



**HAL**  
open science

# Investigating the effect of teacher commitment on student academic: The case of Moroccan high schools in Tangier

Insaf El Kalai, Brahim Kirmi, Imad Ait Lhassan

## ► To cite this version:

Insaf El Kalai, Brahim Kirmi, Imad Ait Lhassan. Investigating the effect of teacher commitment on student academic: The case of Moroccan high schools in Tangier. *International Journal of Research in Business and Social Science* (2147- 4478), 2022, 10, pp.350 - 363. 10.20525/ijrbs.v10i8.1507 . hal-03649692

**HAL Id: hal-03649692**

**<https://hal.science/hal-03649692v1>**

Submitted on 22 Apr 2022

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



## Investigating the effect of teacher commitment on student academic achievement: The case of Moroccan high schools in Tangier

 *Insaf El Kalai* <sup>(a)\*</sup>  *Brahim Kirmi* <sup>(b)</sup>  *Imad Ait Lhassan* <sup>(c)</sup>



<sup>(a)</sup>Faculty of Legal, Economic and Social Sciences, Abdelmalek Essaadi University, Tangier, Morocco

<sup>(b)</sup>Professor, Faculty of Legal, Economic and Social Sciences, Abdelmalek Essaadi University, Tangier, Morocco

<sup>(c)</sup>PhD, Abdelmalek Essaadi University, Tangier, Morocco

### ARTICLE INFO

#### Article history:

Received 27 November 2021

Received in rev. form 19 Dec. 2021

Accepted 22 December 2021

#### Keywords:

Organizational Commitment;  
Professional Commitment; Teachers;  
Commitment; Students; Academic  
Achievement.

JEL Classification:  
O15, P36

### ABSTRACT

*The present work is interested in the resonance of teacher commitment on students' academic commitment and consequently on their academic achievement. It aims to identify the determinants of the commitment of Moroccan teachers at the qualifying secondary level specifically in the Provincial Directorate of National Education of Tangier-Assilah (Morocco), in particular organizational commitment and professional commitment with repercussions on student commitment in its two dimensions: affective, cognitive and its extension on academic achievement. This article has discussed the conceptual and theoretical details as well as the problematic, the main hypotheses and the conceptual model of the research. Then, it has presented the results of the empirical study which is based on a quantitative methodological approach of a positivist hypothetical deductive nature. The data were collected by a questionnaire submitted by e-mail to our study population, which consists of 204 teachers and 380 students of the qualifying secondary level in 29 local public schools of the qualifying secondary cycle in the Provincial Directorate of National Education of Tangier-Assilah (Morocco). The result of our empirical study shows that the teacher commitment had a positive and statistically significant effect on student academic achievement through student engagement in local public schools of the qualifying secondary cycle in the Provincial Directorate of National Education of Tangier-Assilah (Morocco).*

© 2021 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

## Introduction

Legendre (2006) (Current Dictionary of Education) proposed two synonyms for academic achievement: performance and academic achievement. In the same context, Sandrine Fournier (2019) denoted that the measurement of the performance of an educational system is translated by the measurement of academic success, defined by the number of young people holding a diploma at the end of their schooling; it represents for many countries a major concern. Failure to graduate has direct and indirect economic, social, and financial consequences for a nation.

Concerning the case of Morocco, which is no secret, the survey conducted by the Organization for Economic Cooperation and Development (OECD), comes to illustrate the malaise of the national education system as well as the failure of the methods implemented for its reform for several years. The results of the latest International School Reading Research Program (ISRRP) test evaluation that took place in 2016 for school reading, Moroccan students were far from performing as well as their peers at the same level in other countries with a score of 358 points. In this test administered every five years, the kingdom is ranked 47th out of a total of 50 countries that participated in the international PIRLS survey organized by the International Association for the Evaluation of

\* Corresponding author. ORCID ID: 0000-0002-7369-4643

© 2021 by the authors. Hosting by SSBFNET. Peer review under responsibility of Center for Strategic Studies in Business and Finance.  
<https://doi.org/10.20525/ijrbs.v10i8.1507>

Educational Achievement (IEA) to assess the reading performance of students at the end of their fourth year of compulsory education. A very high proportion of Moroccan students (64%) scored « very poorly », placing Morocco at the bottom of the ranking.

In 2019 Trends International Mathematics and Science Study's (TIMSS) rankings, Morocco remains among the bottom countries in terms of student ability in math and science despite a modest improvement in results from 2015. For Moroccan students in the fourth year of primary school, they are among the bottom five in mathematics with a score of 383 below the average of 500 points and in science, these same Moroccan students are among the bottom four in the ranking with a score of 374 points. As far as, the second-year student of high school, Morocco is also last in the rankings in mathematics with a score of 388 points and in science, the country is ranked among the bottom four with a score of 394, below the average of 500 points.

As part of the Organization for Economic Cooperation and Development (OECD) Program for International Student Assessment assessments of the achievements of 15-year-old students in mathematics, science and reading, the survey actually targets the evaluation of the education systems of participating countries. Morocco is ranked 75th on a list of 79 countries in 2019 with a score of 359 points far from reaching the average of the OECD evaluated at 487 points, it is qualified as a bad pupil of the countries of the MENA region, it leaves behind him only Lebanon, Kosovo, the Dominican Republic and the Philippines. These results of Moroccan students are far from meeting expectations and aligning with the results expected by all the reform projects put in place. The position occupied by Morocco in relation to other countries, specifically Asian countries at the top of the ranking, alarms us of the urgency of an overhaul at the level of structures, human resources and the entire educational system.

This research is concerned with the human and managerial aspects of teachers in order to identify possible avenues for improvement. Thus, the following problem is investigated: How could teacher commitment influence student engagement and academic achievement?

The interest of this research is two fold, first of all theoretical, insofar as this work has made it possible to propose, on the one hand, a delimitation of the factors likely to influence the commitment of teachers and, consequently, their behavior with regard to their profession and their organization, to identify the elements suspected of influencing the academic commitment of pupils and, finally, to present, in a way that we are trying to be exhaustive, the determinants of academic achievement. On the other hand, the analysis of the links of influence of the teachers' commitment on the students' academic achievement could not be ensured without the theoretical framework. The second interest is practical, given the problematic that was announced in the context of the Moroccan educational system through the realization of a field survey in the Provincial Directorate of National Education of Tangier-Assilah in Morocco in order to evaluate the relations and possible effects between the commitment of teachers of the secondary qualifying and the academic success of the pupils through their academic engagement.

In order to provide some answers, this article is composed of three parts. The first part proposes the conceptual framework that outlines the notions of teacher engagement, and then goes on to discuss the notions of student academic engagement and the relationship with academic achievement. In the second part, we present the methodological approach and finally develop our results and discussion in the third part before concluding on the contributions of the research.

## **Literature Review**

### **Theoretical and Conceptual Background**

#### **The concept of commitment**

In the framework of management sciences, commitment reflects a strong adhesion to the values and goals of the organization, by a volition and intention to invest for the benefit of the target and by a strong desire to remain a member (Mowday et al, 1982). Thévenet (1992) agreed that « Commitment leads to a specific behavior that is the result of a set of attitudes at work ». Allen and Meyer (1990) support the idea that commitment acts on the relationship, affects attitudes and influences behaviors. Brown (1996) supports them by describing commitment as « the force that stabilizes an individual's behavior despite circumstances that might have caused him or her to change behavior ».

