaustion on student adjustment.



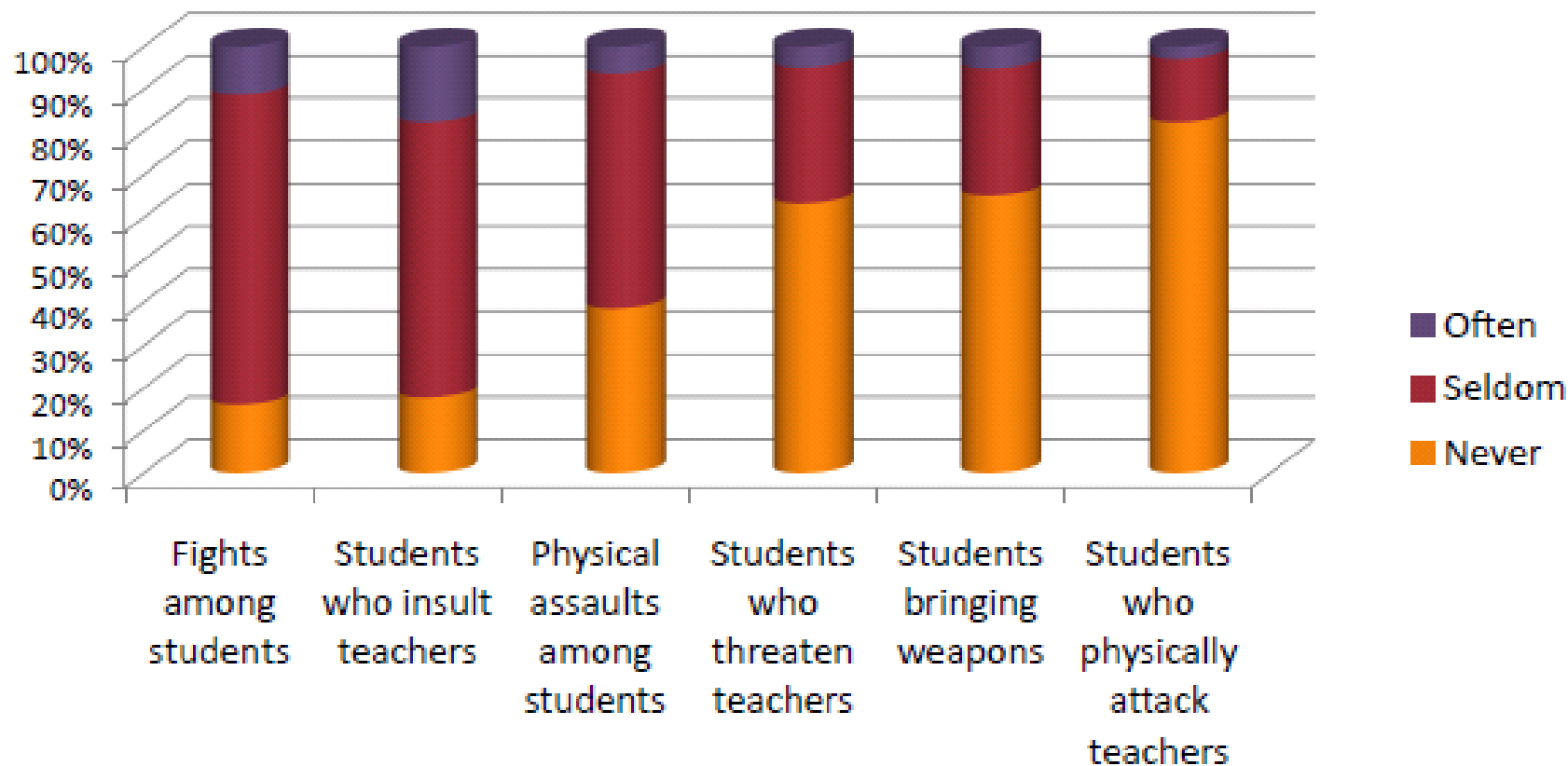
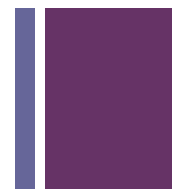
Graph 1 - Distribution of minor violence school witnessing



13 868 students ,grade 7 to grade 11,57% female75 secondary schools

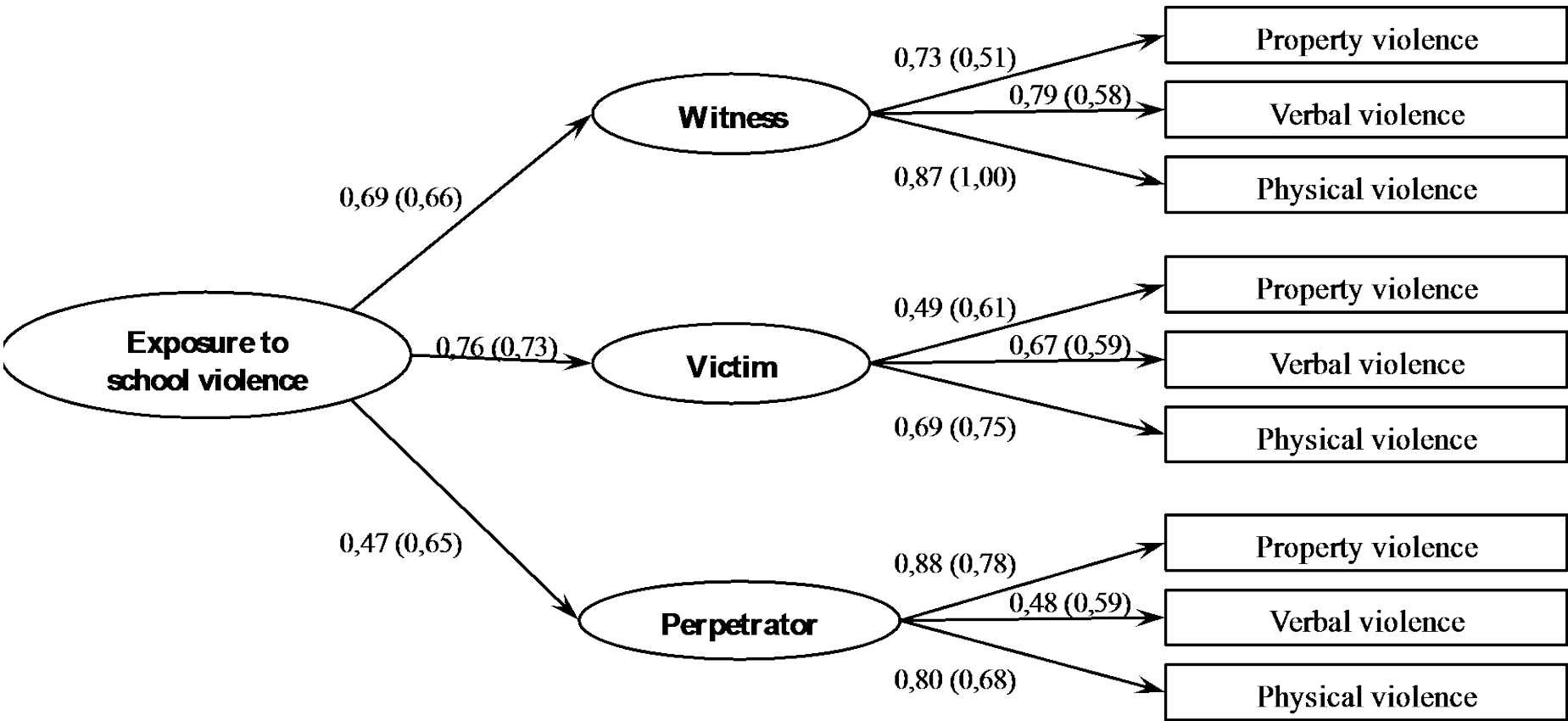


Graph 2 - Distribution of major violence school witnessing



13 868 students ,grade 7 to grade 11,57% female75 secondary schools

Multidimensional modelling of student exposure to school violence
 (the numbers in brackets refer to the coefficients for the Belgian sample)



CFI=0,99, TLI=0,98, RMSEA=0,036; échantillon belge : CFI=0,99; TLI=0,97; RMSEA=0,050

Janosz, M., Pascal, S., & Galand, B. (2012). *Être témoin de violence à l'école : son importance et ses liens avec le climat scolaire*. In B. Galand, C. Carra & M. Verheoven (dir.), *Prévenir la violence* (pp.99-109). Paris : Presses Universitaires de France.



