

# M@n@gement

ISSN: 1286-4892

## Editors:

Emmanuel Josserand, *HEC, Université de Genève (Editor in Chief)*

Jean-Luc Arrègle, *EDHEC (editor)*

Stewart Clegg, *University of Technology, Sydney (editor)*

Philippe Monin, *EM Lyon (Editor)*

José Pla-Barber, *Universitat de València (editor)*

Linda Rouleau, *HEC Montréal (editor)*

Michael Tushman, *Harvard Business School (editor)*

Olivier Germain, *EM Normandie (editor, book reviews)*

Karim Mignonac, *Université de Toulouse 1 (editor)*

Thibaut Bardon, *Université Paris-Dauphine, CREPA - HEC, Université de Genève (editorial assistant)*

Florence Villesèche, *HEC, Université de Genève (editorial assistant)*

Martin G. Evans, *University of Toronto (editor emeritus)*

Bernard Forgues, *EMLyon Business School (editor emeritus)*

■ Olivier BRUNEL  
François GRIMA 2010  
Dealing with Work-School Conflict: An analysis  
of coping strategies  
*M@n@gement*, 13(3), 172 -204.

accepted by Louis Hébert

M@n@gement est la revue officielle de l'AIMS



M@n@gement is the official journal of AIMS

Copies of this article can be made free of charge and without securing permission, for purposes of teaching, research, or library reserve. Consent to other kinds of copying, such as that for creating new works, or for resale, must be obtained from both the journal editor(s) and the author(s).

M@n@gement is a double-blind refereed journal where articles are published in their original language as soon as they have been accepted.

For a free subscription to M@n@gement, and more information:  
<http://www.management-aims.com>

© 2010 M@n@gement and the author(s).

# Dealing with Work-School Conflict: An analysis of coping strategies

---

Olivier BRUNEL

Université LYON 3, IAE, Magellan IRIS  
brunel@univ-lyon3.fr

François GRIMA

UPEC et RMS  
grimaf2000@yahoo.com

This article aims to shed light on the ways in which working students marry their work and school activities. On the basis of questionnaire responses garnered from 303 working French students, it shows that coping strategies implemented to deal with the stress which arises from the work-school conflict are generally effective, with the exceptions of self-accusation and cognitive repression. Furthermore, a negative relationship between work-school conflict, stress and turnover intention emerges. This study goes beyond mere one-dimensional illustrations which portray students as being under pressure or taking action to foster their own professional development, and instead suggests a combined response to role conflict which involves both confronting the conflict and managing emotions.

---

## INTRODUCTION

Dealing with Work-School Conflict: An analysis of coping strategies  
Whilst role strain in the professional sphere (Kahn et al, 1964) and conflict at its interface with the private domain (Greenhaus & Beutell, 1985) have been the focus of a number of studies emerging from the English-speaking world (Bédeian & Amenakis, 1981; Brown & Peterson, 1993; Naumann et al, 2000) and, more recently, from the French-speaking world (Perrot, 2001; Grima, 2004) and Asia (Hang-yue et al, 2005), work-school conflict (WSC) has not enjoyed the same level of interest. The findings remain limited, the external validity of the handful of American and Canadian empirical studies in existence (Barling et al, 1995; Markel & Frone, 1998; Butler, 2007) has yet to be established, and labour legislation for young employees continues to differ from one country to the next. Krahn (1991) observes that in the United States 54% of students aged 15 to 19 engage in paid work while they study, whereas in France only those aged 16 and over are permitted to work. Theoretical debate is still lacking, and is pursued neither by advocates of the resource-scarcity hypothesis (Tubre & Collins, 2000; Jackson & Schuler, 1985), who suggest that individuals have a finite amount

of energy to expend, nor by those who, on the contrary, suggest that resources and knowledge are increase as the roles being performed impose ever greater demands (Marks, 1977; Sieber, 1974).

In light of these constraints, the aim of this paper is to assess both the impact of WSC on stress and turnover intention and the strategies honed by French students in order to counter this situation. This study aligns itself with the resource-scarcity approach for two reasons. Firstly, the university system disregards the particular circumstances of working students: their occupation is not supported by the academic system, and their work commitments are rarely taken into account when drawing up academic timetables. Secondly, the particular circumstances of working students are only very occasionally taken into account by employers (France's Conseil Economique et Social (CES)). The role-conflict approach is altogether appropriate when we consider this schism between the professional and academic spheres.

The reason for our decision to identify stress and turnover intention as consequences of WSC can be found in the links seen in the literature between these concepts and role conflict (Byod et al, 2009; Jackson & Schuler, 1985). Turnover intention, which has been defined as 'The conscious will and deliberated to leave his (her) company' (Tett & Meyer, 1993, p.262), is one of the key variables in models which analyse the consequences of role conflict (Hang-yue, 2005; Schaubroeck et al, 1988) and work-family conflict (Karatepe & Baddar, 2006; Greenhaus et al, 2001). These studies take a common stance according to which role conflict (which Kahn et al (1964, p.204) define as a situation in which 'an individual is subject to two role expectations or more, and when he/she fulfils one of these it becomes difficult to meet the requirements of the other') increases turnover intention. Stress, defined as 'work-related nerves or anxiety which exerts an emotional and physical impact upon the employee's health' (Cox et al, 2000, p.14), can be identified as an intermediary variable in the link between role strain and turnover intention (Netemeyer et al, 2004; Beehr & Newman, 1978). By examining the links between WSC, stress and turnover intention, we broaden the scope of literature seeking to shed light on the consequences of WSC, that rather specific and seldom studied form of role conflict. In addition to this, within the specific field of this type of conflict, this paper marks a shift in perspective. Firstly, by integrating coping strategies, it sees the working student faced with WSC as an active individual. Secondly, without dismissing the negative consequences of WCS where the individual's education is concerned (Zierold et al, 2005; Trockel et al, 2000; Canabal, 1998), it looks at the constraints caused by school attendance which have an impact on work. Questions such as how WSC affects the relations which students working part time maintain with work and their employers and how working students deal with both sets of constraints imposed upon them have thus far gone unanswered, and yet many aspects of these issues are significant for young people, their employers and society in general.

Early experiences of the world of work bear an influence on indivi-

duals' relations with their employers over the course of their career (Mortimer et al, 1986; Barling et al, 1995). Tannock and Flocks (2003) observe that in many cases young employees' potential is not harnessed in their place of work. This can lead to a sense of frustration and give rise to doubts about career choices. Butler (2007) stresses that levels of WSC vary depending on the characteristics of the position held. From the employer's point of view, WSC bears a noticeable influence upon staff turnover rates and the cost of recruitment and training. The retention of student employees is therefore a significant concern in a number of economic sectors, such as the restaurant trade and call centres. Many human resource managers stress the importance of this cohort for their company's flexibility: in retail, for instance, working students are key to maintaining longer opening hours (CES, 2007). Ultimately, the burden shouldered by working students means that it is crucial for society in general that their circumstances be understood. A number of studies undertaken by the French Centre d'Etudes et de Recherches sur les Qualifications (Céreq, 2001) and Observatoire de la Vie Etudiante (OVE, 2006) show that more than a third of students (35%) work throughout their studies. Meanwhile, a survey carried out by the Union Syndicale des Etudiants de France (UNEF) in 2005<sup>1</sup> suggests that 65% of students engage in paid work at some point in their education. Such is the importance of this phenomenon that in 2007 the French government voted in a law declaring this type of work to be tax-exempt.