Nevertheless, it seems simplistic to consider that commitment can only be of interest to the « organization » dimension. This is why another vision of the multidimensionality of targets or objects has gradually developed (Morrow. P. 1983, 1993). Charles Pauvers (2012) specifies that the work of Morrow (1993) on the concept of « work commitment » led most French researchers to adopt the more general term of commitment in work, thus encompassing all forms of commitment (in the job, in the organization, but also in the career, in the profession and in the union). Meyer & Herscovitch (2001) agree with Morrow (1993) by extending the concept of commitment to other targets, they define commitment as « A force that binds the individual to adopt a course of action to achieve one or more targets, and is accompanied by different 'states of mind' that play a central role in shaping behaviors ».

In this research, only the organization target and the profession target will be retained, as these two forms are positively associated. In fact, professional commitment is a causal antecedent of organizational commitment (Mowday et al., 1982; Lachman and Aranya 1986; Randall and Cote, 1991; Van denberg and Scarpello, 1994; Cohen, 1999, 2000). Cited by Isis Gutiérrez Martínez (2006). For Cohen (1992), the link that professionals have with the organization can be characterized as an exchange relationship. These employees will be involved with the organization only if the organization satisfies and fulfills their professional expectations. The

profession would thus be a fundamental element of the commitment of professionals with the organization. Mowday et al. (1974) set up the basis of a unidimensional attitudinal approach of commitment, a « psychological » approach synonymous with affective commitment which will lead to the appearance of numerous works whose aim is to experiment with a multidimensional model. Meyer and Allen's three component model (TCM) thus became established at the end of the 1980s (Meyer and Allen, 1997; Meyer et al, 2002; Vandenberghe, 2003; Cohen, 2007), cited by Charles- Pauvers and Peyrat-Guillard (2012). The retention of this model is justified by its popularity and considered as an inescapable reference (Demery-Lebrun, 2006) despite the criticism it has received (Charles- Pauvers and Peyrat-Guillard, 2012).

### **Organizational Commitment**

The Three-Component Model (TCM) of Meyer and Allen (1991, 1997) integrates the attitudinal (affective) approach and the behavioral (calculated) approach, and is based on their complementarity.

The organizational commitment model (Allen and Meyer, 1991, 1997) selected includes three dimensions: Affective commitment: refers to the employee's emotional attachment, identification and commitment to the organization. It is defined as « the relative strength of one's identification with and commitment to an organization ». Meyer and Allen (1997) referring to the emotional attachment, psychological, identification to define the affective commitment, which is characterized by a strong adhesion of the employee in the goals and values of the organization, employees remain in the organization by deep desire, they want to invest and remain loyal to them. Calculated commitment: refers to « an awareness of the costs associated with leaving the organization. Employees whose primary connection to the organization is based on calculated commitment stay because they need to do so » (Allen and Meyer, 1990). Normative commitment: is highly dependent on individuals' antecedents (individual characteristics) and relatively independent of the work context. (Baret & Renaud, 2014). Normative commitment refers to « a sense of obligation to continue the job. Employees with high levels of normative commitment feel that they must stay with the organization » (Allen & Meyer, 1990).

### **Professional Commitment**

Various expressions have been used to express occupational commitment for example, career commitment, and professional commitment.

The authors agree that, despite the diversity of terminologies used, the research focuses on the same subject, namely occupational commitment. Many previous approaches have examined the definition and measurement of the concept of professional commitment. These include the approaches of Gouldner (1957), Hall (1968), Greenhaus (1971) and Gould (1979), Arnaya et al. (1981), Blau (1985), and the most widely used at present is that of Meyer et al. (1993), (cited by Demery-Lebrun, 2007). Meyer, Allen and Smith (1993) extended the theoretical framework they developed for the study of organizational commitment (Meyer et al, 1991) to professional commitment. They even proposed a measurement scale that has been validated (1993). Following Meyer and Herscovitch (2001), we define professional commitment as the strength that characterizes a person's connection to his or her profession. This strength can take three forms: Affective commitment refers to the identification and emotional attachment to the profession ; Calculated commitment, referring to the costs that individuals associate with leaving the profession, linked to the investments made in terms of training, and the lack of attractive alternatives in other professions. Normative commitment refers to the feelings of obligation of individuals to remain in the profession.

### **Teacher Commitment**

A person's adherence to the values and project of the organization is necessary; it prefigures an investment in work and a willingness to act (Thevenet, 1992). Assigning varied tasks to employees, encouraging them to use multiple skills, granting them autonomy, giving meaning and visibility to the set of tasks they perform are considered an effective way to influence their attitudes and behaviors at work (Manville, 2014). The authors highlighted the precursors of affective and calculated commitment, to induce the individual to become affectively attached and adopt a course of action towards the target. The productive behaviors of individuals and the positive experiences they have at work can be the basis for the success of the organization to which they belong. In fact, in education, several authors (Reeve et al, 2002; Reeve, Deci & Ryan, 2004; Skinner & Edge, 2002), cited by Sarrazin et al (2006), refer to « commitment » as the dimension of the motivational climate whose objective is to satisfy the students' need for social proximity. For these authors, commitment means the relationship established between a teacher and a student, i.e. both the quantity (time, energy) and the quality (affection, smile, note of humour) of the psychological resources deployed by the teacher in this relationship. In the same vein, Skinner & Edge (2002) suggest that the need for social proximity is distributed along a bipolar axis opposing commitment and hostility. A « hostile » teacher is characterized, for example, by cold and distant behaviors, by a severe and monotonous tone of voice, by a categorical refusal to hear and take into account the student's point of view. In contrast, an « involved » teacher is affectionate and available to his or her students, i.e., tries to establish an empathetic relationship in which he or she invests time and energy. Ryan & Deci (2000) join the model of Doyle (1978) which highlights the link between the teacher's behavior interpreted by the students and their academic performance, they argue that it is the teacher's behavior that facilitates the engagement/spontaneous commitment of students in the proposed tasks, it is fundamental for the latter to feel respected by, and « connected » with their teacher.

Thus, we can establish the relationship between the students' psychological responses triggered by the teacher's behavior and their academic achievement. Duchesne and Savoie-Zajac (2005) show that teachers' commitment reveals private commitment factors such

as liking the children and having the support of colleagues or the principal. The recognition of the work accomplished and the possibility of updating one's knowledge encourage teachers to be involved in their work. However, any adverse environment such as self-doubt, personal difficulties, and obstacles in the profession will diminish or even destroy this commitment.

Also, we found that the antecedents of affective commitment including feedback, interpersonal relationships, recognition, challenge, autonomy, management responsiveness... and those of calculated commitment namely benefits, skills, investments, experiences... Andry Tiffany (2016) evoke many practices of Human Resource Management, which leads us to believe that there is a close relationship between Human Resource Management and the commitment of individuals especially teachers in our research (Kirmi & El kalai, 2021).

### **Student Engagement Induced Academic Achievement and its relationship to Teacher Engagement**

The goal is academic achievement. It is an important stake in the development of the child which will even go so far as to influence several spheres of his adult life, for example his socioeconomic status (Chen and Kaplan, 2003). In the shorter term, being successful in school contributes to the likelihood that a student will persevere until graduation (Henry, Knight & Thornberry, 2012).

#### **The concept of academic achievement**

Jean Jacques Demba (2016) argues that the notion of academic achievement is polysemic and multidimensional, with varying levels of appreciation of success depending on the education systems and also on the individuals and their aspirations. According to Kahn (2011), academic achievement and its opposite, academic failure, are social constructions specific to a particular culture.