3. Utility the SEQ for RESEARCH

- Janosz, M., Archambault, I., Pagani, L. S., Morin, A. J. S., & Bowen, F. (2008) *Are there Detrimental Effects of Witnessing School Violence in Early Adolescence?* Journal of Adolescent Health, 43(6), 600-608.
 - Witnessing violence at the beginning of 7th grade, controlling for victimization and aggressiveness, predicted, at the end of the school year external behavioral problems and student engagement.
 - No relation with internalizing problems or school grades.
- Janosz, M., Brière, F.N., Galand, B., Pascal, S., Brault, C., Archambault, I., Moltrecht. B., & Pagani, L. (Revision) . Academic Outcomes of Witnessing Violence in Secondary School
 - Witnessing violence in Grade 8 predicts psychosocial and academic impairments two years later beyond victimization and other confounders.
 - Witnessing covert and major violence primarily predicts externalizing problems.
 - Witnessing minor violence primarily predicts internalizing problems and student engagement.
 - Again, we no effect on student achievement !



3. Utility the SEQ for RESEARCH

- Brière, F.N., Pascal, S., Dupéré, V., & Janosz, M. (2013). School Environment and Adolescent Depressive Symptoms: A multilevel Longitudinal Study. *Pediatrics*, 131, 702-708.
 - Large-scale multilevel prospective study
 - School socioeducational environment in grade 8 predicted student depressive symptoms in grades 10, controlling for potential school and individual confounders.

- Archambault, I. & Janosz, M. (2006, août). *Behavioural problems and school dropout: Does school climate matter?* Annual meeting of the Applied Psychology Association, Athènes.
 - Large-scale multilevel prospective study (one year)
 - Social climate between students; educational, security and climate of belongingness were the dimensions of climate best predictive of school dropout



3. Utility the SEQ for RESEARCH

- The influence of school environment on teacher burnout (2017)
 - See R. Chouinard presentation on Wednesday afternoon
 - Multilevel large scale longitudinal study (2 years apart).
 - Interesting findings regarding perceived or «objective» school environment...



3. Utility the SEQ for RESEARCH

■ Teacher burnout predicting student well-being and success

- *Janosz, Archambault, Chouinard, Marchand, Pascal & Pagani (2017).*
- Primary (1381 students in 107 classes) and secondary schools (7903 students in 56 schools) from Quebec province. Longitudinal multilevel design.
 - **Primary schools :**
 - T. feelings of inefficiency predicts negative outcomes among students (school engagement, sense of competence, achievement, behavior problems, teacher-student relationship, etc.)
 - Consequences of teacher professional exhaustion follow an inverted U-shaped pattern !
 - **Secondary schools:**
 - T. feeling. of inefficiency doesn't predict student outcomes
 - T. exhaustion results in negative effects among students (student perception of school environment, achievement). Negative effects slightly diminish when teacher exhaustion reaches high levels !
 - Teacher professional exhaustion and feeling of inefficiency adds up (interaction)



3. Utility the SEQ for RESEARCH

- Brault, M.C., Janosz, M. & Archambault, I. (2014). Effects of School Composition and School Climate on Teacher Expectations of Students: A Multilevel Analysis. *Teaching and Teacher Education*, 44, 148-159.
 - School socio-economic and academic composition and school educational climate have independent effects on teacher expectations.
 - Educational climate mediates partially the effect of school composition on teachers' beliefs of students teachability.
- Archambault, I., Janosz, M., & Chouinard, R. (2012). Teacher beliefs as predictors of adolescents' cognitive engagement and achievement in math. *The Journal of Educational Research*, 105, 319-328.
 - Large-scale multilevel prospective study (two years)
 - Teachers' beliefs of students teachability predicts students' achievement.



3. Utility the SEQ for INTERVENTION

- To assess the educational potential of the school.
- To support the development of an action plan by enabling the identification of the strengths and vulnerabilities of the school.
- To support the implementation of school-wide and comprehensive interventions; of school improvement initiatives.
- To assess intervention effects.
- To be used as a starting point for school-community collaborations.



3. Utility the SEQ for INTERVENTION

- Online, self-reported, anonymous questionnaires. (QES-WB)
- Primary school and secondary school versions.
- Student and Personnel members versions
- Original version 140 – 200 items; new shorter version 60 – 80 items.
- 40 Graphs and tables of results
- Secondary school versions adapted and used in France, Switzerland (French and Italian), and Libanon (Arabic).
- 2-4 days of training : interpretation and communication of the results.