As has been the case for the few existing empirical studies on the work-school interface within the discipline of management sciences (Barling et al, 1995; Markel & Frone, 1998; Butler, 2007), the scarcity of research on this specific topic leads us in our literature review to draw on the contributions made by studies on other forms of role conflict in the workplace, as well as research into work-family conflict. This paper comprises four sections. We begin by presenting the relevant theory to be found in the literature and formulating hypotheses, and then go on to discuss our methodology. We then report our results before engaging in a critical discussion.

## **THEORETICAL FRAMEWORK AND HYPOTHESES**

### **Role conflict: overexploitation of resources and problems at school**

It may seem at first sight that research on role conflict in those with interface roles gives rise to a whole variety of stances, but on closer examination, it becomes clear that a common theoretical foundation can be discerned. Three pivotal contributions have been made: the theory of role conflict (Kahn & Byosière, 1992), identity theory (Thoits, 1991) and the theory of resource conservation (Hobfoll, 2002). These all set out from the same pretext: that role conflict curbs employees' ability to adapt to the various expectations resting upon them and deprives them of temporal, cognitive and emotional resources. An inter-

1. Students and Work, a survey carried out from 3-7 January 2005 by the Institut CSA, using face-to-face interviews with a representative sample of 1423 individuals who had been students in 2003-2004.

role conflict arises: individuals' inability to deal with the various expectations to which they are subject is caused by their involvement with a number of different associates. Those same individuals thereby lose all means of managing complex coping mechanisms (Hobfoll, 2002). From this perspective, regardless of the form taken on by role conflict, that conflict has negative consequences for the individual occupying the multifaceted role in question.

Where WSC is concerned, these negative consequences for education are coming to be rather well known. There are concerns relating to performance (Steinberg et al, 1993), and working alongside one's studies often goes hand in hand with a delay in obtaining the final qualification (Canabal, 1998) and failure to attend classes (Steinberg & Cauffman, 1995). Following Frone et al's (1992) work on work-family conflict, Markel and Frone (1998) demonstrate that SWC first brings about a decline in the student's diligence at school, and this then exerts a negative influence on school performance. This, in turn, triggers a decrease in satisfaction with school activities. However, almost all research into this type of role conflict focuses exclusively upon the negatives consequences for education, which may explain the lack of interest which management research has shown in this area (Butler, 2007). Butler (2007) notes that no study has addressed the issue by analysing the impact which this situation has on the employee's relations with his/her employer or job. This is not to say, meanwhile, that the workplace is absent from existing research: on the contrary, its characteristics appear as precursors to WSC (Markel & Frone, 1998). These authors, along with Barling et al (1995), stress the role which the quality of tasks completed and the time dedicated to them play in triggering WSC.

In light of this, the task of gaining a deeper understanding of this type of role conflict and its impact on employees' relations with their employer remains, in the first instance, an exploratory one. We do, however, share the view of Markel and Frone (1998), who suggest that role conflicts relating to work, family or education are similar. They set an individual against two domains which the individual perceives as being of equal importance for his/her personal development. It is for this reason that as we formulate our research hypotheses we will, with due caution, rely upon this form of external validity by broadening our scope to include studies completed outside the limited field of WSC.

### **The link between WSC and turnover intention: stress as a mediating variable**

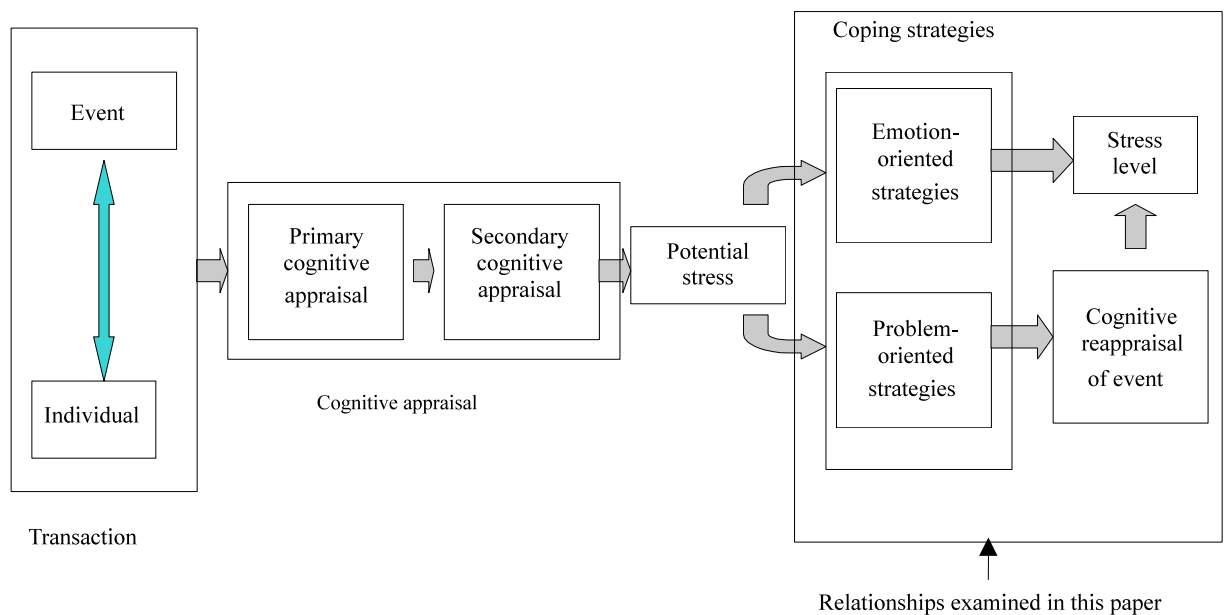
The literature on work-family conflict (Eby et al, 2005) and role strain (Jackson & Schuler, 1985) suggests that the deterioration of employees' relations with work and their employers involves complex processes. However, a certain consensus has emerged in that the final element in the process is widely identified as being turnover intention (Schaubroeck et al, 1989; Brown & Peterson, 1993). Borgi (2002) argues that role strain is a crucial element in global models for turnover intention (Naumann et al, 2000). Greenhaus and Powell

(2006) suggest that work-family conflict is synonymous with turnover intention as employees cannot grant work priority over family in the long term.