The concept of academic achievement is addressed by several authors who attempt to give a clear definition in order to facilitate its understanding for the different actors in education.

Antoine Baby (1992) defines academic achievement as follows: « It is the attainment of learning objectives specific to each stage of the educational process. When these stages coincide with the end of a cycle of study or a level of education, academic achievement generally translates into obtaining a diploma or a certificate and ultimately into successful integration into the world of work ». In 1996, Bouchard and StAmant also defined this concept as follows: « Academic achievement refers to the attainment of schooling objectives linked to the mastery of specific knowledge, in other words, to the path followed by the student within a school network. This path follows the path of the subjects taught (the curriculum) whose programs are defined by the Ministry of Education. It is subject to evaluation - indicating performance and certain stages are accompanied by graduation and allow either passage to a higher or specialized level, or integration into the labour market ». Other definitions emphasize the need to master the basic tools that are indispensable for future life, for integration into social and professional life, and therefore to give more importance to the « individual-context » relationship, notably Gérard Chaveau (1996). The most advantageous meaning of academic achievement is that which places cognition at the center of the theme of academic failure or success. For the author, « wanting to achieve academic achievement means choosing to support the child in mastering basic learning skills, in particular reading, writing and reasoning. These are the essential skills that allow access to all the others and that constitute intellectual tools for understanding, communicating, interacting with the world, participating in its evolution, and living in society ». For their part, Demba and Rousseau (2016) propose to go beyond instruction materialized by the acquisition of academic knowledge, while allowing young people to develop their potential through socialization translated by the acquisition of know-how, skills, values, attitudes useful for functioning in society and the qualification that prepares young people for professional integration with the aim of achieving personal goals including autonomy, well-being, social ascension ... etc.

In fact, in Morocco, the Higher Council for Education, Training and Scientific Research (HCETSR), 2018, focuses on the construction of a new educational model in which the link between social origin and the student's academic heritage is loosened in the sense that personal merit, attributed exclusively to the student, is the only criterion for his or her social promotion, which consequently contributes to social cohesion. The implementation of this model requires the provision of equitable quality education and training to learners without interfering with their social origin. Thus, we consider academic achievement as the means that will allow the student to understand the world, to be able to integrate into it and to contribute to its evolution by implementing all the competences developed in terms of acquisition of knowledge, know how, interpersonal skills and knowledge of becoming within the framework of merit and academic equity, crowned by the obtaining of a diploma allowing him/her to integrate into the workforce and to achieve his/her personal objectives without interacting with his/her socio-economic environment.

#### **The notion of Student Academic Engagement**

Student engagement, is a construct that incorporates many definitions. Many researchers have identified the importance of basic needs as antecedents of engagement (Christenson & Anderson, 2002; Connell & Wellborn, 1991; Furlong et al.2003; Ryan & Deci, 2000). Most definitions tend to include a behavioral dimension reflected in the observable behavior of the student and also contain an emotional or psychological dimension. However, few definitions include the academic or cognitive dimension. Engagement is generally described as multidimensional with two to four Components. Researchers who adopt a two component model often include an element, which has been defined as exhibiting positive conduct, participation, and effort, and an emotional element, which has been defined as having interest, belonging, and positive attitude (Marks, 2000; Willms, 2003), as cited by Michelle Cardwell (2011). In this regard, Academic engagement is reflected in the student's commitment in school, psychological investment, and efforts to

learn, understand, or master the knowledge and skills promoted by the school (Klem & Connell, 2004), thus, engagement provides an understanding of the patterns of engagement in which students engage throughout their academic journey (Appleton et al., 2008). In the available research literature, there is clear evidence of the link between student academic engagement and high academic achievement (Ogbu, 2003). In seeking to foster academic engagement and find solutions to counteract low academic achievement and high dropout rates, we proceeded to understand how academic engagement has been defined and measured from elementary through high school. We chose to address engagement at the qualifying high school level as studies estimate that 40-60% of students are disengaged in high school (Marks, 2000) and that student engagement declines as students' progress through third grade and junior high school, reaching its lowest level in senior high school (Marks, 2000; National Research Council and Institute of Medicine, 2004). Currently, many school reform models, programs and student interventions, particularly in Morocco, focus on increasing engagement to improve academic performance and graduation rates (Academic achievement).

**Dimensions of Student Academic Engagement**

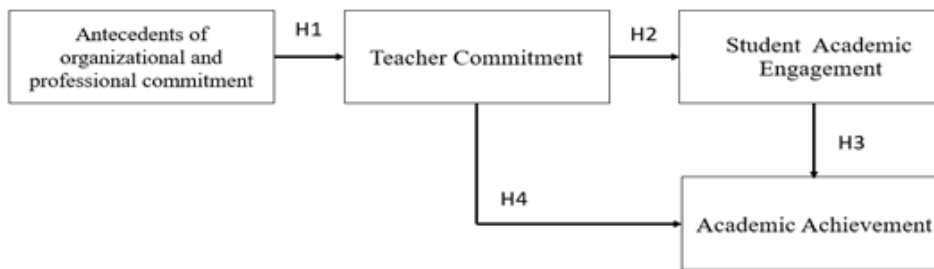
Linnenbrink and Pintrich (2003) described engagement as having three components, which include behavioral, cognitive, and motivational. Motivational engagement, as defined by Linnenbrink and Pintrich (2003), has similarities to the definition of emotional engagement as defined by Fredricks et al. (2004). According to Fredricks et al. (2004), a student's overall level of engagement depends on the extent to which he or she is engaged in these three domains: Behavioral which refers to the actions and practices that students direct toward school and learning, including positive conduct and absence of disruptive behavior, as well as participation in learning and academic tasks (Finn, 1989; Connell, 1990), Emotional which encompasses positive and negative reactions to teachers, classmates, and school and to interest in and valuing of school activities (Voelkl, 1997), and Cognitive which is based on the idea of investment; it incorporates caring, thoughtfulness, and willingness to put forth the effort necessary to understand complex ideas and master difficult skills . These three components of academic engagement are dynamically embedded in the individual and provide a rich characterization of how students act, feel, and think (Wang & Peck, 2013).

**Empirical Review and Hypothesis Development**

To highlight the relationship between teacher engagement and student engagement, Rutter and Jacobson (1986) suggest that high levels of teacher engagement, as reflected in teacher commitment and enthusiasm, are critical to success in high school and a contributing factor to academic achievement (Basikin, 2007). Similarly, McLaughlin et al. (1986) have argued that teacher engagement stimulates and develops student engagement and that student engagement positively influences academic achievement (Greenwood et al. 2002; McMahon & Portelli, 2004; Tyler & Boelter, 2008). Cited by Michelle.E. Cardwelle (2008). Along the same lines, student engagement is a fundamental component essential to the learning process and paramount to academic and student success (National Research Council, 2004). This being said, teacher engagement has a positive impact on academic achievement (Basikin, 2007). Hence the possibility of linking these variables, the subject of the study.

Our research model conceptualizes teacher commitment and its influence on academic achievement. Through the literature (Kirmi & El kalai, 2021), we concluded that there is a causal relationship between three concepts. This relationship is in line with the logic that teacher commitment encourages and develops students' academic commitment, which positively influences academic achievement and, consequently, teacher commitment positively impacts academic achievement.