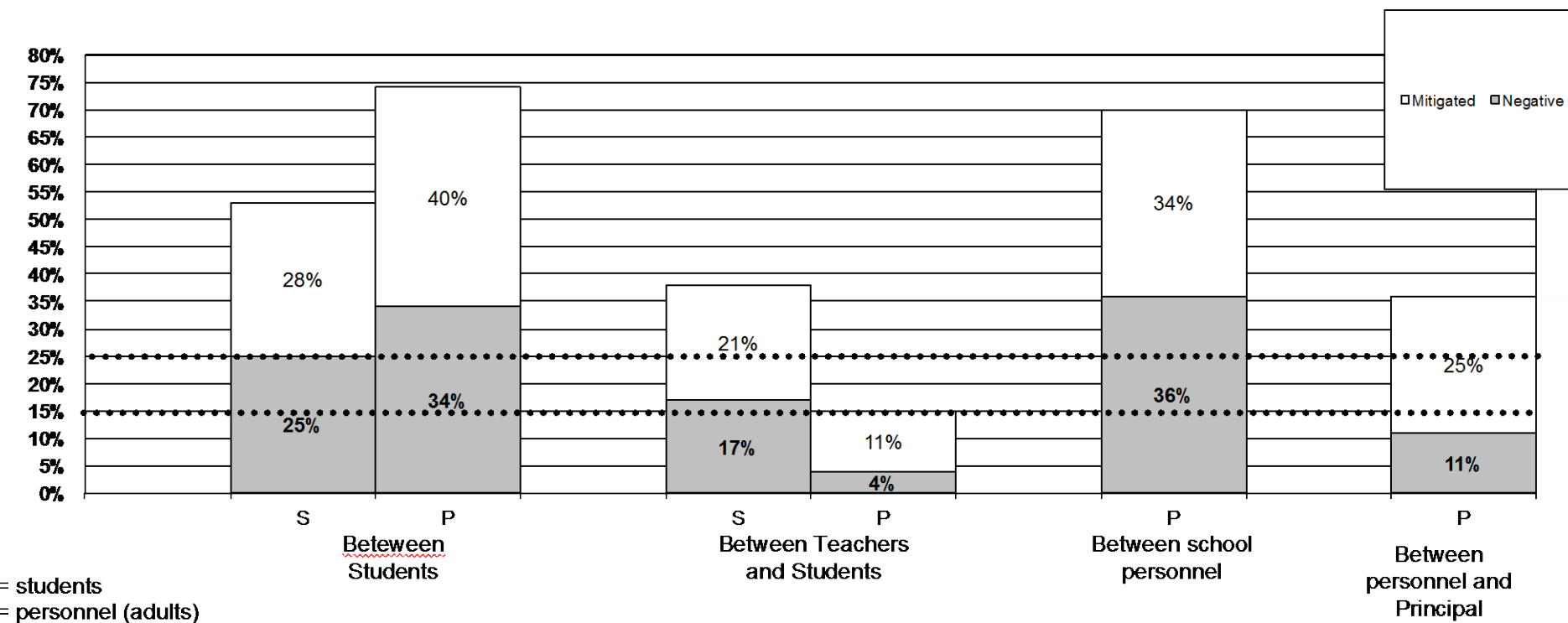
3. Utility the SEQ for INTERVENTION

■ Method of analysis

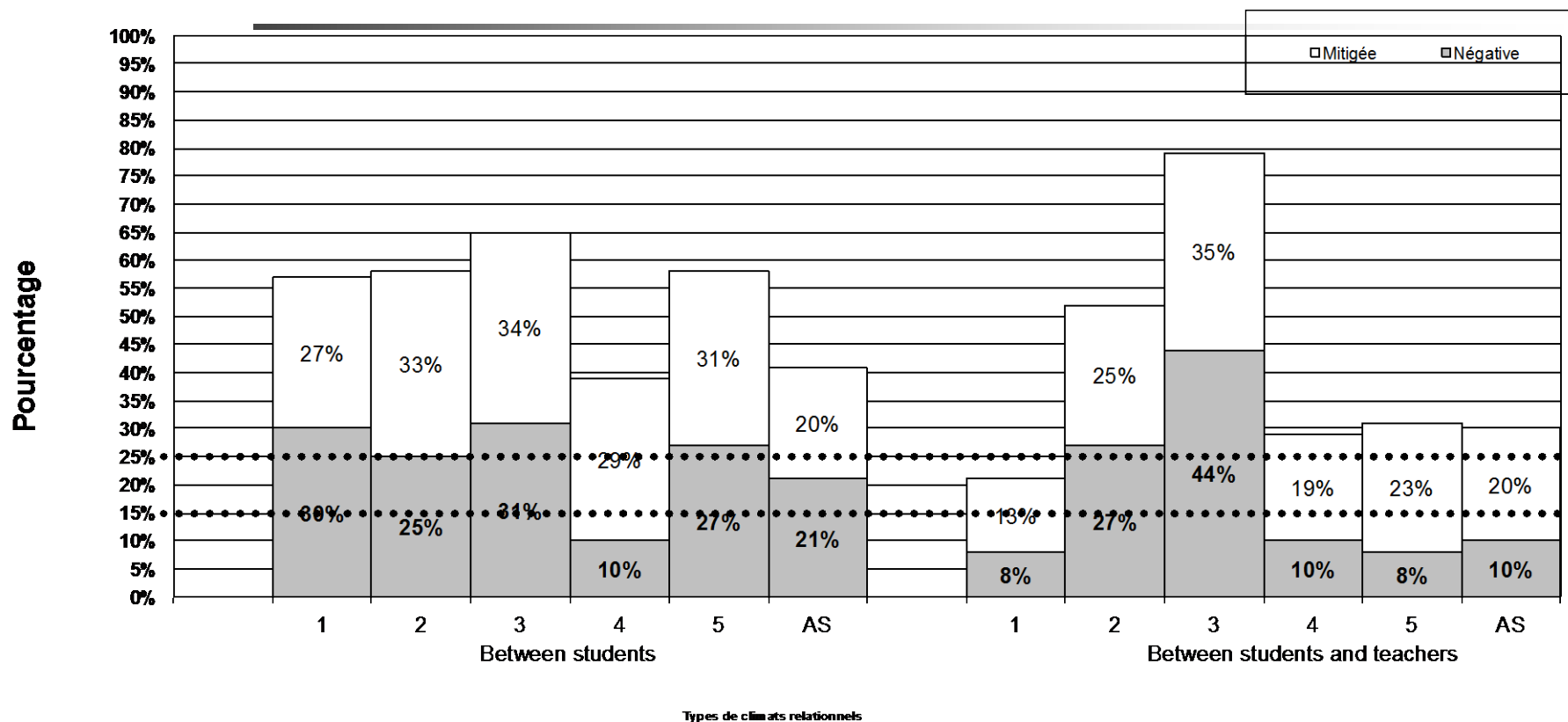
- Descriptive (normative and comparative)
- Context
- Synthesis and dynamic interpretation

■ School profile example

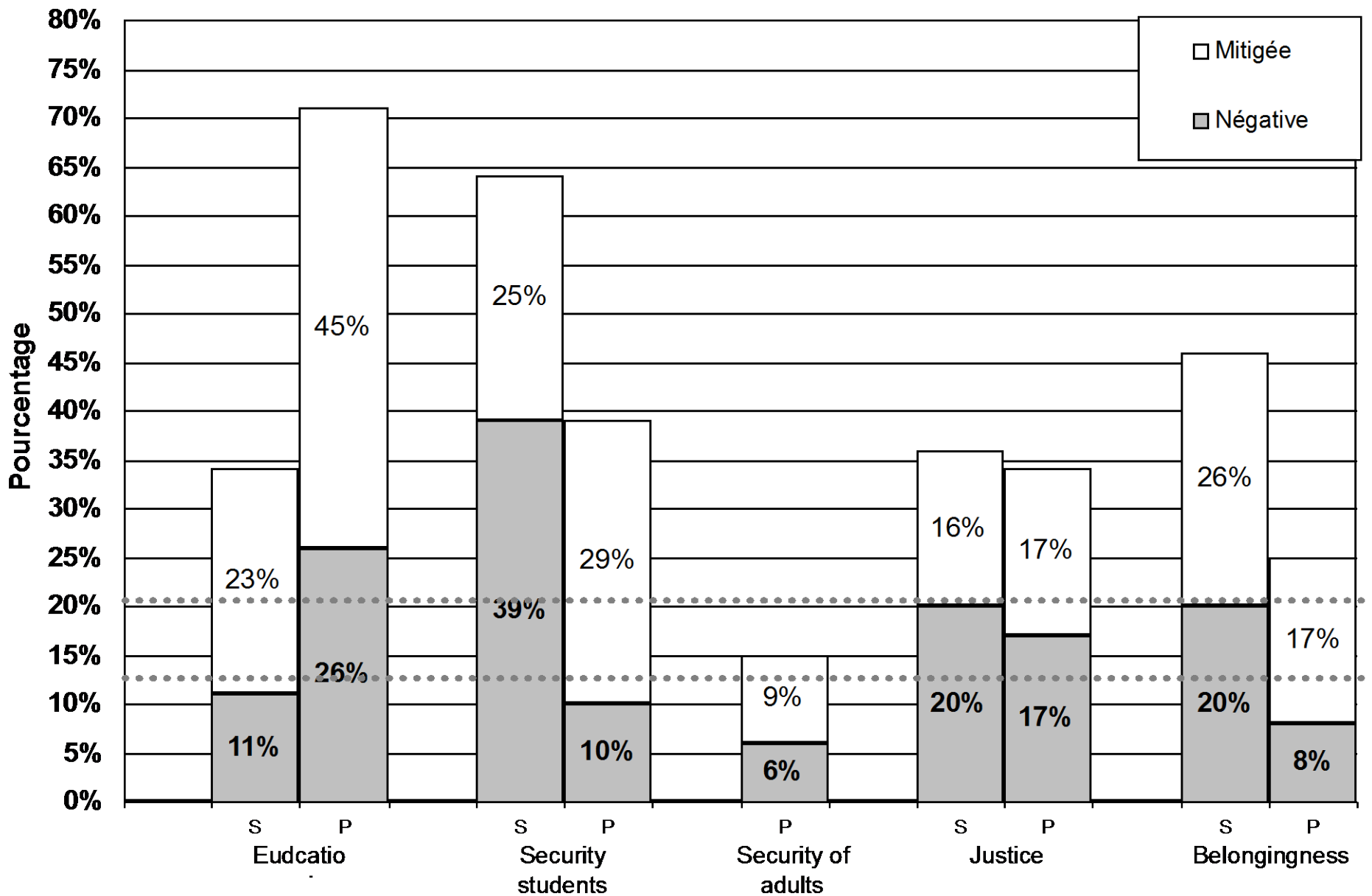
Graph 5.1 : Perception of social climate according to students and school personnel