Work-related stress is defined by Cox et al (2000, p.14) as 'work-related nerves or anxiety which exerts an emotional and physical impact upon the employee's health', and is an intervening variable (Netemeyer et al, 2004; Bédian & Armenakis, 1981; Beehr & Newman, 1978) between role conflict and turnover intention. It plays a pivotal role in the process by which employees' relations with their employers deteriorate. A number of factors attest to this. Firstly, the link between role conflict and stress has been clearly established by work on the consequences of work-family conflict. Netemeyer et al (2005) state that role conflict puts such a strain on emotional and cognitive resources that individuals come to believe that they will be unable to deal with all of the expectations imposed upon them in their various roles (Frone et al, 1992). Thoits (1991) observes that, with work-family conflict, individuals realise that they cannot combine two identities even though they have striven to meet the different expectations imposed upon them. Role conflict presents an obstacle to fulfilment in this double role (Edwards & Rothbard, 2000). The same applies in studies on strain arising between different professional positions (Karasek & Theorell, 1990). These last authors, having reviewed key literature in the field (Jackson & Schuler, 1985; Fisher & Gitelson, 1983), remark that there is a correlation between role conflict and stress. A number of studies (Bédian et al, 1981; Kemery et al, 1985; Schauboech et al, 1989) have also analysed the consequences of role strain by offering structural models and underscored the role of stress as a mediator in the connection between professional role conflict and turnover intention. Taking into account all of these various contributions to the literature on work-family and intra-professional conflict, we are led to formulate the following hypothesis:

**H1:** *With stress as a mediator, WSC increases turnover intention*

The transactional model for stress and coping: an active individual  
 Numerous theories have shed light on stress (Carver & Scheier, 1994), and general models (Cannon's animal model; Selye's General Adaptation Syndrome) have offered a widely applicable insight into the role which it plays in the individual. Other, more specific studies (that of Holmes and Rahe on circumstances and that of Antonovsky on personality) have sought to predict fluctuations in stress levels. Whilst all of these contributions are valuable and original, however, they do not offer any information as to how the individual deals with stressful events (Paulhan & Bourgeois, 1995). Whilst a great deal of the literature on role conflict is based on the idea of a passive individual who has no choice but to undergo the constraint in question, other studies (Grima, 2004; Rafaeli, 1989; Butler & Snizek, 1976) have questioned such passivity and acquiescence to the new circumstances. Role conflict is thus assimilated into cognitive appraisal, which is the first stage of the stress model posited by Lazarus and Folkman (1984).

**Figure 1. – Transactional Model (Lazarus & Folkman, 1984)**

The transactional model (see **Figure 1**) analyses the stress which arises in a particular situation in the context of a transaction taking place between the individual and his/her environment. Personal issues are taken into account (sequentially) by comparing the potential negative effect (disturbance to physical or psychological well-being) of the event which the individual is facing (primary cognitive appraisal) and the resources (be they physical, social, psychological or material, or relating to anticipation of coping, etc) which he/she has on hand to deal with the situation (secondary cognitive appraisal). An event becomes stressful 'if the primary appraisal of the threat is higher than the secondary appraisal of the coping strategies' (Major et al, 1998, p.736). According to Folkman and Lazarus (1984), the result of this comparison reveals the potential subjective emotional burden imposed by the event (potential stress). This appraisal (transaction) depends on internal factors (personality, beliefs, goals) and external ones (characteristics of the circumstances present) and so a single set of circumstances can, depending on the people and factors involved, be seen as a threat or loss, leading to negative stress, or a challenge, leading to positive stress (McRae, 1984; Kohn, 1996).<sup>2</sup>

The association between cognitive appraisal and stress levels is then subject to the mediation of coping strategies for stress and cognitive reappraisal (Paulhan & Bourgeois, 1995).<sup>3</sup> Cognitive reappraisal is an amended version of the original appraisal on the basis of new information coming in from the environment or the individual himself (coping strategies which have been planned or implemented). The (positive or negative) nature of the stress, as well as its intensity, depend on the person involved (Folkman & Lazarus, 1984). In the eyes of these last

2. Whilst it is, in theory, possible for there to be no emotional reaction to a stressful situation (Folkman (1984) uses the term 'irrelevant'), no research has, to our knowledge, documented an apathetic response to role conflict. Lepore and Evans (1996) refer to 'stressors' linked with the role of the individual (particularly excessive workload) and show that 'universally' serious consequences are triggered in individuals not suffering from mental illness (particularly when the roles in question are deemed by the individual to be important).

3. Given the lack of an experimental protocol (before, during and after the presence of the stressor) researchers principally have access to cognitive reappraisal. In our case, our desire to study SWC-affected students' reactions in situ meant that we were obliged to interview participants who had already developed adjustment strategies (cognitive reappraisal) (see Figure 1).

authors (1984, p.114), coping strategies are 'all of the cognitive and behavioural efforts employed to overcome, contain or bear the internal or external demands which threaten or exceed an individual's resources'. Paulhan et al (1994, p.293) draw a comparison between coping strategies and 'filters', or mediators in the link between the stressful event and emotional disturbance (Aldwin & Revenson, 1987), which are said to alter the stressful event and thereby increase or diminish the stressed reaction. De Ridder (1997) has catalogued between two (Folkman & Lazarus, 1984) and 28 (McRae, 1984) different coping strategies. As Endler and Parker (1990) have it, two meta-strategies can nonetheless be identified: one which involves paying attention to the problem and taking action to deal with it, and another which entails a palliative, emotional response to avoid the problem. The first of these allows the causes of a given problem to be tackled, whereas the second limits the emotional impact brought about by the stressful situation given that the two can be linked (Folkman & Lazarus, 1984).

### **Coping strategies for WSC: a theoretical overview**

Many strategies have been put forward in research into work-family conflict and professional role conflict which allow individuals to deal with such conflict, and these strategies apply to various different contexts. In terms of work-family conflict, a number of recent literature reviews (Edwards & Rothbard, 2000; Greenhaus et al, 2001) give rise to three major lines of thinking. One is segmentation, where the individual chooses to place his/her professional and private lives in separate physical and mental compartments. Another is compensation, where people invest in the neglected area so as to contain the costs of their previous over-investment in the other area. In the image of work on the management of professional and private boundaries (Ashforth et al, 2000), Kirchmeyer (1993) notes that individuals can also take action at the source of the strain by redefining the expectations which have been placed upon them. Excessive activity can ensue. Individuals then take refuge in a reinterpretation of reality, which is deemed to be fragile so as to become bearable (Jenning & McFougald, 2007).

In his examination of professional role strain, Grima (2004) explores four coping strategies. In the first, individuals (Kahn et al, 1964) deal with what they see as irreconcilable factors by dividing themselves up into various roles. In the second, individuals tackle the predicament by opting for one or the other of the options on offer to them (Courpasson, 1995). The third type of individual demonstrates a desire to take a certain distance from those issuing roles (Butler & Snizek, 1997). In the final scenario, the individual runs away and shuts himself off, failing to deal with the situation (Rafaeli, 1989).

Besides the diversity of coping strategies, the richness which characterises the descriptions made of them is far from being exhausted by the commonly advocated dichotomy discussed above. Brunel's (2002) research has demonstrated that the range of stressful situations studied (school examinations, war, etc) gave rise to a range of coping strategies. The type of strategies used are said to be contingent, situational

and individual (Lazarus & Folkman, 1984). The literature encourages the researcher to exercise caution in operationalising the strategies developed.

### **Coping strategies for WSC: their impact on stress**

The transactional model interprets stress perception and reduction as a cognitive process which causes stress. The work of Lazarus and Folkman (1984) shows that while the stressful transaction is taking place coping strategies act as mediators between the stressful event and stress itself. Coping operates as a stabilising factor which helps individuals to maintain a certain level of psychosocial development during stressful periods (Holahan & Moos, 1991). Coping strategies protect the individual by altering the conditions which lie at the origin of stress or by keeping emotional reactions below an acceptable limit (Zeidner & Saklofske, 1996). Coping thus performs two functions: on the one hand, it directly regulates emotional disturbance (emotion-oriented strategies), and on the other, it regulates emotional disturbance by tackling the problem (problem-oriented strategies) (Lazarus & Folkman, 1984; Carver & Scheier, 1994). This element of confrontation assists in furnishing the individual with the means to alter his/her relationship with the environment and bears an indirect and negative influence upon his/her emotional state (Rivolier, 1989). In general, then, we posit that coping strategies exert an inhibiting influence both directly (Felton & Revenson, 1987) and indirectly (Pearlin & Schooler, 1981) on the stress caused by WSC.