Thus, the wealth of literature in the context of our research theme has enabled us to establish links between the different variables, materialized in the following model:



**Figure 1:** Conceptual research model

This model includes three types of variables: variables to be explained (dependent variables), on which we seek to identify an influence (academic achievement); explanatory variables (independent variables), identified as possible causes of influence (antecedents of commitment and organizational commitment and commitment in the teaching profession); and intermediate variables (mediators) that specify the conditions and mechanisms of transmission of causal relationships (students' academic engagement).

The data advanced lead to the hypotheses that:

H1: Antecedents of organizational commitment and antecedents of professional commitment would influence teacher commitment (attitudes and behavior)

H2: Teacher commitment would influence student academic engagement

H3: Students' academic engagement would influence their academic achievement

H4: Teacher commitment would influence students' academic achievement via their academic engagement.

## Research and Methodology

### Participants and Procedure

This study was conducted in local public schools at the provincial level (Tangier-Assilah) (29 high schools) with a sample of 204 teachers in the qualifying secondary level and a sample of 380 students in the same cycle. We obtained 202 returns from teachers and 325 returns from students, all of which were usable. The sample structure was as follows:

**Table 1:** Respondent characteristics (Students)

Respondent characteristics (Students)	Frequency	%
By Gender:		
Male	141	43,38%
Female	184	56,62%
According to grade level:		
Common core	8	2,46%
1st grade high school	160	49,23%
2nd grade high school	157	48,31%

Based on the collected information, we selected in the sample: 57% of high school students in the Provincial Directorate of National Education of Tangier-Assilah (Morocco) are male and 43% are female.

As shown in the table above, 49% of students are in the first grade of high school, compared with 48% in the second grade of high school, and the common core is 3%.

As part of the characteristics of the interviewees, we described teacher data such as age, gender, education level, and teaching experience.

**Table 2:** Respondent characteristics (Teachers)

Respondent characteristics (Teachers)	Frequency	%
By Gender:		
Man	140	69,31%
Women	62	30,69%
By Age:		
20 - 29 years old	12	5,95%
30 - 39 years old	79	39,11%
40 - 49 years old	62	30,69%
50 - 59 years old	48	23,76%
Over 60 years old	1	0,50%
By level of study:		
Bachelor degree	58	28,71%
Master degree	103	50,99%
PhD	37	18,32%
Others	4	1,98%
According to the years of experience :		
Less than 5 years	6	2,97%
5 years - 10 years	60	29,70%
11 years - 15 years	25	12,38%
16 years - 20 years	43	21,29%
20 years and more	68	33,66%

In reading the table of the distribution of respondents, we see that 69% of high school teachers in the Provincial Directorate of National Education of Tangier-Assilah (Morocco) are men, while 31% are women. Then, from these statistics, it appears that almost half of the teachers (69.8%) are between thirty and fifty years old, 24% of the teachers are over fifty years old. Finally, 5.9% are between twenty and twenty-nine years old. Through these percentages, we see a predominance of teachers between thirty and fifty

years of age compared to other ages (between twenty and twenty-nine years or over fifty years). After that, we note from the table that 51% of teachers in high schools in the Provincial Directorate of National Education of Tangier-Assilah (Morocco) have a master's degree, 29% are graduates and 18% of teachers have a PhD. In addition, we note from the table that 34% of teachers in high schools in the Provincial Directorate of National Education of Tangier-Assilah (Morocco) have more than twenty years of experience and 30% have an experience between five and ten years and finally 21% of teachers have between sixteen and twenty years of experience in teaching.

**Scales of measurement used**

The survey is conducted via a 5 level Likert type questionnaire (from strongly disagree to strongly agree) based on the Allen & Meyer, 1996 measurement scale, adapted for measuring teachers' organizational commitment and the Allen & Meyer, 1993 measurement scale, adapted for measuring teachers' professional commitment.

As for the measurement of students' academic achievement via their academic engagement, our choice fell on the use of the two-dimensional student engagement instrument « Student Engagement Instrument » (SEI) of the Likert type. 5 levels (from not at all agree to totally agree), developed by Appleton, Christenson, Kim and Reschly (2006), it allows to assess the cognitive dimension and the psychological / affective dimension in order to prevent dropping out especially at the secondary level and consequently achieve academic achievement (Academic Achievement).

**Table 3:** List of variables and number of research items

Variables	Sub variables	Number of items	References
Antecedents of organizational and professional commitment	Affective commitment	25	Herzberg (1959); Becker (1960) ; Allen & Meyer (1990) ; Mathieu & Zajac (1990) ; Cohen (1993) ; Meyer & Herscovitch (2001) ; Meyer et al. (2002) ; Brasseur & Mzabi (2003) ; Paillé (2005) ; Morrow, (1993) ; Cohen (2007) ; Gonzalez & Guillen (2008) ; Solinger et al. (2008) ; Johnson et al. (2010) ; Klein (2012) ; Charles-Pauvers & Peyrat-Guillard (2012) ; Tiffany Andry (2016).
	calculated commitment		
Teacher commitment	Organizational commitment	18	Becker (1960); Kanter (1968) ; Buchanan (1974) ; Etzioni (1975) ; Mowday et al. (1979) ; Rusbult & Farrell (1981,1983) ; Wiener (1982) ; O'Reilly, Chatman, (1986), Allen & Meyer (1990) Sommers (1993) ; Neveu (1996) ; Cohen (2007) ; Gonzalez & Guillen (2008) ; Solinger et al. (2008) ; Johnson et al. (2010) ; Klein (2012).
	Professional Commitment	18	Becker (1960) ; Greenhaus (1971) ; Hall (1971) ; Carson et al. (1995) ; N. Aranya (1981 ; 1984 ; 1986) ; Wiener & Vardi (1982) ; Gary. Blau (1985; 1989; 2003 ; 2006) ; Meyer et al (1993) ; Carson et al (1995) ; Meyer & Herscovitch (2001) ; Thévenet (2004) ; Paillé (2005).
Student Academic Engagement	Cognitive engagement of students	16	Deci & Ryan (1991); Marks (2000) ; Willms (2003) ; ; Michelle Cardwell (2011) ; Wang & Peck (2013).
	Psychological/Emotional engagement of students	19	Connell (1990); Connell & Wellborn (1991); Finn & Voelkl (1993) ; Skinner & Belmont ; (1993) ; Voelkl (1997) ; Linnenbrink & Pintrich (2003) ; Fredricks et al. (2004); Wang & Peck (2013).

**Research Methodology Adopted**

In our research, we chose to study the impact of teacher commitment and student engagement on in Academic Achievement the case of high schools in the Provincial Directorate of National Education of Tangier-Assilah (Morocco), respecting the seven steps of the Churchill paradigm (1979).

Our paper aims to carry out two empirical phases in order to study the impact of teacher commitment and student engagement on academic achievement in the case of high schools in the Provincial Directorate of National Education of Tangier-Assilah (Morocco):

The Quantitative Exploratory Phase: It is conducted by a survey administered by a questionnaire. Data are collected from a sample of 325 students and 202 teachers of high schools located in the Provincial Directorate of National Education of Tangier-Assilah (Morocco) which are subject to purification through exploratory factorial analysis methods including Principal Component Analysis



(PCA). Also, the result of this purification will be presented. Note that this step is necessary to assess the psychometric quality of the scales used to collect the data and is a fundamental prerequisite for applying the regression method. These analyses are performed using SPSS 25 software.