Graph 5.2 : Perception of social climate according to students and grades



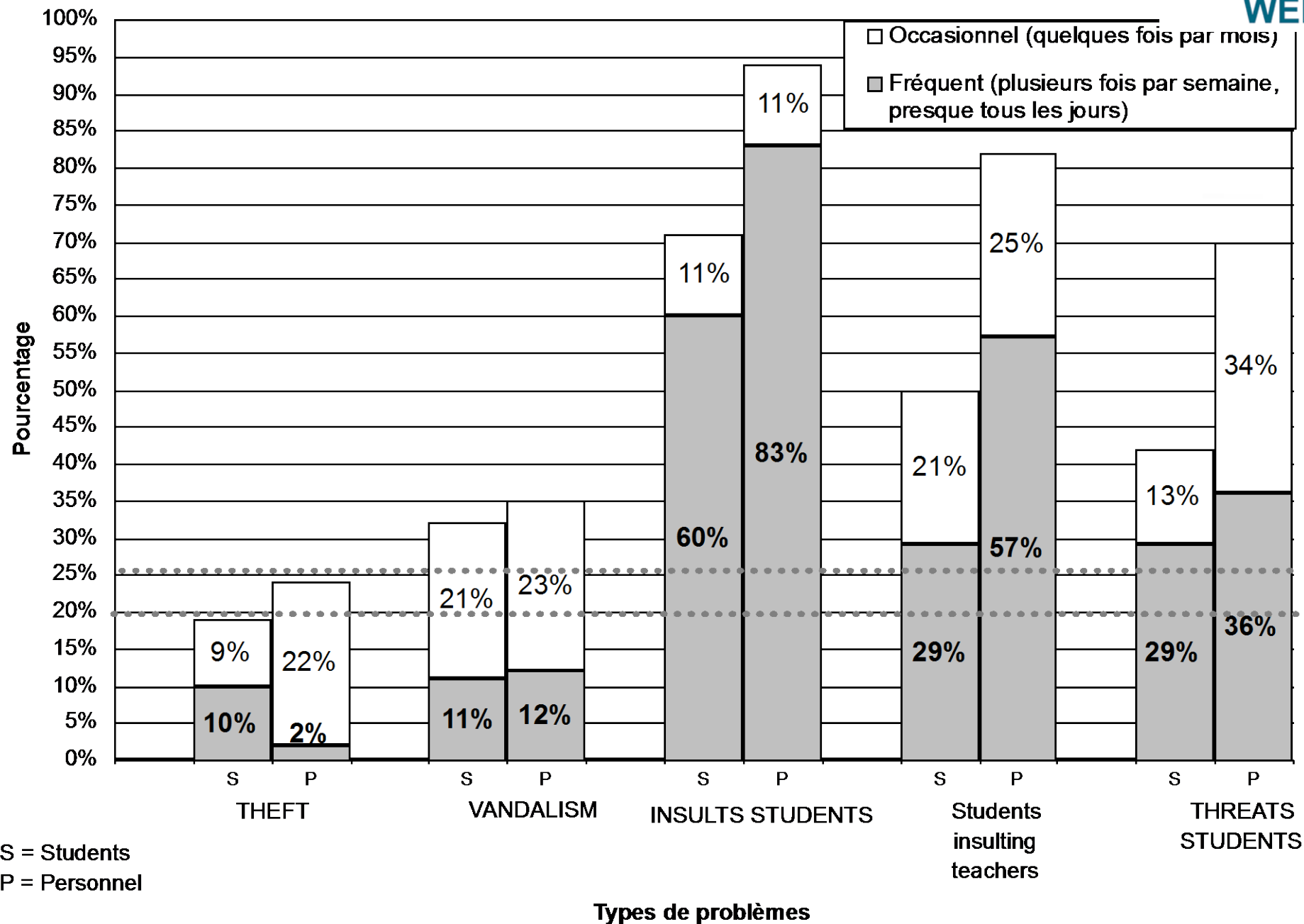
Graph 5.3 : Perceptions of school climate according to students and school personnel



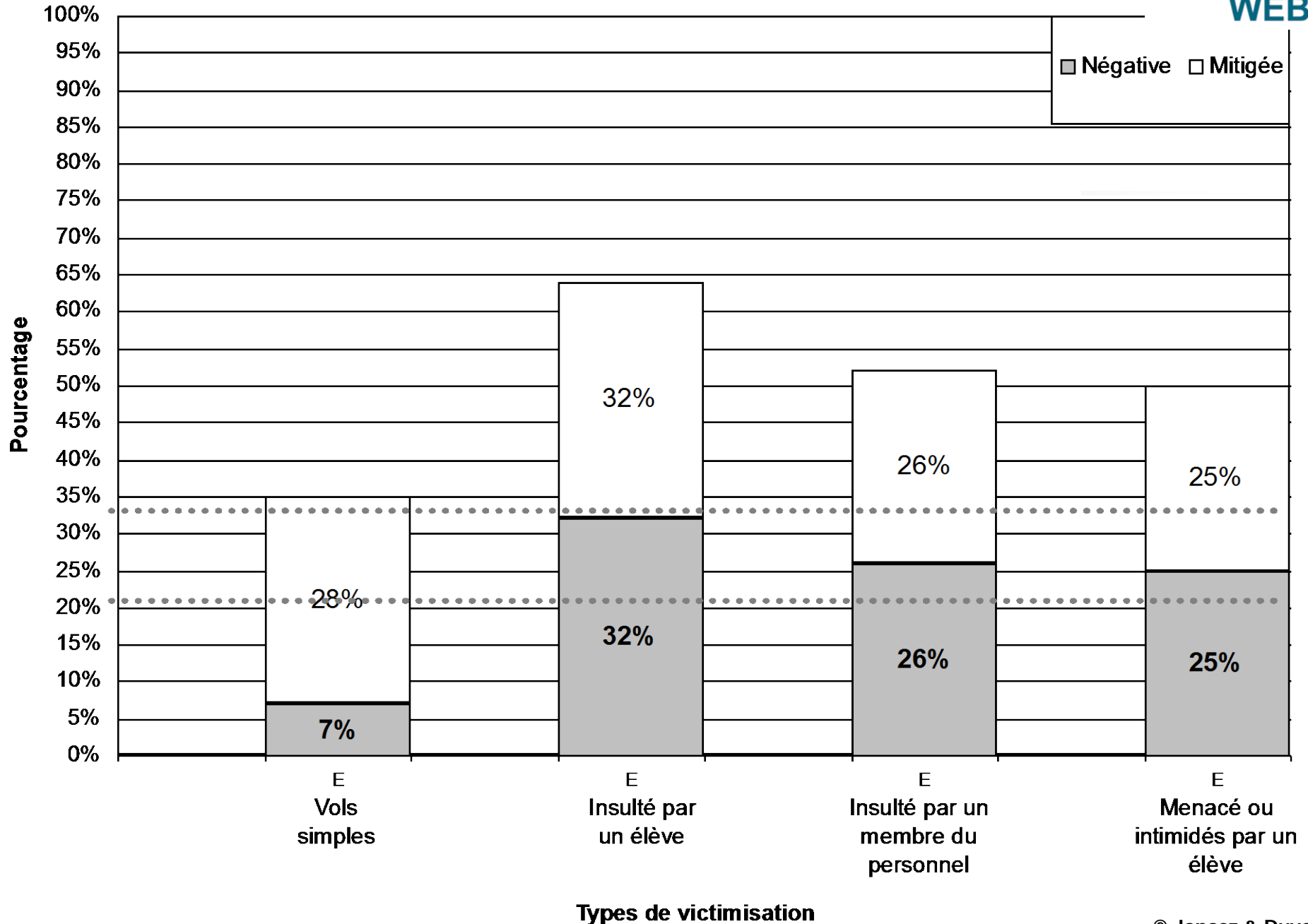
E = Students
P = Personnel

Types de climats

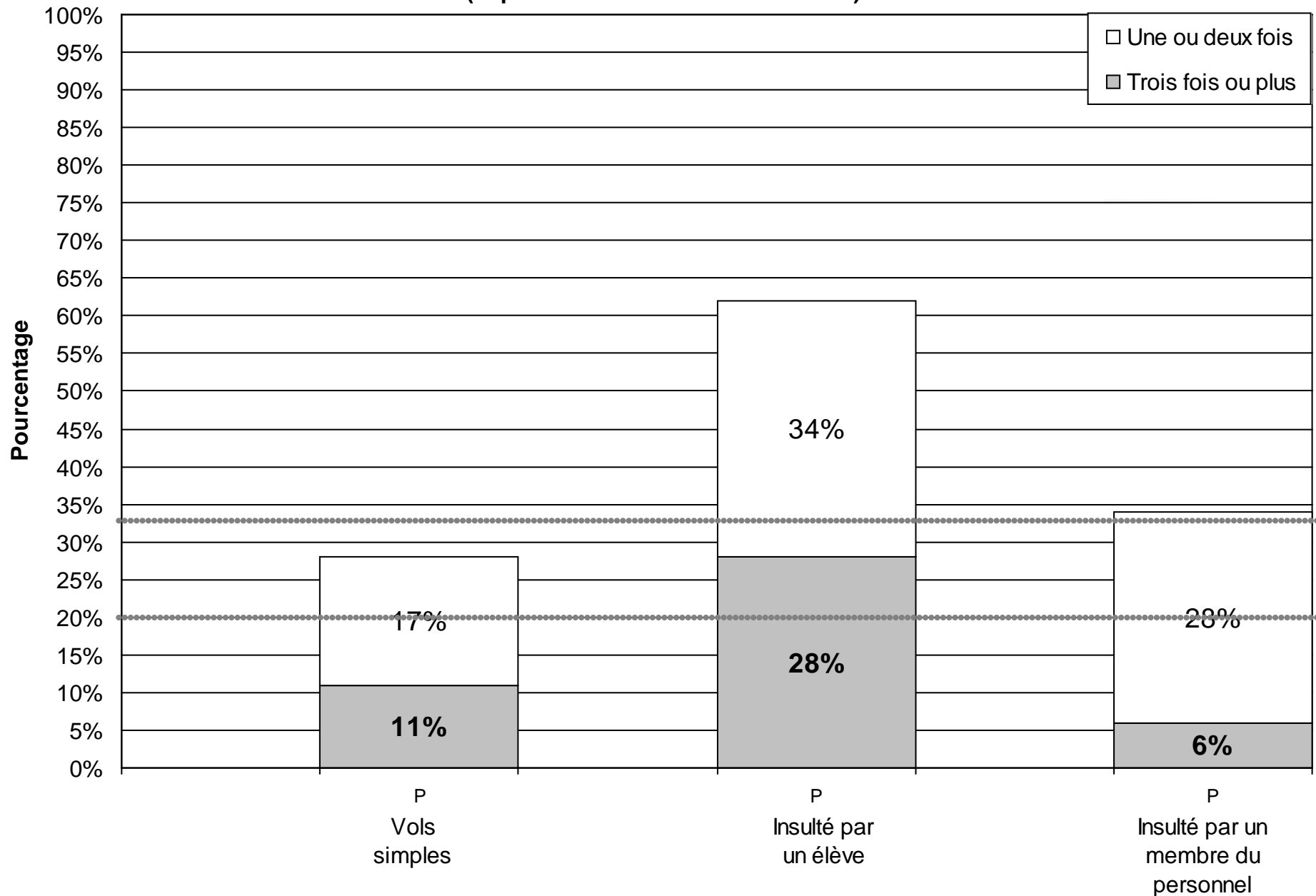
Graphique 7.1 : La perception de la fréquence des problèmes de gravité mineure selon les élèves et les membres du personnel