***H2:** Emotion- and problem-oriented coping strategies directly and indirectly reduce the level of stress which students experience.*

In spite of this, coping strategies depend heavily on context and vary widely depending on circumstances. Costa, Summerfield and McRae (1996) add that the transactional model was, by definition, developed as an alternative to models seeking to discover stable tendencies. Whilst the approach based on trait interpretation (Beehr & McGrath, 1996) posits the stability hypothesis, the transactional approach establishes a predominant variable (Folkman et al, 1986). The coping response can vary with the circumstances in which it is given (Folkman & Lazarus, 1998), and this makes it difficult to secure solid internal and external validity in research on coping strategies (De Ridder, 1997). Benson and Hagvet (1996) also remind us of the fact that the various tools used are very different (Ways of Coping Questionnaire, COPE, CISS). Since stress and the coping process are both intimately linked with context and the tools are developed in specific circumstances, it is difficult to extrapolate results to other events, individuals and periods. In order to reject our overall hypothesis, then, it will be necessary to test hypotheses which have been specially formulated for WSC.

## Identifying coping strategies for WSC and research hypotheses

When identifying and assessing coping strategies, two approaches come into conflict (Brunel, 2002). The first of these consists in beginning with a selection of hypothetical categories which are made to be mutually exclusive and which together exhaust all possible coping options. This 'classification' is then tested on responses to various stressful stimuli (Carver, Scheier & Weintraub, 1989). The second strategy uses induction (Pearlin & Schooler, 1978; McRae, 1984). A detailed examination of the coping strategies used by a specific population (at a given point in time) is carried out (Folkman & Lazarus, 1984). Statistical methods then allow general coping strategies to be identified. In order to integrate the dependent aspect of the transactional stress model whilst necessarily maintaining the possibility of comparing results and making generalisations, the induction approach was used (Pearlin & Schooler, 1978; McRae, 1984; Folkman & Lazarus, 1988).

In this spirit, and in order to identify WSC coping strategies, the semi-structured interview was chosen. This method offers the desired advantages of freedom and depth which are appropriate given the exploratory nature of this phase of the research. Twenty individual interviews were held, each lasting on average 45 minutes. Participants were volunteers from three universities in Greater Paris. The interviews allowed us to exhaust the theory (Glaser & Strauss, 1967). We paid particular attention to the sampling process. This led us to opt for a heterogeneous sample (Quivy & Van Campenhoudt, 1995) so as to bolster our study's external validity. The lack of reliable statistical data on the population in hand led us to draw on the theoretical criteria which may have influenced WSC perception and response. Thus, we matched participants' level of education and gender. To this were added a number of elements relating to the type of work done (non-standard shifts, contact with the client) and the programme followed (hours per week, attendance rules).

The interview guidelines included seven questions<sup>4</sup> covering four main areas: describing working students' daily lives, how work fits in with school commitments, perceived level of difficulty in managing role conflict and the way in which individuals deal with the situation.

The interviews were transcribed and subjected to a thematic content analysis. The unit of analysis was the theme, whereas the unit of context was the interview. The coding categories were based on our efforts to integrate theory and field observations. This process allowed us to meet the need for quality and a priori conceptualisation, as well as to marry the units of observation with the analysis categories. The qualitative data handling software which we employed (Nudist Vivo) allowed us to extract semantic categories (nodes) which we applied to the verbatim transcripts. This formed the basis for constructing assessment scales. We used Miles and Huberman's (1994) method of assessing inter-coder reliability (instances of agreement / instances of agreement + instances of disagreement) in the coping strategies. This gave a result of 92% (higher than 70%, Miles & Huberman, 1994). We

4. Could you describe a typical day at university and at work? How does the fact that you study interfere with your professional life? How does your professional life interfere with your studies? Which types of difficulties have you faced while managing the interface between the two? How has this made you feel? What action do you take to foster compatibility between these two activities? What advice would you give to a working student to help them manage their various commitments (both professional and university- or school-based)?

5. Self-accusation, escape from reality, social support-seeking, fatalism, cognitive repression and confrontation

6. Self-accusation: accepting one's own role in triggering the event; escaping reality: thinking pleasant thoughts with a view to their replacing the stress-provoking thoughts; social support-seeking: inter-personal communication with a view to reducing the emotional impact of a given set of circumstances; fatalism: accepting that the situation cannot be resolved; cognitive repression: the individual's desire to refuse to think about the stressful event; confrontation: taking action to change the status of the situation.

thus discerned five emotion-oriented coping strategies and one problem-oriented one,<sup>5</sup> the existence of all of which is confirmed in the literature.

The exploratory phase of our research gave rise to the following emotion-oriented coping strategies for WSC (see research methodology<sup>6</sup>): self-accusation (McRae, 1984; Folkman et al, 1986), escape from reality (Stone & Neale, 1984; McRae, 1984), social support-seeking for emotional reasons (Carver, Scheier & Weintraub, 1989; Raffety, Smith & Ptacek, 1997), fatalism (Stone & Neale, 1984; Carver, Scheier & Weintraub, 1989; Feifel & Starck, 1989) and cognitive repression (Chip & Scherrer, 1992; Endler & Parker, 1990). All studies mentioned see these strategies as 'emotion-oriented coping strategies' and also ascribe to them a direct inhibiting effect on stress. Whilst all the strategies seem to be oriented towards emotion, however, we can discern two distinct functions on their part in light of Folkman's (1984) definition of emotion-oriented coping. The first of these is to 'contain emotional disturbance'. Strategies involving cognitive repression, escape from reality and social support-seeking which do not alter the perception of the event allow the student to contain the emotional effect of WSC, which results in stress reduction (Folkman, 1984). We therefore posit the following hypotheses:

*Cognitive repression reduces students' stress levels (H2.a).*

*Escape from reality reduces students' stress levels (H2.b).*

*Social support-seeking reduces students' stress levels (H2.c).*

The second function of emotion-oriented coping strategies is to alter the meaning of an event. This involves dealing with meaning and a cognitive adjustment which modifies the way in which the event is interpreted (Folkman & Lazarus, 1980), making the circumstances which the student is facing more bearable (even though in objective terms they remain the same, Folkman, 1984). We therefore posit the following hypotheses:

*Self-accusation reduces students' stress levels (H2.d).*

*Fatalism reduces students' stress levels (H2.e).*

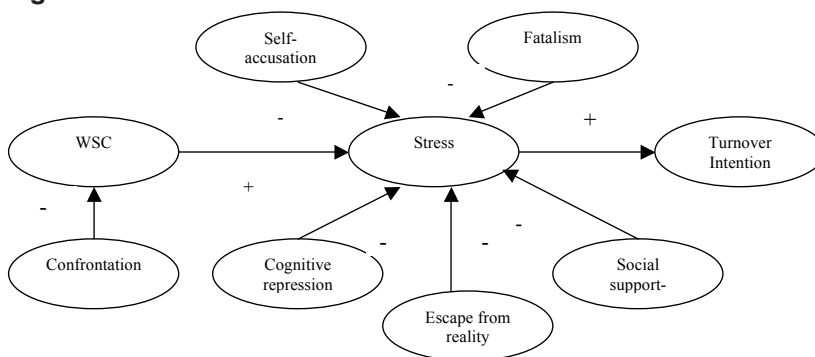
The qualitative results also revealed a problem-oriented strategy in the form of confrontation (Carver, Scheier & Weintraub, 1989; Billings & Moos, 1984; Folkman & Lazarus, 1980, 1985). We included only one problem-oriented element in spite of the many different means of confrontation on offer because all the elements observed related to similar responses (discussion with the university or employer, seeking compromises with teachers, working harder, etc). This corroborates Bolger's (1990) conclusion according to which problem-oriented action is decidedly less varied than emotion-oriented action, where there are many available strategies. Although the literature gives different names to problem-oriented coping strategies (examples include 'task-oriented strategies' (Endler & Parker, 1990), 'problem-oriented strategies' (Carver, Scheier & Weintraub, 1989) and 'fighting spirit' (Folkman et al,

1986)), all these authors share a common suggestion that confrontation has a direct effect on cognitive reappraisal (Paulhan et al, 1994; Felton & Revenson, 1987). Thus, the more students use problem-oriented strategies, the less important WSC must seem: such is the extent to which this type of strategy gives the individual in question the impression that he/she has taken the stressful circumstances in hand (Christensen et al, 1990; Collins et al, 1983). We therefore put forward the following hypothesis:

*The strategy of problem confrontation reduces WSC perception levels (H2.f).*

Figure 2 summarises the research model.

Figure 2: Research model



## RESEARCH METHODOLOGY

Due to the importance of context and the broad weaknesses in the psychometric qualities (reliability and validity) of various assessment tools (Brunel, 2002), we decided to develop our own method of assessing coping strategies.

### Exploratory quantitative analysis

Following the qualitative phase, we developed assessment scales (Churchill, 1979). The items were obtained during the qualitative interviews. After an initial test which aimed to avoid any ambiguity in question composition (around twenty copies were given out to various different types of people of varying levels of education), an initial (self-administered) survey was carried out in January 2004 among a population of 222 students. The assessment scale was based on a six-point Likert scale. The (initial) exploratory nature of our study led us to carry out an exploratory factor analysis so as to find the assessment model underlying the data (Gerbing & Anderson, 1988). In order to refine the constructs and lend them greater dimensionality, a principal component analysis was carried out. First, the items were selected (items with factor contributions higher than 0.3 over several dimensions and those with no contribution higher than 0.5 on one factor were omitted). The modified scales were then subjected to a further statistical procedure

to establish the reliability and factor structure of the scales being tested. The questionnaire was then submitted to the final sample.

### Participants and means of distribution of final questionnaire

The final sample was made up of 303 students specialising in certain humanities (management, psychology, sociology and business administration (AES)) at three Paris universities.<sup>7</sup> The sample comprised 98 men and 205 women. Respondents were mainly aged between 20 and 29 (273 people were in this age group, versus only 23 who were over thirty), which is reflected in the respondents' level of education (208 had spent at least two years in university-level education, 65 had studied in university-level education for less than two years, 24 had only their baccalauréat (French school-leaving qualification) and seven had a qualification of a lower level than the baccalauréat). In terms of seniority at work, 141 respondents had been in their posts for less than a year, 79 for between one and two years, 65 for between two and five years, nine for between five and ten years and only ten for more than ten years. Participants were contacted through announcements made at the end of their classes. Once their status had been verified, those who were interested in participating were given an anonymous questionnaire which they could either fill in immediately or return by post. They were informed that they could obtain a summary of the research findings by contacting the researchers. Participants were not remunerated. The anonymity of all participants' information was guaranteed. New principal component analyses were carried out on the data collected from this sample. The results obtained reproduced the factor structure of the first survey and the alpha coefficients were in line with the recommendations offered by Churchill and Peter (1984), so we conclude that the assessment tool is stable (see **Appendix 1**).

### Validation of the assessment tool

A number of authors have suggested direct stress assessment methods (such as Paulhan et al's (1994) single-item scale or Terry's (1994) five-item scale) which have yielded disappointing results (de Ridder, 1997). In light of work by Folkman and Lazarus (1985) stressing a significant change in the development of emotions experienced by individuals faced with stressful events, Carver and Scheier (1994) and Raffety, Smith and Ptacek (1997) used a six-point Likert scale based on the following emotions: worry, anxiety and fear (see **Appendix 1**). We opted for this solution. Turnover intention was assessed using the scale established by McFarlane *et al* (1990) (six-point Likert). This was because the tool has successfully been used (alpha higher than 0.8) in a French-speaking context (Nevey, 1993; Grima, 2004). WSC was assessed using Markel and Frone's (1998) scale.<sup>8</sup> This scale is still deemed by researchers in the field to be the standard for measuring WSC (Butler, 2007; Adebayo, 2006; Adebayo *et al*, 2008). The alpha coefficients reported are high (0.86 to 0.88).

In order to validate this assessment model, we carried out a confir-

8. Details of the scales can be found in Appendix 1.

matory factor analysis (Anderson & Gerbing, 1988). On the basis of our analysis of the individual reliability of the items (SMC <0.5), the modification indexes (>3.84) or standardised residuals led us to omit a number of items.<sup>9</sup> The reliability of the measures (Jöreskog's Rho) and concurrent and discriminant validities (see Tables 1 and 2)<sup>10</sup> were confirmed (Fornell & Larcker, 1981).

9. One example is fatalism item 4, 'I told myself that I had no choice but to resign myself to the situation and accept it', which was omitted because its individual reliability was lower than 0.4. Similarly, the item 'my occupation takes up time that I should give over to my education or work related to it' from Frone and Markel's scale was omitted because its factor contribution was less than 0.6. This could be explained by the double questioning which it involves.

10. In line with the method put forward by Fornell and Larcker (1981).

**Table 1: Assessment model**

Indicators	Latent Variables	$\lambda$	$\rho\xi$	$\rho_{vc}$
Self-accusation 2	Self-accusation	0.818	0.85	0.65
Self-accusation 3		0.838		
Self-accusation 4		0.755		
Confrontation 1	Problem resolution	0.704	0.85	0.66
Confrontation 2		0.852		
Confrontation 3		0.869		
WSC 1	WSC	0.800	0.80	0.50
WSC 2		0.688		
WSC 3		0.671		
WSC 4		0.657		
Escape from reality 2	Escape from reality	0.901	0.89	0.73
Escape from reality 3		0.760		
Escape from reality 4		0.892		
Social support-seeking 1	Social support-seeking	0.891	0.92	0.75
Social support-seeking 2		0.836		
Social support-seeking 3		0.808		
Social support-seeking 4		0.918		
Fatalism1	Fatalism	0.748	0.78	0.54
Fatalism 2		0.641		
Fatalism 3		0.813		
Cognitive repression 1	Cognitive repression	0.781	0.74	0.58
Cognitive repression 2		0.744		
Stress 1	Stress	0.901	0.95	0.86
Stress 2		0.951		
Stress 3		0.936		
Turnover intention 1	Turnover intention	0.791	0.85	0.65
Turnover intention 2		0.686		
Turnover intention 3		0.931		
Chi-square				428
Degrees of freedom				315
Chi-square/df				1.36
Combined P				< 0.001
GFI				0.91
AGFI				0.88
SRMR				0.083
RMSEA				0.035
				(Lower bound) 0.026
				(higher bound) 0.042
TLI				0.97
CFI				0.97

The results of this confirmatory factor analysis warrant more detailed analysis. All  $\lambda$  are above 0.7. In terms of fit indexes, whilst the GFI exceeds 0.9 (0.91), the AGFI is lower (0.88) than the threshold advocated by Didellon and Valette-Florence (1996). It is, however, still above the level recommended by Igalens and Roussel (1998). The complex nature of the assessment model probably explains the relative weakness of this index. Furthermore, the other fit indexes satisfy all the criteria suggested by Hu and Bentler (1999). The reliability of assessments is also confirmed: Jöreskog's Rhos are all above 0.7. We confirmed the concurrent and discriminant validity of the method. Each latent variable shares more than 50% of its variation with each of the assessments, and the average variance extracted ( $\rho_{uc}$ ) for each construct is higher than the square of the correlations which that particular construct shares with the rest.