The Quantitative Confirmatory Phase: A final step is the validation of the hypotheses using the SMART PLS 3 software using both simple and multiple linear regression methods. As a result of the hypothesis testing presentation, the discussion of the results will be addressed.

### Analysis and Findings

In this section, we present the results and analysis of our empirical study, which involves two important steps, exploratory factor analysis and confirmatory factor analysis. Regarding the empirical study, we refer to a sample of 325 students and 202 teachers of high schools located in the Provincial Directorate of National Education of Tangier-Assilah (Morocco), subjected to a few steps in a first stage. Thus, the exploratory factorial analysis was carried out using SPSS 25 software for the purpose of purifying the items of our research model. In the second step, the confirmatory factorial analysis carried out using the structural equations method and SMART PLS 3 software leads us to test the hypotheses of our study, and to validate our research model.

#### Exploratory Factor Analysis (EFA)

This section presents the analysis of the results of our empirical study, which includes the quality of representation of all the variables (Antecedents of organizational and professional commitment, Teacher commitment and student academic engagement).

**Table 4:** Summary of the results of the principal component analysis

Variables	Number of items before EFA	Number of items after EFA	Cronbach's Alpha
Antecedents of organizational and professional commitment	25	19	0,653
Teacher commitment	36	26	0,725
Student Academic Engagement	35	34	0,798

According to Table 4, the result of the exploratory factor analysis shows that there is a deletion of items from three variables of our research mentioned in the table. Either the deletion of items was because of low representation or we sometimes find items with several dimensions with low correlation. For the items that have a low representation, we have eliminated six items of the variable « antecedents of organizational and professional commitment ». For the eliminated items where they presented several dimensions with a low correlation are items of the variable « teacher commitment » and the variable « student academic commitment ». At last, we distinguish that the Cronbach's alpha of all variables have a good reliability and respects the scientific standards in management sciences (Kaiser & Rice, 1974; George and Mallery, 2003).

#### Confirmatory Exploratory Analysis (CFA)

The validity of the measurement model has four elements: cronbach's alpha, rho\_A, composite reliability and AVE. It can be seen from Table 5 that all variables reached acceptable values at cronbach's alpha, rho\_A, composite reliability and AVE levels and exceeded 0.6 and reached acceptable values whither the author's recommendations (Hair et al., 2014; Tenenhaus, 1999). When the AVE of each structure is greater than 0.5, the convergent validity is confirmed (Hair et al., 2014; Tenenhaus, 1999).

The results provided in Table 5 show that the AVE's are 0.6 higher. This means that convergent validity is demonstrated.

**Table 5:** Validity of the measurement model

Variables	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Antecedents of organizational and professional commitment	0.842	0.858	0.886	0.569
Student Academic Engagement	0.751	0.772	0.834	0.504
Teacher commitment	0.756	0.776	0.859	0.671
Academic Achievement	0.851	0.858	0.887	0.532

The Fornell-Larcker criteria is the approach that allow to evaluate the discriminant validity.

The discriminant validity is asserted when each element has an element loading greater than 0.7 on its respective construction (Hair et al., 2006), especially when the square root of all constructions is greater than all other extracted mean variances (AVE) cross-correlations, and no element is highly loaded on another construction.

The results also show that the values on the diagonal are greater than all the values on the lower part of the diagonal, which asserts discriminant validity. It is also clear that the elements are strongly correlated with their corresponding construction and weakly correlated with other constructions. This confirms the discriminant validity of the measurement scales (Tables 6 and 7).

**Table 6:** Represents the result of the regression (Discriminant Validity)

	<b>AOPC</b>	<b>SAE</b>	<b>TC</b>	<b>AA</b>
<b>AOPC</b>	<b>0.754</b>			
<b>SAE</b>	0.006	<b>0.716</b>		
<b>TC</b>	-0.552	0.041	<b>0.729</b>	
<b>AA</b>	-0.552	0.041	1 000	<b>0.729</b>

AOPC : Antecedents of organizational and professional commitment  
 SAE : Student Academic Engagement  
 TC : Teacher commitment  
 AA : Academic Achievement

The presence of strong correlations above a threshold of 0.70 indicates the existence of multicollinearities that may affect the regression results (Jolibert & Jourdan, 2006).

**Table 7:** Correlation matrix and the square root of the AVE

	<b>Student Academic Engagement</b>	<b>Antecedents of organizational and professional commitment</b>	<b>Teacher commitment</b>
RELAT_ELEV_ENSEIGN1	0.783		
RELAT_ELEV_ENSEIGN2	0.736		
RELAT_ELEV_ENSEIGN4	0.808		
RELAT_ELEV_ENSEIGN6	0.731		
SOUTI_PAIR_APPR5	0.771		
BUT_ASPIR_FUTUR3	0.778		
CONT_PERT_DEV2	0.829		
CONT_PERT_DEV1	0.791		
CONT_PERT_DEV3	0.747		
CONT_PERT_DEV4	0.775		
CONT_PERT_DEV7	0.742		
REC_AUT_TRAV3		0.896	
REC_AUT_TRAV4		0.875	
REC_AUT_TRAV6		0.723	
REC_AUT_TRAV7		0.701	
CLIM_ATTIB_SATS1		0.789	
CLIM_ATTIB_SATS2		0.846	
CLIM_ATTIB_SATS3		0.748	
CLIM_ATTIB_SATS4		0.861	
CLIM_ATTIB_SATS5		0.757	
IMPL_NORM_METIE3			0.828
IMPL_NORM_METIE4			0.759
IMPL_NORM_METIE5			0.825
IMPL_NORM_METIE6			0.828
IMP_ORGAN_NORMAT4			0.745
IMP_ORGAN_NORMAT5			0.857
IMP_ORGAN_NORMAT6			0.851

The values of the square root of the AVE shown diagonally in Table 7 are acceptable. Thus, we found that all reliability coefficients are satisfactory and are greater than and equal to 0.7.

**Table 8:** Predictive validity of the model

Variables	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Antecedents of organizational and professional commitment	1300.000	1300.000	0.551
Student Academic Engagement	1625.000	1627.132	0.492
Teacher commitment	2925.000	2537.857	0.526
Academic Achievement	2925.000	1419.393	0.526

The result of Q2 size effect of academic achievement is 0.526, on the one hand, it shows that both Q2 values are greater than zero and indicate that the model has predictive relevance, on the other hand, Q2 values >0.15 show that the result of Q2 size effect is moderate.

At the level of the structural model, we evaluated the R2 coefficient of determination and, according to our analysis, we found that our R2 is moderate with 1.000 and this result meets scientific standards in management science (Chin, 1998).

According to the standard of Wetzels, Odekerken-Schröder and Van Oppen (2009), we found that the value of GoF is equal to 0.752. We can conclude that the GoF model of this study is high and important enough to consider the full validity of the PLS model.

The validation of hypotheses H1, H2, H3 and H4 via confirmatory factor analysis (CFA), confirms the interdependence of the four variables that make up the conceptual model, which was also validated, namely the antecedents of organizational and professional commitment, teacher commitment and student academic success, based on their academic commitment.