**Graphique 7.3a : La victimisation de gravité mineure chez les élèves
(depuis le début de l'année scolaire)**

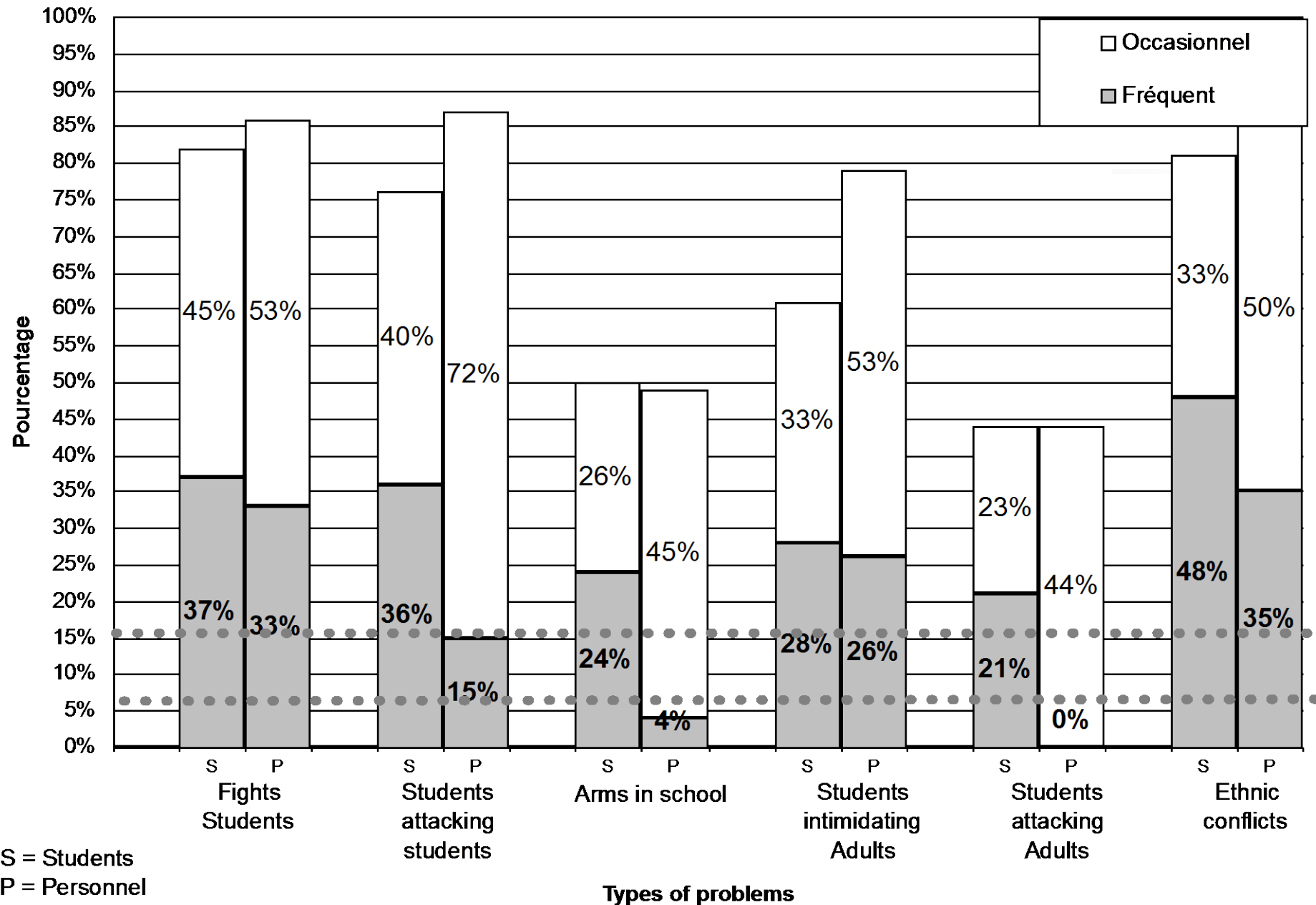


**Graphique 7.4 : La victimisation de gravité mineure chez les membres du personnel
(depuis le début de l'année scolaire)**