**Table 2:** Discriminant validities of the model's variables

Aspect	Confrontation	WSC	Stress	Fatalism	Cognitive repression	Self-accusation	Escape from reality	Social support-seeking	Average	Standard deviation
Confrontation	*								3.73	1.55
WSC	0.088	*							3.73	1.29
Stress	0.029	0.070	*						3.90	1.55
Fatalism	0.006	0.039	0.092	*					2.81	1.40
Cognitive repression	0.006	0.001	0.072	0.068	*				3.53	1.47
Self-accusation	0.037	0.003	0.077	0.094	0.005	*			4.17	1.49
Escape from reality	0.041	0.000	0.042	0.008	0.000	0.002	*		2.63	1.60
Social support-seeking	0.041	0.001	0.042	0.008	0.001	0.071	0.011	*	3.61	1.62
Turnover intention	0.000	0.001	0.063	0.016	0.000	0.003	0.001	0.034	4.19	1.69

## Statistical procedures

In order to test hypotheses **H1** and **H2** (a, b, c, d, e and f), we opted for structural equation modelling. The advantage of these methods (unlike regression) is that they make it possible to deal with concurrent estimations of several links of dependence and to incorporate measurement errors into the estimation process (Roussel et al, 2002). We used covariance structure analysis (Amos VI, maximum likelihood estimation) rather than the partial least squares (PLS) method. The distribution of variables was not multi-normal, and so we used a bootstrap ( $n=200$ ). The sample size was sufficient for covariance structure analysis (Roussel et al, 2002). To assess the quality of the data's fit with the theoretical model, two incremental indexes (CFI and TLI), four absolute indexes (GFI, AGFI, SRMR and RMSEA) and a parsimony index ( $\chi^2/df$ )<sup>11</sup> were used (Roussel et al, 2002). For stress's role as a mediator in the link between WSC and turnover intention, we used Baron and Kenny's (1986) method, taking structu-

11. GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index; CFI: Comparative Fit Index; TLI: Tucker Lewis Index; SRMR: Standardised Root Mean Square Residual; RMSEA: Root Mean Square Error of Approximation.

ral equations as a basis (El Akremi, 2006). Four conditions must be brought together: (1) the independent variable (WSC) must have a significant impact upon the dependent variable (turnover intention), (2) the independent variable (WSC) must have a significant impact on the mediating variable (stress), and (3) the mediating variable (stress) must have a significant influence upon the dependent variable (turnover intention) when the influence of the independent variable (WSC) on the dependent variable (turnover intention) is moderate. The fourth condition (4) involves a need to demonstrate that in the regression of the third condition, the regression coefficient of the independent variable (WSC) is not significant. If this is the case, full mediation applies; otherwise, only partial mediation applies. As observed by Chumpitaz, Caceres and Vanhamme (2003), conditions 2 and 3 are crucial if a variable's mediating role is to be confirmed. A small sample (fewer than 500 observations) can, however, fall short of the breadth required to find a significant effect for the first condition (El Akremi, 2006), but in such a case, the mediating effect can still be asserted with no loss of validity despite failure to meet the first condition.

## Findings

The results of this analysis do not stray far from the arguments put forward by a number of authors (Bollen, 1989; Didellon & Valette-Florence, 1996; Hu & Bentler, 1999; Roussel et al, 2002). With the exception of the relationship between cognitive repression and stress, all p-values are significant. Excluding the influence of self-accusation on stress, all the results support our hypotheses. In terms of the fit indexes, we note the relative weakness of the GFI (0.89) and the more considerable weakness of the AGFI (0.87), both of which are sensitive to the models' complexity (Bentler, 1990) but generally confirm the good fit of the assessment model. Bollen (1989) observes that any value which is set a priori leaves room for discussion, and each study involves particular characteristics with which it is crucial to be familiar. The SRMR (0.09; anything above 0.1 indicates considerable residual values, Hu & Bentler, 1999), the chi-square by degrees of freedom (1.569; norm: less than 3) and the RMSEA (0.043; less than 0.05 (Roussel et al, 2002)) are all satisfactory, whereas the TLI (0.95) and the CFI (0.96) are above the limit of 0.9 (Didellon & Valette-Florence (1996).

**Table 3: Results of structural model**

Hypothesis	Independent Variable	Dependent Variable	Structural Links	C.R.	P
H1	Conflict	Stress	0.334	5.485	<0.001
H1	Stress	Turnover Intention	0.215	3.474	<0.01
H 2a	Cognitive repression	Stress	-0.093	-1.526	NS
H 2b	Escape from reality	Stress	-0.182	-3.294	<0.01
H 2c	Social support-seeking	Stress	-0.138	-2.539	<0.05
H 2d	Self-accusation	Stress	+ 0.153	2.669	<0.01
H 2 e	Fatalism	Stress	-0.28	-4.541	<0.05
H 2 f	Confrontation	Conflict	-0.302	-4.328	<0.01
	Variable to be explained	SMC	Multinormal coefficient	108	
			Chi-square	540.159	
	WSC	0.09	Degrees of freedom	343	
			Chi-square/df	1.569	
			Combined P	< 0.001	
	Stress	0.28	GFI	0.89	
			AGFI	0.87	
			SRMR	0.09	
			RMSEA	0.043	
				(Lower bound) 0.036	
				(Higher bound) 0.051	
	Turnover intention	0.05	TLI	0.95	
			CFI	0.96	

Concerning hypothesis **H1**, the test of the mediating role which stress plays in the connection between WSC and turnover intention yields a number of unexpected results. We might conclude that the modest size of the sample used (303 observations) failed to allow condition (1) to be validated (regression coefficient of turnover intention over WSC = 0.105, Student's  $t = -1.573$ ,  $p=0.116$ ). WSC does not affect turnover intention. Condition (2) is met. WSC influences stress (regression coefficient = 0.267, Student's  $t = 4.082$ ,  $p<0.001$ ). This model's fit meets the recommendations of Hu and Bentler (1999) (chi-square/df = 1.629; CFI= 0.99; NFI = 0.98; RMSEA = 0.046). Condition (3) is also validated. There is a correlation between the mediating variable, stress, and the dependent variable, turnover intention (regression coefficient = 0.258, Student's  $t = 4.242$ ,  $p<0.001$ ) whereas the independent variable, WSC, correlates negatively with turnover intention (regression coefficient = -0.176, Student's  $t = -2.675$ ,  $p<0.01$ ). This model is an adequate fit (chi-square/df = 1.649; CFI = 0.98; NFI = 0.97; RMSEA = 0.046). As for condition (4), this result warrants more detailed discussion. Indeed, it seems that the direct link between WSC and turnover intention (negative correlation) and the indirect link between the two via the mediation of stress (positive correlation) contradict one another. This may indicate two very different paths. We might assume, then, that fluctuation in stress levels offers an explanation for this phenomenon. That is why we decided to move on to a multi-group analysis in terms of the level of stress experienced.