**Table 9:** Result of validation of research hypotheses

Hypotheses	Path coefficients (Mean, STDEV, T-Values)						Results
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values		
H1 : AOPC -> TC	0.443	0.459	0.066	5.668	0.000	<b>Accepted</b>	
H2 : SAE -> AS	0.251	0.245	0.090	2.345	0.000	<b>Accepted</b>	
H3 : TC -> SAE	0.190	0.227	0.062	2.123	0.005	<b>Accepted</b>	
H4 : TC -> AA	0.921	0.902	0.043	2.125	0.000	<b>Accepted</b>	

AOPC : Antecedents of organizational and professional commitment  
 TC : Teacher commitment  
 SAE : Student Academic Engagement  
 AA: Academic Achievement

In other words, the results show that the antecedents of both facets of organizational and professional commitment influence teacher commitment and that this teacher commitment influences student academic success through their academic engagement.

## Discussion

First, the empirical results of the research show that antecedents of organizational and professional commitment have a positive and significant effect on teacher commitment (coeff. = 0.443; p < 0.01). Our results are fully consistent with the literature, these results corroborate Mathieu and Zajac, 1990, Meyer et al. (1990 - 1997) and Meyer & Herscovitch (2001) who found that the antecedents of the three dimensions of commitment (affective, calculative, and normative) in these two forms, organizational and professional commitment are strongly associated with the commitment of the employees in our study (the teachers). The results revealed, for example, that the precursors of affective commitment (attitudes toward the target, Solinger et al, 2008) that embody unmet teacher expectations negatively influenced the affective dimension of teachers emotionally detached from their organization and occupation in contrast to the other two dimensions calculated and normative (attitudes toward a behavior, Solinger et al, 2008) positively associated with the commitment of teachers who expressed their intention to remain in the organization and occupation.

Second, it has also validated that teacher commitment influences students' academic engagement. In other words, the results have revealed that teacher commitment positively impacts the affective and cognitive dimensions of academic engagement (coeff. = 0.190; p < 0.05) with the omission of the behavioral dimension since its measurement presents a redundancy with the cognitive dimension. Our results agree with (Rutter and Jacobson, 1986, Sarrazin et al, 2006) regarding the relationship between teacher engagement and student engagement who believe that a high level of teacher engagement translated by their commitment and enthusiasm is essential for success in high school, also (Riehl and Sipple, 1996, cited by S. Fournier, 2015) stipulate that teacher engagement could lead to an attitude of student engagement. Indeed, our results showed that the « Student-Teacher Relationship » is positively associated with student affective engagement (0.801). Teachers create opportunities for students to engage in a variety of school activities (Eccles et al., 1993; Eccles & Wigfield, 2002), and these experiences provide students with information regarding their ability to succeed, their

relationship with others in that setting, and their autonomy as learners, allowing them to realize their personal and social identities (Connell & Wellborn, 1991). In addition, meaningful curriculum and instruction provide an appropriate level of challenge and context that can encourage a variety of cognitive strategies (e.g., opinion forming, comprehension, and connection) and promote cognitive engagement (Helme & Clarke, 2001 ; Wigfield et al., 2006).

Thus, commitment refers to the quality of the interpersonal relationship between the teacher and his or her students and the teacher's willingness to allocate time, attention and interest to his or her students. It also highlights a positive correlation between academic engagement and student academic achievement (coeff. = 0.251 ;  $p < 0.01$ ). Our results support (Fredricks, Blumenfeld, & Paris, 2004; Marks, 2000) which confirm that engaged students tend to perform better academically and do well on standardized tests, also, our results corroborate (Finn & Rock, 1997 ; Wang and Holcombe, 2010) who indicated that academic engagement is critical to students' academic success and (Wang and Eccles, 2012a , 2012b ) who denoted that youth need to be actively involved in their education in order to acquire the knowledge and skills required for successful transition to postsecondary programs and careers. It is found that the qualifying high school students interviewed, are cognitively engaged as they see the knowledge and skills acquired as relevant to their personal goals and interests and are of great value in creating opportunities in the future, we agree with (Roeser et al., 1998), who predict that students feel a sense of autonomy when they are doing work that, rather than simply fulfilling the requirements of school, relates to their interests and has personal meaning. Emotionally, students in the Provincial Directorate of National Education of Tangier-Assilah (Morocco) are engaged as they feel supported by their teachers, peers, and families as well as the security they enjoy at the school site (the high school). These results are consistent with the empirical findings of Wang et al, 2013, who found that regarding kinship support, students are more likely to be emotionally involved at school when teachers and peers create a caring and socially supportive environment.

Finally, the results of the confirmatory analysis have shown that teacher commitment positively impacts academic achievement (coeff. = 0.921;  $p < 0.01$ ). This result corroborates (Basikin, 2007) who confirms that the student-teacher relationship is a contributing factor to academic success. (Sarrazin et al 2006), stated that the commitment of teachers with students is an educational principle to promote the motivational needs of students, this commitment relies on the establishment of a pedagogical relationship based on empathy and closeness to students translated by the behavior of the teacher for example show affection and respect and avoid criticism that may « sting » the ego. The teacher's behavior stimulates the students' mediating responses, which have an impact on their performance and academic results (grades obtained) (Doyle, 1978). In the end, we can say that teacher commitment is influenced by the antecedents, which refer to the components of the HRM functions, specifically the conservation function and the de-velopment function, and consequently it influences the students' academic success through the outcome of their academic commitment.

## **Conclusion**

This research has made it possible to position the central role of teacher commitment (organizational and professional) in the context of improving students' academic engagement and consequently achieving academic success under the condition of implementing appropriate human resource management practices, referred to as the antecedents of the two forms of commitment studied.

The results of our research can be broken down into three main contributions:

The first concerns the affective commitment of high school teachers in the Provincial Directorate of National Education of Tangier-Assilah (Morocco), who are affectively disengaged (in the profession and in the organization (M.E.P.T.S.R) which is a negative attitude towards the target (the organization and the profession), this in a lack of satisfaction of the expectations of the teaching staff addressed as antecedents of affective commitment.

The second demonstrates that normative and calculated commitment in the organization and the profession correlate positively with teachers' commitment, which are attitudes toward behavior reflected in their intention to remain in the organization and the teaching profession. Teachers feel obliged and morally obliged to remain teachers and that a sense of loyalty based on the values of solidarity and responsibility towards colleagues (interpersonal relations) as well as an obligation of reciprocity, prevent them from abandoning the teaching profession and oblige them to continue in the organization (M.E.P.T.S.R), also out of concern for the loss of non-transferable investments and the lack of opportunities and alternatives to the profession and the organization

We recall that the commitment of educational actors, represents the first source of the deficit in the development of education and lies in the emphasis on the success especially the teacher in the success of the student, the HCETSR in its report published in 2019, P 22. This strongly corroborates the results of our study conducted in the Provincial Directorate of National Education of Tangier-Assilah (Morocco).

The third, which reveals that the relationship with teachers is an inescapable factor in student engagement and academic success. Hence the need to make teachers aware of the importance of the relational dimension for the success of their students' education. Similar to the relationship with teachers, the relationship with peers and family support have a significant influence on academic engagement. These relationships create a climate conducive to cognitive and social development.

As a result of the empirical results obtained, it is essential to improve teacher commitment through the implementation of the necessary actions as recommended by the HCETSR, 2019 to develop students' academic engagement and consequently their

academic success with the aim of preparing an informed and productive citizen, equipped with useful tools and adapted to the changes he will face in the future and able to contribute to the development and economic growth of the country.

All authors have read and agreed to the published version of the manuscript.