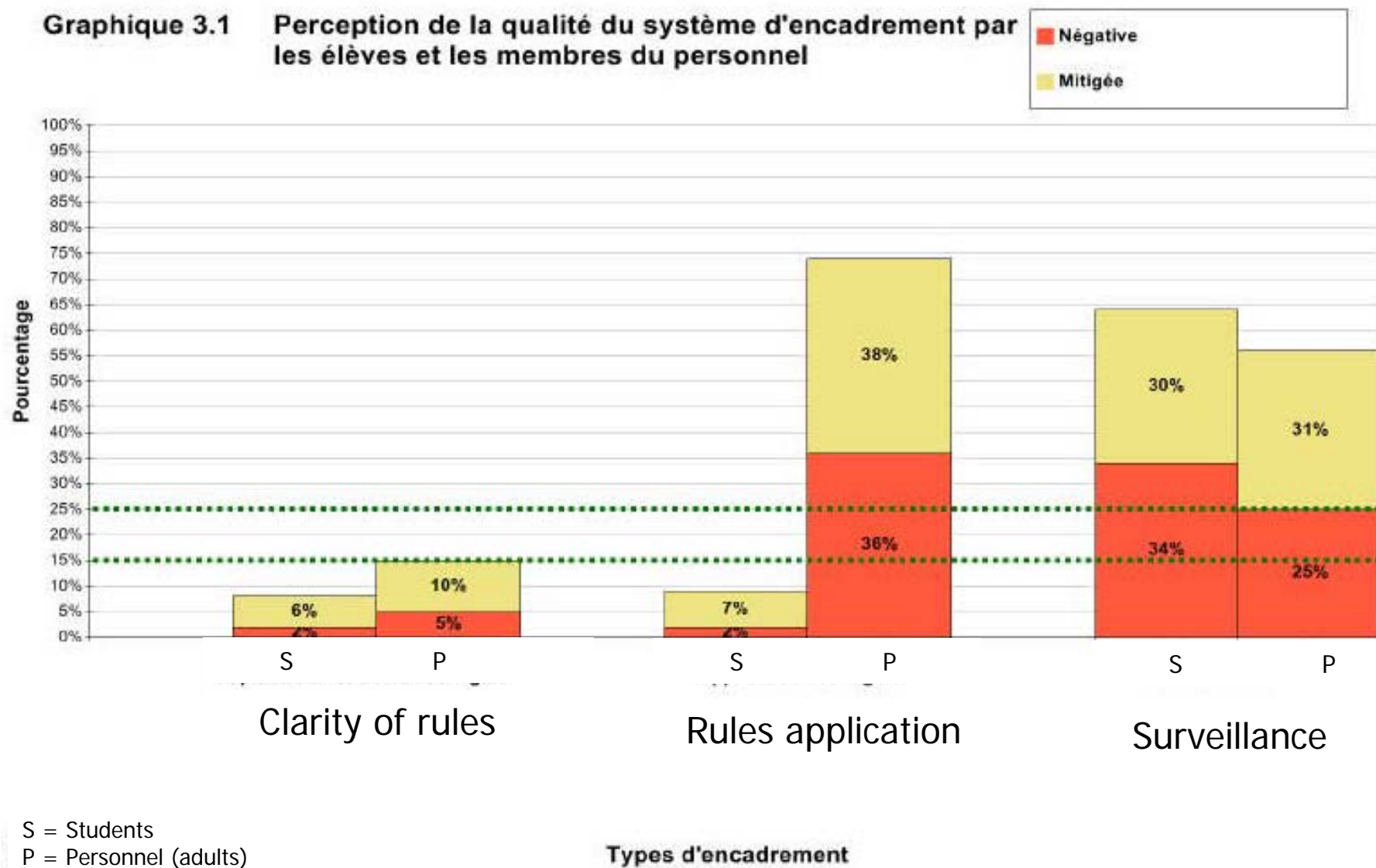


Types de victimisation

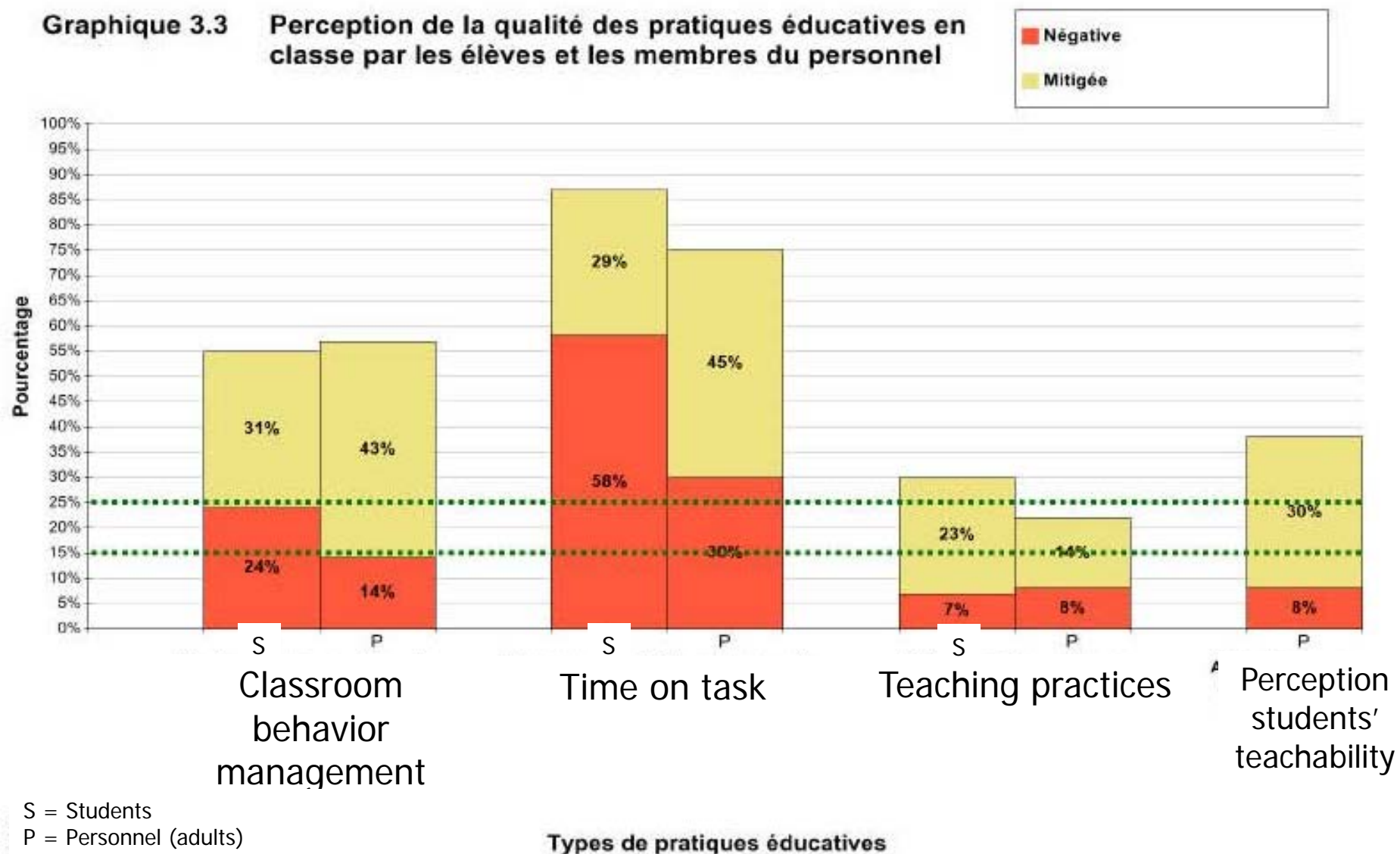
Graphique 7.5 : La perception de la fréquence des problèmes de gravité majeure selon les élèves et les membres du personnel



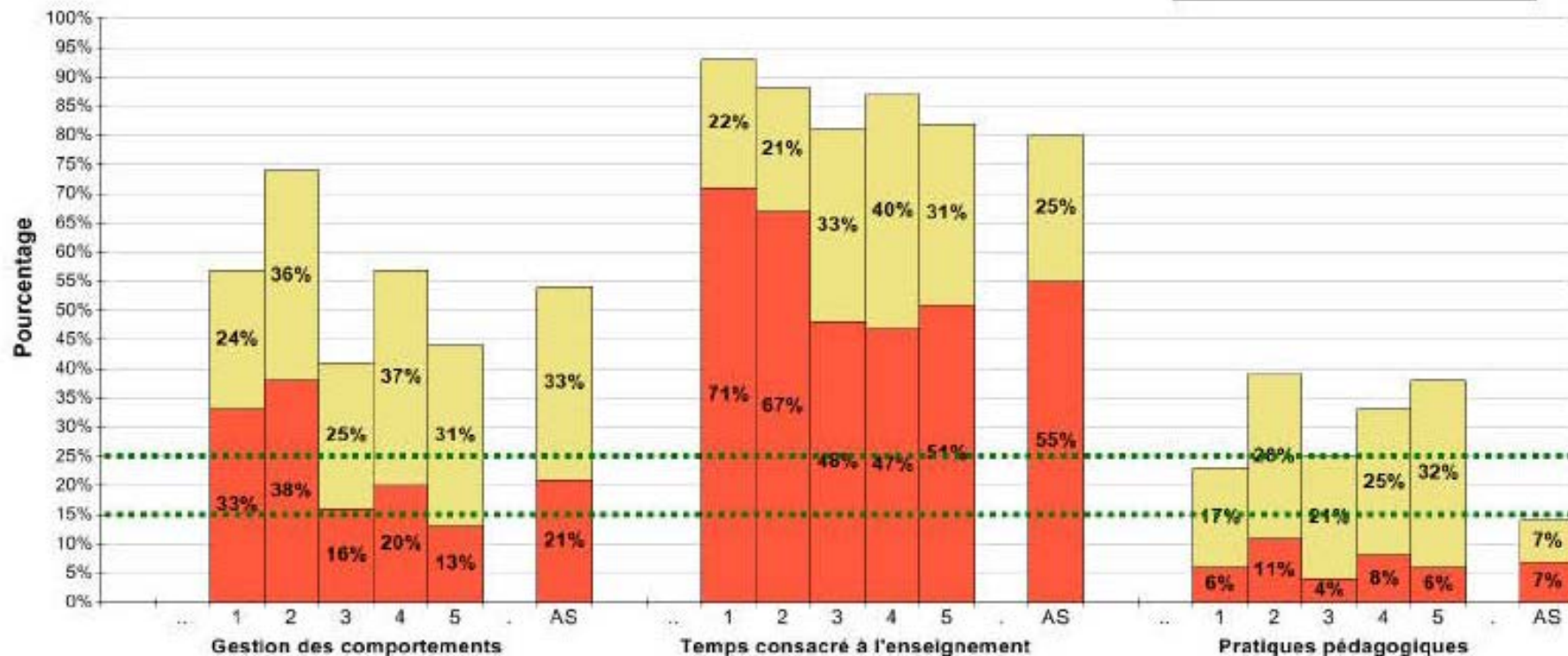
Graphique 3.1 Perception de la qualité du système d'encadrement par les élèves et les membres du personnel



Graphique 3.3 Perception de la qualité des pratiques éducatives en classe par les élèves et les membres du personnel



Graphique 3.4 Perception de la qualité des pratiques éducatives en classe par les élèves des différents niveaux



Types de pratiques éducatives

.. = 6e année du primaire
 1 = 1re secondaire
 2 = 2e secondaire
 3 = 3e secondaire
 4 = 4e secondaire
 5 = 5e secondaire
 . = Je ne sais pas
 AS = Adaptation scolaire



SYNTHESIS

School climate

	STUDENT			PERSONNEL		
	Weakness	Vulnerabi	Strenght	Weakness	Vulnerabi	Strenght
Social climate						
between students						
students and teachers						
between adults	N/A	N/A	N/A			
between personnel and principal	N/A	N/A	N/A			