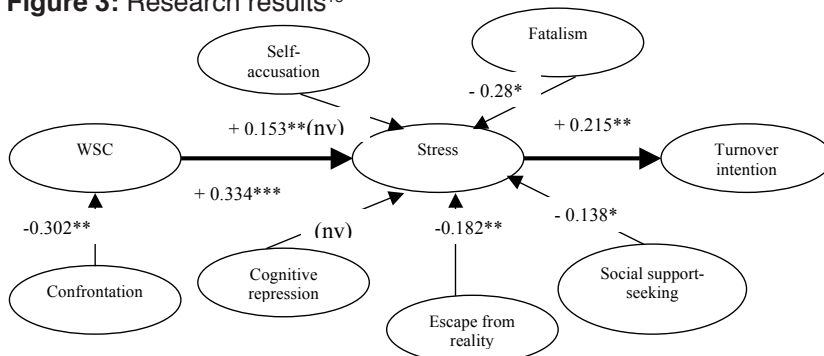
In order to create groups of individuals with different but homogenous stress levels, we used a typological analysis (dynamic cluster method using factor scores). The modest sample size led us to use two groups: one with high stress levels (n = 195) and one with low stress levels (n = 108). The homogeneity of intra-group fluctuations was verified (Levene's test:  $F = 0.703$ ,  $p = 0.403$  for 1 and 301 df).

For the low-stress group, we reject the hypothesis according to which stress plays a mediating role in the relationship between WSC and turnover intention. Condition (1) is met (regression coefficient of turnover intention over WSC = -0.319, Student's  $t = -2.862$ ,  $p = 0.04$ ). WSC is correlated negatively with turnover intention. The model's fit is as follows: chi-square/df = 1.128; CFI = 0.99; NFI = 0.96; RMSEA = 0.02). Condition (2) is not fulfilled: the relationship between WSC and stress is not significant (regression coefficient = 0.06, Student's  $t = 1.337$ ,  $p < 0.181$ ). For this group, we can therefore conclude that stress is not a mediating variable in the link between WSC and turnover intention. There is, however, a direct negative link between WSC and turnover intention.

For the high-stress group, the hypothesis according to which stress acts as a mediator in the link between WSC and turnover intention is supported. Condition (1) is not fulfilled, as the sample size is smaller (regression coefficient of turnover intention over WSC = 0.02, Student's  $t = 0.001$ ,  $p = 0.999$ ). However, condition (2) (regression coefficient of stress over WSC = 0.16, Student's  $t = 2.47$ ,  $p < 0.014$  with a fit of chi-square/df = 1.535, CFI = 0.98, NFI = 0.94, RMSEA = 0.042), condition (3) and condition (4) (regression coefficient of turnover intention over stress = 0.313, Student's  $t = 2.72$ ,  $p < 0.007$ ; regression coefficient of turnover intention over WSC = 0.073, Student's  $t = -0.685$ ,  $p < 0.493$  with a fit of chi-square/df = 1.11; CFI = 0.99; NFI = 0.94; RMSEA = 0.019) are met. The results of condition (4) show that stress is a complete mediator in the link between WSC and turnover intention for the high-stress group. The regression coefficient for turnover intention over WSC in condition (1) is equal to the product of the regression coefficient for stress over WSC in condition (2) and that of turnover intention over stress in condition (3). Furthermore, the regression coefficient of turnover intention over WSC in the first condition is higher than that in the third condition. A Sobel (1982) test<sup>12</sup> allowed the significance of stress's mediating effect between WSC and turnover intention to be established (Sobel test: 1.97;  $p = 0.048$ ).

12. We used Preacher and Leonardelli's (2001) online calculator.

Figure 3: Research results<sup>13</sup>



13. The grey arrow shows the mediating role which stress plays between WSC and turnover intention. 'v' denotes a supported hypothesis, while 'nv' denotes a rejected one.

Hypotheses **H 2b**, **H 2c**, **H 2e** and **H 2f** are therefore supported, whereas hypotheses **H 2a** and **H 2d** are rejected. The analysis of squared multiple correlations (SMC, equal to the  $r^2$  of a regression) shows that the model explains 9% of WSC, 28% of stress and 5% of turnover intention in the short term (before taking the indirect effect into account).

## DISCUSSION AND CONCLUSION

### Our contribution

The aim of this study was to shed light on the way in which the work-school interface is managed, a field which has thus far attracted little scholarly attention in the French-speaking world. We sought to analyse the impact of coping strategies on the stress caused by WSC and to gauge its effects on a key aspect of employees' relations with their workplace, namely turnover intention. The thinking behind our decision to use turnover intention and stress as variables is rooted in their importance in both managerial and academic terms, a role which is reflected in the literature on role conflict (Hang-yue, 2005; Schaubroeck *et al*, 1988; Bédeian & Armenakis, 1981) and work-family conflict (Karatepe & Baddar, 2006; Greenhaus *et al*, 2001). These decisions, which were ultimately of an exploratory nature in the case of WSC, have been partially validated.

The first contribution made by this research has been to demonstrate the complex nature of the link between WSC and turnover intention via the mediating factor of stress. This mediating role is only supported in individuals with high stress levels. This result makes it possible in part to broaden the results' external validity across the various types of role strain which occur. To our knowledge, no empirical study has yet established this relationship in the specific context of WSC, although research on professional role conflict (Kemery *et al*, 1985; Brown & Peterson, 1993; Borgi, 2002), as well as work on the professional-private life interface (Greenhaus *et al*, 2001; Netemeyer *et al*, 2005; Eby *et al*, 2005), has demonstrated this positive correlation between role strain and turnover intention. Nevertheless, Markel and Frone's (1998) conviction that there are similarities between work-, family- and school-related conflict demands a closer look. In low-stress situations, WSC correlates negatively with turnover intention. Whilst this result contradicts work based on the resource-scarcity hypothesis (WSC), it finds meaning in that of the resolution of contradictions (work-school facilitation). Whilst high stress levels can be seen with the expression of an individual's negative assessment of his/her ability to fulfil the requirements of a post and result in higher turnover intention, when stress levels are low, young people do not have the same view of their ability to cope. Far from feeling overwhelmed in this low-stress scenario, people judge the situation to be difficult but not impossible to manage. The negative correlation observed here lends credibility to the idea of the challenge as posited by McRae (1984). For instance, young people can deem their work situation to be an opportunity to test their academic knowledge (Mortimer, 2003). This degree of compatibility develops self-

confidence, self-esteem and a sense of responsibility, and such skills can go on to bolster school performance (William & Alliger, 1994). We could broaden our model's contribution here by integrating the concept of 'positive stress' (McRae, 1984). It seems that stress presents us with two separate options: on the one hand, it is asserted, there are individuals who allow themselves to feel overwhelmed, experience negative stress and struggle to deal with the situation (WSC), and on the other, there are those who see WSC as an opportunity to push themselves and a source of motivation; these people thus experience a positive form of stress (work-school facilitation).