**Author Contributions:** Conceptualization, R.E., C.A. and Z.P.; methodology, Z.P. and R.E.; validation, Z.P., R.E. and S.T.; formal analysis, Z.P. and R.E.; investigation, R.E. and S.T.; resources, R.E. S.T. and C.A.; writing—original draft preparation, Z.P. and R.E.; writing—review and editing, Z.P., R.E. and C.A.; supervision, C.A.; project administration, R.E.; funding acquisition, R.E.

**Funding:** This research was funded by the authors.

**Informed Consent Statement:** “Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author. The data are not publicly available due to restrictions.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18. <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Allen, N.J., & Meyer, J.P. (1996). Affective, continuance and normative commitment to the organization: an examination of construct validity. *Journal of Organizational Behavior*, 49, 252–276. <https://doi.org/10.1006/jvbe.1996.0043>
- Betts, J., Appleton, J., Reschly, A., Christenson, S., & Huebner, E. (2010). A Study of the Factorial Invariance of the Student Engagement Instrument (SEI) : Results From Middle and High School Students. *School Psychology Quarterly*. 25. 84-93. <https://doi.org/10.1037/a0020259>
- Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement : Validation of the student engagement instrument. *Journal of School Psychology*, 44(5), 427-445. <https://doi.org/10.1016/j.jsp.2006.04.002>
- Appleton, J., Christenson, S., & Furlong, M. (2008). Student engagement with school : Critical conceptual and methodological issues of the construct. *Psychology in the Schools*. <https://doi.org/10.1002/pits.20303>
- Basikin, Basikin. (2007). Vigor, dedication and absorption : work engagement among secondary school English teachers in Indonesia. *Paper presented at the Annual AARE Conference*. Fremantle, Perth, Western Australia.
- Bouchard., P., & St-Amant J-C. (1996). *Garçons et filles : stéréotypes et réussite scolaire*. Montréal : Les Éditions du Remue-ménage, 300 p.
- Brown, R. B. (1996). Organizational commitment clarifying the concept and simplifying the existing construct typology. *Journal of occupational psychology*, 63, P24. <https://doi.org/10.1006/jvbe.1996.0042>
- Cardwell, M. E. (2011). Patterns of Relationships Between Teacher Engagement and Student Engagement. *Education Doctoral*. Paper 49.
- Chaveau, G. (1996). *L'échec scolaire : une notion qui a une brève histoire*. Presses Universitaires de France, Paris, coll. " Que sais-je ? ", 1997 pages 7 to 15.
- Charles-Pauvers. B., & Peyrat-Guillard. D. (2012). L'implication (ou l'engagement) au travail : Quoi de neuf ?. University of Nantes LEMNA (Laboratory of Economics and Management of Nantes Atlantique) and University of Angers GRANEM (Angevin Research Group in Economics and Management), UMR MA n° 49.
- Chen, Z-Y, & Howard B. K. (2003). School failure in early adolescence and status attainment in middle adulthood: A longitudinal study. *Sociology of Education*, 76, 110-127. <https://doi.org/10.2307/3090272>
- Cohen, A. (1992). An empirical assessment of organizational commitment. *Relations industrielles*, 47, n° 3, P 439 – 440. <https://doi.org/10.2307/2392596>
- Connell, J. P. (1990). Context, self, and action: A motivational analysis of self-system processes across the life span. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition: Infancy to childhood*. *The John D. and Catherine T. MacArthur foundation series on mental health and development* (pp. 61 – 97). Chicago: The University of Chicago Press.
- Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness : a motivational analysis of self-system processes. In M. R. Gunnar, & L. A. Sroufe (Eds.). *Self processes in development : Minnesota symposium on child psychology*, Vol. 23, (pp. 43e77). Chicago: University of Chicago Press.
- Connor, C.-M., S.-H. Son, A.-H. Hindman, & F.-J. Morrison (2005). Teacher qualifications, classroom practices, family characteristics, and preschool experience : Complex effects on first graders' vocabulary and early reading outcomes. *Journal of School Psychology* (43), 343–375. <https://doi.org/10.1016/j.jsp.2005.06.001>
- Demba, J. J. (2016). *La notion de réussite scolaire*. *CRIFRES*, Laval University, Québec.
- Demery, L. M. (2006). *Quelle opérationnalisation de l'implication pour concilier théories de la motivation et théories de l'implication ? Réflexion en faveur d'une nouvelle échelle de mesure de l'implication dans le métier*. <https://halshs.archives-ouvertes.fr/halshs-00077682>.
- Doyle, W. (1977). Paradigms for Research on Teacher Effectiveness. *Review of Research in Education*, 5, 163–198. <https://doi.org/10.2307/1167174>
- Dunkin, M. J., & Biddle, B. J. (1974). *The study of teaching*. Holt, Rinehart & Winston.