Educational climate

Climate of safety - students

Climate of safety - personnel

Climate of justice - fairness

Climate of belongingness

	N/A	N/A	N/A			

School problems

	Élèves			Personnel		
	Urgence	Vulnérabilité	Force	Urgence	Vulnérabilité	Force
Perception de la fréquence des comportements d'indiscipline par les élèves et les membres du personnel						
Ne pas faire ses devoirs						
Déranger la classe volontairement						
S'absenter de l'école sans raison						
Tricher durant les examens						
Être suspendu						
Comportements d'indiscipline rapportés par les élèves						
Ne pas faire ses devoirs				N/A	N/A	N/A

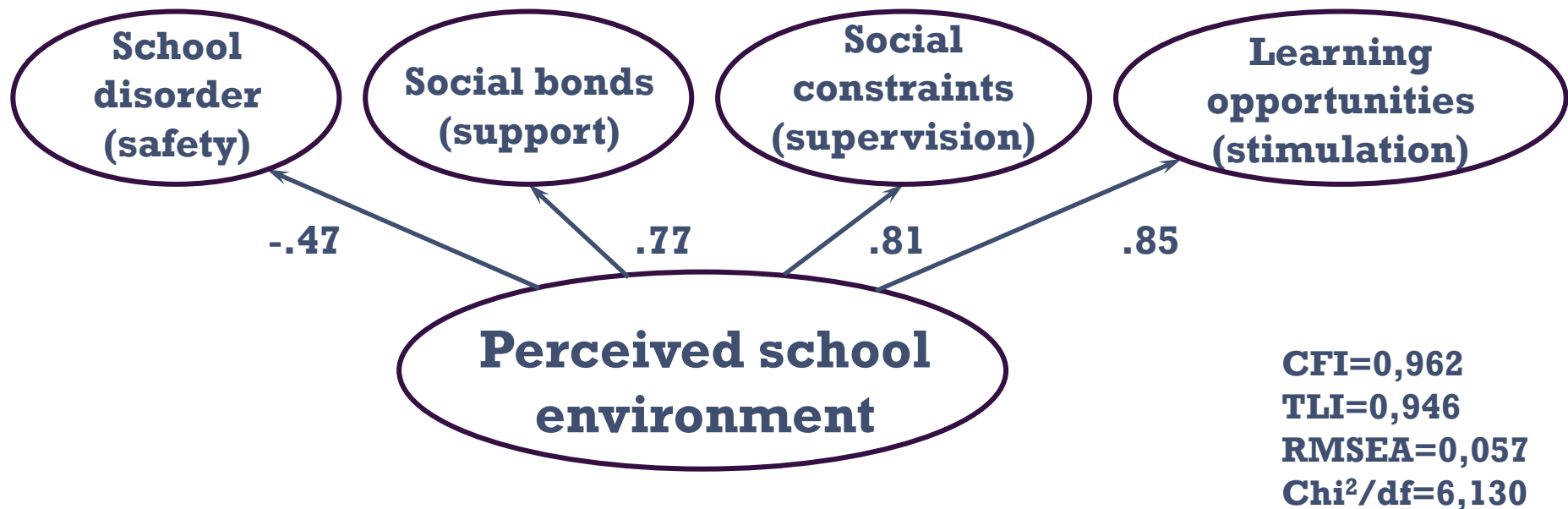
+ 3. Limitations of the SEQ

- Gives a good overview of multiple school dimensions, but not a good tool for a deep investigation on specific aspects.
- Does not cover all aspects (indicators) of school success. Many other sources of information and indicators are needed to build a success plan.
- Provides a fixed snapshot of the history of the school, not a dynamic portrait.
- Focuses on the environment and communities of people, not on individuals. **Not a classroom evaluation for secondary schools.**
- Requires a demanding training and necessitates very good analytical and communicational skills.
- Complex and huge amount of data (original version).

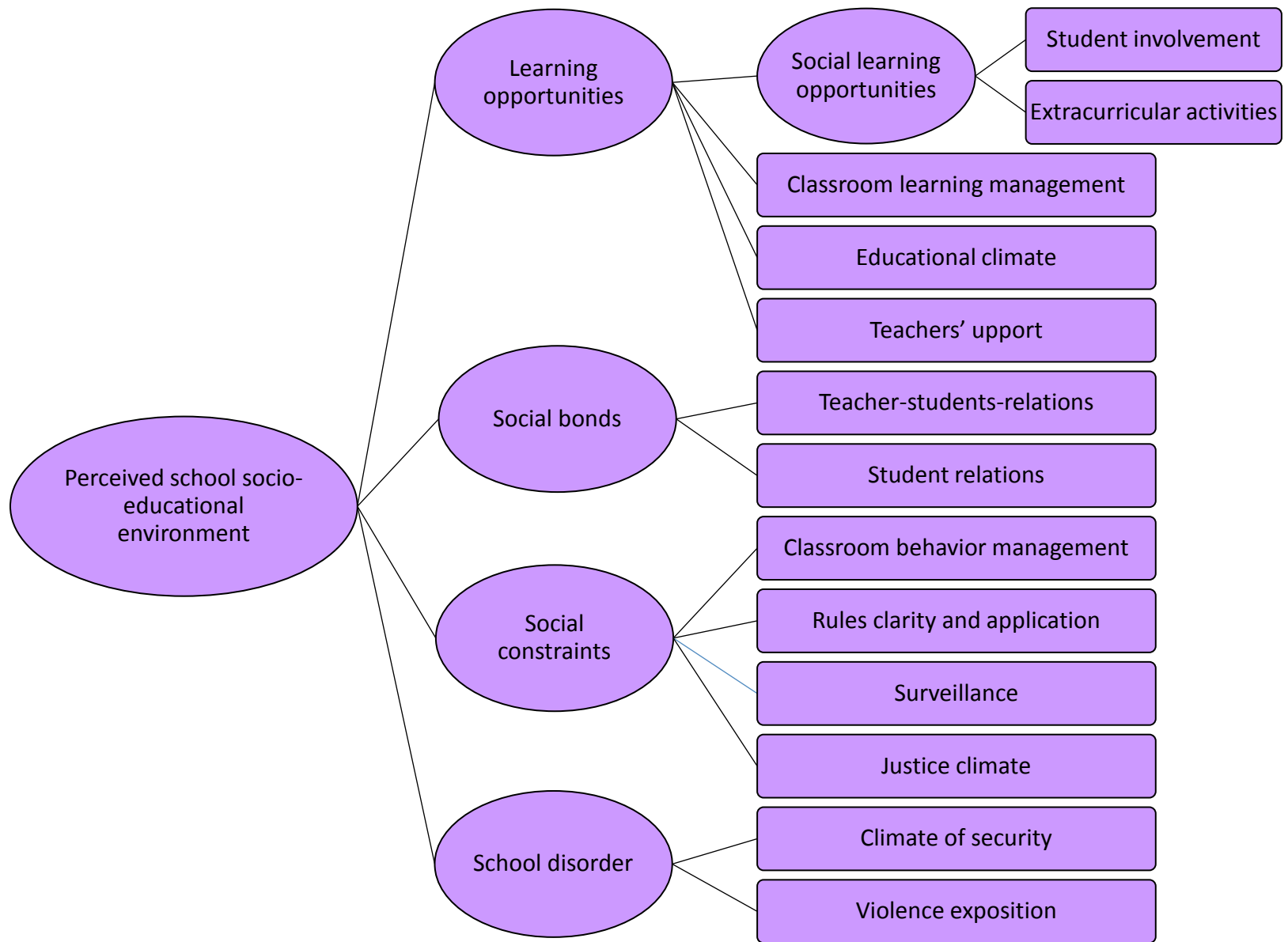
+ 4. Evolution of the model and SEQ

- While well received by practitioners, we failed to establish empirically the relative independence of the tridimensional model : climate, practices and problem.
- For example, educational climate, teachers' classroom practices and student motivation are highly correlated; as security climate, school rules and student violent behaviors, social climate between teachers and principal... (Janosz et al, 2011).
- A structural equation model of school environment more closely linked to our Five S principle and to the Social Development Model of Catalano & Hawkins (1996) appeared more empirically valid than our initial 3 dimensions structure.

4. Evolution of the model and SEQ



Janosz, M., Pascal, S., Archambault, I., Vezeasu, C. & Fournel, M. (2011) *The contribution of perceived schools socio-educational environment to student emotional, cognitive and behavioral engagement*. Sixth SELF Biennial International Conference, Montréal.