- El Akremi, A. (2005). Chapitre 12. Analyse des variables modératrices et médiatrices par les méthodes d'équations structurelles. In : P. Roussel & F. Wacheux (Dir), *Management des ressources humaines: Méthodes de recherche en sciences humaines et sociales* (pp. 325-348). Louvain-la-Neuve, Belgium: De Boeck Supérieur.
- Feyfant, A. (2014). *Réussite éducative réussite scolaire ?*. Observatoire de la Réussite éducative Veille et analyses - French Institute of Education - ENS de Lyon.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117–142.
- Finn, J. D., & Rock, D. A. (1997). Academic achievement among students at risk for school failure. *Journal of Applied Psychology*, 82, 221e234. <http://dx.doi.org/10.1037/0021-9010.82.2.221>
- Fournier, S. (2015). Les pratiques managériales dans les ELPE et implication des enseignants. *Gestion et management public* - 2015/2, Vol 3/ n° 4, P 27 – 48.
- Fournier, S. (2019). L'implication des enseignants : une des clés possibles de la performance éducative. *Management international / International Management/ Gestión Internacional*, 23 (3), 45–55. <https://doi.org/10.7202/1062208ar>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). Academic engagement : Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59- 109. <http://dx.doi.org/10.3102/00346543074001059>
- Furlong, M. J., Whipple, A. D., Jean, G. S., Simental, J., Soliz, A., & Punthuna, S. (2003). Multiple Contexts of School Engagement: Moving Toward a Unifying Framework for Educational Research and Practice. *California School Psychologist*, 8, 99–113. <https://doi.org/10.1007/BF03340899>
- Goodenow, C. (1993). Classroom belonging among early adolescent student : re- lationships to motivation and achievement. *Journal of Early Adolescence*, 13, 21° 43. <http://dx.doi.org/10.1177/0272431693013001002>
- Helme, S., & Clarke, D. (2001). Identifying cognitive engagement in the mathematics classroom. *Mathematics Education Research Journal*, 13, 133-153. <http://dx.doi.org/10.1007/BF03217103>
- Henry, K., Knight, K. E., & Thornberry T. P. (2012). School Disengagement as a Predictor of Dropout, Delinquency, and Problem Substance Use During Adolescence and Early Adulthood. *Journal of Youth and Adolescence*, 41(2):156-66. <http://dx.doi.org/10.1007/s10964-011-9665-3>
- Gutiérrez-Martínez, I. (2006). L'implication organisationnelle des professionnels de TI. *Revue française de gestion*, 168-169, 143-156. <https://doi.org/10.3166/rfg.168-169.143-156>
- Kahn, S. (2011). La relativité historique de la réussite et de l'échec scolaires. *Éducation et francophonie*, 39, 54. <http://dx.doi.org/10.7202/1004329ar>
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74, 262 – 273. <https://doi.org/10.1111/j.1746-1561.2004.tb08283.x>
- Lacroux Alain. (2008). Implication au travail et relation d'emploi flexible : le cas des salariés intérimaires. Doctoral thesis. Management. Paul Cézanne University - Aix-Marseille III, 2008.
- Legendre R. (1993). *Dictionnaire actuel de l'éducation*. Montréal : Guérin.
- Linnenbrink, E. A., & Pintrich, P. R. (2003). The role of self-efficacy beliefs in student engagement and learning in the classroom. *Reading & Writing Quarterly : Overcoming Learning Difficulties*, 19(2), 119–137. <https://doi.org/10.1080/10573560308223>
- Manville, C. (2014). Parce que je le vaux bien : les relations entre caractéristiques du travail, estime de soi et engagement affectif envers l'organisation. *Revue de gestion des ressources humaines*, 92, 52-68. <https://doi.org/10.3917/grhu.092.0052>
- Marks, H. M. (2000). Student engagement in instructional activity : patterns in elementary, middle and high school years. *American Educational Research Journal*, 37, 153e184. <http://dx.doi.org/10.2307/i248902>
- Moisset, J.J., Plante, J., & Toussaint P. (2005). La gestion des ressources humaine pour la réussite scolaire. *Presses de l'université du Québec*, 423 P.
- Murdock, T. B., & Miller, A. D. (2003). Teachers as sources of middle school students' motivational identity : variable-centered and person-centered analytic ap- proaches. *Elementary School Journal*, 103, 383e399. <http://dx.doi.org/10.2307/i241865>
- Fredricks, J., Mccolskey, W., Manweiler, J., Mordica, J., Montrosse-Moorhead, B., & Mooney, K. (2011). Measuring Student Engagement in Upper Elementary through High School: A Description of 21 Instruments. Issues & Answers. REL 2011-No. 098. Regional Educational Laboratory Southeast.
- Meyer, J.P., & Smith, C.A. (2000). HRM practices and organizational commitment: test of mediation model. *Canadian journal of administrative sciences*, vol.17, p. 319- 331. <https://doi.org/10.1111/j.1936-4490.2000.tb00231.x>
- Meyer J.P., & Herscovitch L. (2001). Commitment in the workplace. Toward a general model. *Human Resource Management Review*, vol.11, n°3, p. 299-326. [https://doi.org/10.1016/S1053-4822\(00\)00053-X](https://doi.org/10.1016/S1053-4822(00)00053-X)
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnitsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61, P 22. <https://doi.org/10.1006/jvbe.2001.1842>
- Mowday R.T., Porter L.W., & Steers R.M. (1982). Employee-organization linkages: The psychology of commitment, absenteeism and turnover, New York, *Academic Press*.
- Neveu J.P. (1991). Méthodologie de l'implication, *Communication to AGRH Congres*, Cergy, p. 141-144.
- Ogbu, J. U. (2003). *Black American students in an affluent suburb: A study of academic disengagement*. Mahwah, NJ US: Lawrence Erlbaum Associates Publishers Retrieved from EBSCOhost.

- Organisation de coopération et de développement économiques (OCDE) International Survey of Teachers, Teaching and Learning (TALIS) 2013.
- Pianta, R. C., la Paro, K. M., Payne, C., Cox, M. J., & Bradley, R. (2002). The Relation of Kindergarten Classroom Environment to Teacher, Family, and School Characteristics and Child Outcomes. *The Elementary School Journal*, 102(3), 225–238. <http://www.jstor.org/stable/1002217>
- Pierre B., & Emmanuel R. (2014). *Un modèle tridimensionnel d'engagement organisationnel pour appréhender la fidélité au CHU des anesthésistes ?*. EMS Editions | « Question(s) de management » 2014/1 n° 5 | pages 33 to 45.
- Higher Council for Education, Training and Scientific Research (2018). Rapport annuel : bilan et perspectives de l'action du Conseil 2018 – July, 2019, <https://www.csefrs.ma/wp-content/uploads/2019/07/rapport-annuel-2018-fr.pdf>
- Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (1998). Academic and emotional functioning in early adolescence : longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology*, 10, 321 – 325. <https://doi.org/10.1017/s0954579498001631>
- Rutter, R. A., & Jacobson, J. D. (1986). *Facilitating teacher engagement*. Madison, WI. : National Center on Effective Secondary Schools, School of Education, University of Wisconsin-Madison, 37, p 11.
- Ryan R. & Deci E. (2000). Intrinsic and extrinsic motivations : Classic definitions and new directions. *Contemporary Educational Psychology*, vol. 25, p. 54-67. <https://doi.org/10.1006/ceps.1999.1020>
- Sarrazin, P., Tessier, D. & Trouilloud, D. (2006). Climat motivationnel instauré par l'enseignant et implication des élèves en classe : l'état des recherches. *Revue française de pédagogie*, 157, 12-12. <https://doi.org/10.4000/rfp.463>
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom : reciprocal effect of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85, 571e581. <http://dx.doi.org/10.1037/0022-0663.85.4.571>
- Skinner E. & Edge K. (2002). Parenting, motivation, and the development of children's coping. In L. J. Crockett (éd.), *Agency, Motivation, and the Life Course : The Nebraska Symposium on Motivation*. Lincoln: University of Nebraska Press, vol. 48, p. 77-143.
- Solinger, O., Van Olffen, W., & Roe, R. (2008). Beyond the Three-Component Model of Organizational Commitment. *The Journal of applied psychology*. 93. 70-83. <http://dx.doi.org/10.1037/0021-9010.93.1.70>
- Thévenet, M. (1992). *Impliquer les personnes dans l'entreprise*, Paris, Editions Liaisons.
- Thévenet, M. (2000). *Le plaisir de travailler : favoriser l'implication des personnes*. Editions d'Organisation.
- Thibert R. (2013). Le décrochage scolaire : Diversité des approches, diversité des dispositifs. Dossier d'actualité Veille et Analyses, n° 84, May, p. 1–26
- Tiffany A. (2016). « Le cadre de proximité, acteur clé de la motivation et de l'implication organisationnelle », *Communication et organisation*, posted on line on 01 December 2019. <http://dx.doi.org/10.4000/communicationorganisation.5418>
- Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, 105, 204-319. <https://doi.org/10.1086/444158>
- Wang, M. T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal*, 47, 633e662. <http://dx.doi.org/10.3102/0002831209361209>
- Wang, M. T., & Eccles, J. S. (2012a). Adolescent behavioral, emotional, and cognitive engagement trajectories in school and their differential relations to educational success. *Journal of Research on Adolescence*, 22, 31e39. <http://dx.doi.org/10.1111/j.1532-7795.2011.00753.x>
- Wang, M. T., & Eccles, J. S. (2012b). Social support matters : longitudinal effects of social support on three dimensions of academic engagement from middle to high school. *Child Development*, 83, 877e895. <http://dx.doi.org/10.1111/j.1467-8624.2012.01745.x>
- Wang M.T., & Eccles Jacquelynne, S. (2013). School context, achievement motivation, academic engagement : A longitudinal study of academic engagement using a multidimensional perspective. Elsevier Ltd, *learning and instruction*, 28, 12 – 23. <http://dx.doi.org/10.1016/j.learninstruc.2013.04.002>

**Publisher's Note:** SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2021 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.