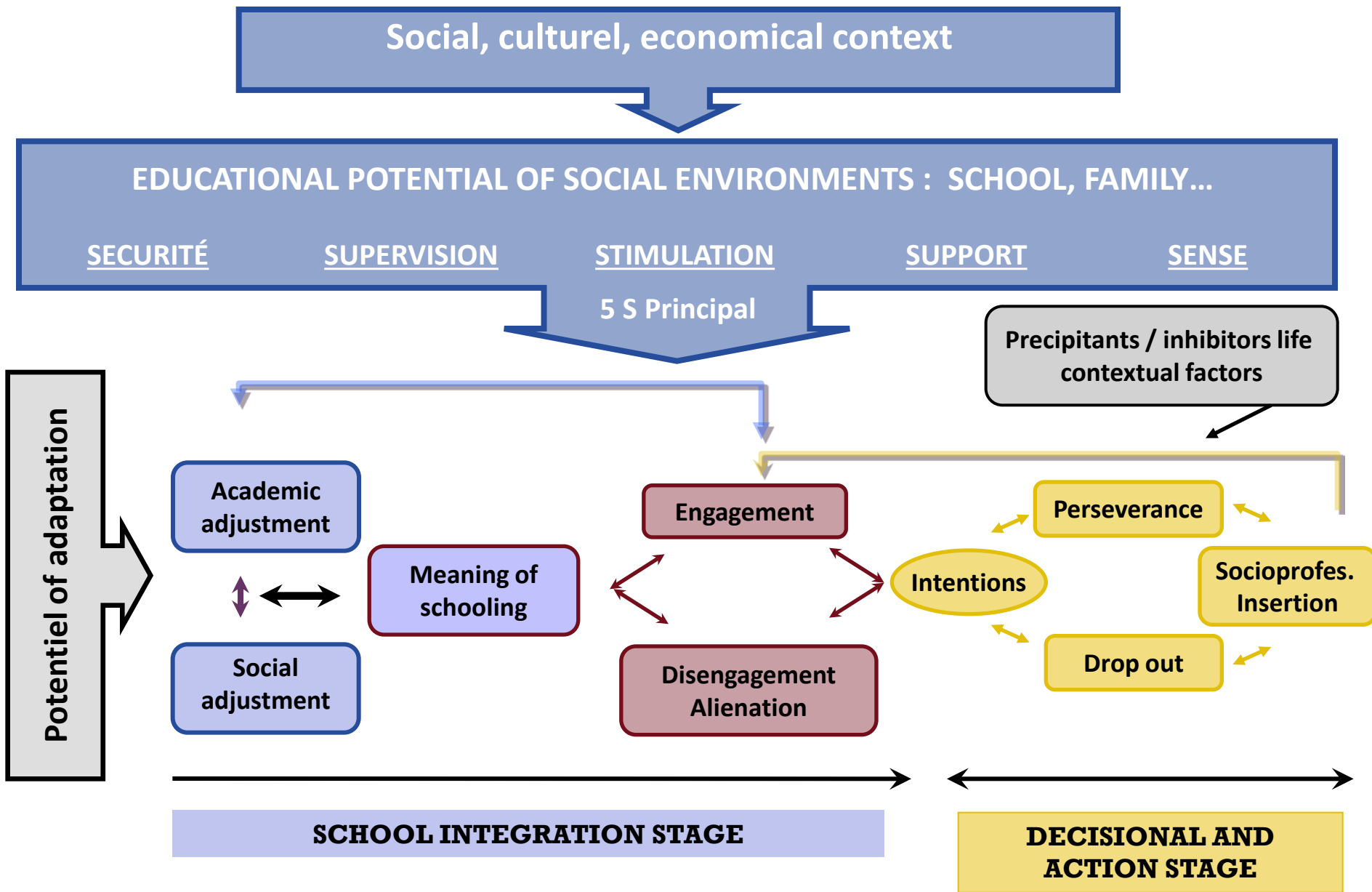


+ 4. Evolution of the model and SEQ

- For research, we use aggregate indicators of the school environment or fewer specific indicators, according to the question of interest.
- Practitioners prefer the distinctions between climate, practices and problems because it is easier to pinpoint modifiable determinants.

+ 4. Evolution of the model and SEQ

- In response to the critics of the time-consuming original version (150-200 items, 60 minutes) a recent shorter versions of the SEQ : 60-80 items, 30 minutes.
- Inclusion of cyber-intimidation questions; witness, victim and perpetrator indicators of violence exposition.
- Finally, our work with the SEQ and on school dropout brought us to develop a new integrated multilevel and developmental theory of school dropout and perseverance (Janosz, 2015).





Thank you very much for your attention

michel.janosz@umontreal.ca



SOCIAL, CULTURAL AND ECONOMICAL CONTEXT :

POVERTY (URBAN/RURAL) DISORGANIZATION, CULTURAL GETTHOS, MOBILITY, CRIMINALITY, JOB OPPORTUNITIES...

EDUCATIONAL POTENTIAL OF SOCIAL ENVIRONMENTS : SCHOOL, FAMILY, PEERS, COMMUNITY

SECURITY

Practices that insure physical and moral integrity; external control, risk reduction

SUPERVISION

monitoring of progress, rules, disciplinary practices...

STIMULATION

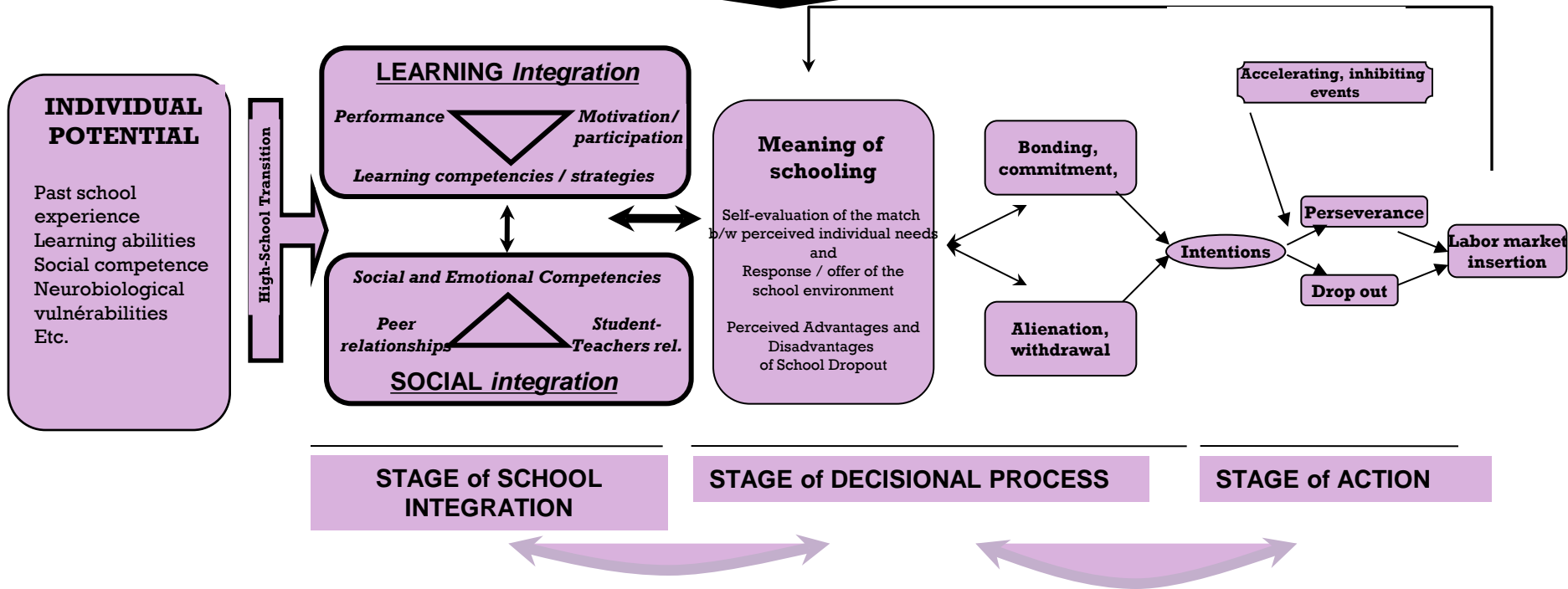
Adapted , meaningful learning contexts, activities, instructional practices; competence development...

SUPPORT

Help, communication, attachment, encouragements, reinforcements, respect...

SENSE

Transmission of values, explanations, recognition of legitimate needs and aspirations



PSYCHO-EDUCATION MODEL OF SCHOOL DROPOUT AND PERSEVERANCE