The second contribution made by this work is to demonstrate the impact of coping strategies on WSC management. Whilst the two hypotheses on strategies involving cognitive repression and self-accusation have not been supported, our research does support the other strategies, be they emotion-oriented, to allow emotional disturbance to be managed (escaping from reality, social support-seeking) or the meaning of the event to be changed (fatalism), or problem-oriented (confrontation). Several explanations can be put forward where hypotheses were rejected. Firstly, transactional stress theory does not posit that coping strategies are effective (Folkman, 1984; Carver & Scheier, 1994). Students facing role conflict can develop ineffective strategies (some of which increase stress, as is demonstrated by our results for self-accusation). Moreover, although several researchers have attempted to identify the characteristics of the most effective strategies, Brunel (2002) is regretful of the fact that coping effectiveness has largely been assessed on the basis of meta-strategies rather than specific ones. Data on the effectiveness of the latter remain limited. Finally, work on specific strategies yields contradictory results whenever their development context is overlooked (Gramling et al, 1998). We need to deepen our knowledge of the field and focus upon specifically developed strategies. These circumstances strengthen internal validity but limit its external counterpart.

In more specific terms, the lack of any link between cognitive repression and stress can be explained in a number of ways. It would be advisable to think more carefully about the extent to which the working student is actually able to develop this strategy given that it requires an ability to remove oneself from the stressful circumstance (Billing & Moos, 1984). It is difficult to imagine that this cognitive evasion would be compatible with the demands (time, commitment, involvement, etc) that the joint pursuit of work and school activities imposes (Markel & Frone, 1998). What is more, work and study are linked throughout the academic year and school holidays. Some students see their circumstances deteriorate considerably during the summer season. They must simultaneously manage work commitments, complete the vocational elements of their course (mandatory work experience to obtain the necessary academic credits to complete the year, CES, 2007) and write a dissertation. In all of this, employers' flexibility is often lower than that of universities. With no understanding ear being lent to them and no choice but to cope with the situation, it becomes more difficult for those affected to develop confrontation strategies, despite the fact that our results have shown

such strategies to be effective. Secondly, these results can partly be explained by methodological factors, namely a failure to integrate the temporal dimension. Paulhan (1992, p.547) stresses the 'changing and evolving nature of the coping process'. A longitudinal approach could have generated results which varied depending on the particular 'point' in the academic calendar being assessed.

The ineffectiveness of self-accusation corroborates the findings of a number of studies (Folkman & Lazarus, 1985; Gunthert et al, 1999). This strategy appears to increase stress. Feelings of responsibility for the situation in hand do not allow the employee to avoid feelings of stress, and this is unsurprising given the financial constraints to which working students are subject (CES, 2007). This strategy may be concurrent with difficulties in forgetting the stressful situation.

The effectiveness of strategies involving an escape from reality, fatalism and social support-seeking for emotional purposes is reflected elsewhere. With escape from reality, working students deal with stress by distracting themselves from the cause of the problem. This may appear to be an effective means of containing stress, but whether it has a positive effect on the student's health in the long term is debatable. A number of strategies can exert a direct influence on physical and psychological wellbeing when they are adopted in conjunction with risky behaviour (alcohol abuse, smoking, drug abuse, etc) relating to the escape-from-reality strategy (Paulhan, 1992). A study by the LMDE (France's student health insurance fund) entitled 'Student Health 2005-2006' yields some edifying results: 23% of students are said to consume alcohol once or twice a week, 6% three or four times per week and 1% every day. With fatalism strategies, young people conclude that they are not responsible for a situation in which forces (such as the market) are beyond their control (Stone & Neale, 1984; Carver et al, 1989; McRae, 1984). They accept the intractable nature of the situation without attempting to change it. It would be interesting to establish whether the development of such strategies is time-resistant and whether it constitutes a one-off or lasting tactic. If the latter applies, it may be possible to ascertain whether a personality trait such as pessimism exerts a damaging influence (Paulhan & Bourgeois, 1995). The effectiveness of social support-seeking for emotional purposes (Folkman et al, 1986) confirms the existence of pain relating to the inability to take action regarding the cause of stress. This pain encourages the student to seek interpersonal support, and since this assistance cannot always be granted by the company, the student will sometimes turn to a more protective emotional context.

Finally, although the findings relating to the effectiveness of emotion-oriented adjustment strategies may be contradictory, Lazarus and Folkman (1984) and Aldwin and Revenson (1987) nonetheless demonstrate that problem-oriented strategies are effective. These are even deemed to be 'adaptive' (Raffety et al, 1997): they are said to allow the stressful situation to be altered and thereby permit students' living conditions to be bettered. In our case, for example, a student could take action regarding the cause of stress by altering his/her working hours and thereby making WSC less perceptible. From a management point of

view, taking WSC into account in emotional and practical terms would probably make it possible to increase the motivation and loyalty of the staff in question.

### **Limitations of the study**

It is necessary to underscore a number of shortcomings on the part of our study. The most significant of these is the fact that we did not adopt a longitudinal approach, which would have allowed fluctuations in work-school role strain and stress to be gauged. By drawing upon a methodological logic which took temporal progression into account, it would be easier to shed light on the effect of strain and stress over a given period. Coping strategies could also then be assessed over time. Whilst it is useful to broaden the field of WSC research beyond the North-American context, the decision to use students living in the Parisian suburbs imposes just as many limitations on extracting generalisations from our findings. The homogeneity of our sample, along with the importance of taking context into account when analysing means of coping with stress, leads us to issue a word of warning regarding the external validity of our study. Research based on an international sample of working students would doubtless shed interesting light on the field. More precisely, it seems that our sample can be compared with those of Butler (2007) and Markel and Frone (1998) in terms of gender distribution (two thirds women and one third men), but our sample has a higher average age (over 20, compared with 20.75 years for Butler and 17.71 for Market and Frone). The cases of Adebayo (2006) and Adebayo et al (2008) were different in that their students were in full-time employment and were particularly senior (36.8 and 36.45 years old respectively). In light of this, it does not seem that we can easily explain our findings on the basis of the characteristics of our sample. Although the model achieved a good fit with the data, only a moderate proportion of the variance in concepts used (9% of WCS, 28% of stress and 5% of turnover intention, with this last figure increasing to almost 9% if the direct negative relationship between WSC and turnover intention is incorporated) was explained. This result demonstrates the importance of WSC, but also highlights the need to suggest new variables for our model. This finding is still worthy of note, however, if we take into account that turnover intention is likely to be triggered by a multitude of factors (lack of interest, working conditions, job opportunities, professional and domestic life cycle, etc).

### **Implications and avenues for future research.**

Our research has implications both for the academic and management branches of our field. Where scholarship is concerned, this study makes an original contribution to existing empirical work by examining the consequences of WCS from a professional rather than an academic perspective. We believe that it would be useful to pursue this line of research further by taking in other concepts which have already been discussed in work on other types of role conflict. Bearing in mind the strong links between professional role strain and both organisatio-

nal commitment and job satisfaction, future research on WSC should embrace those concepts. Tests for structural models such as that put forward by Brown and Peterson (1993) seem to us to constitute a promising avenue for research, as this line of thought offers a synthetic approach which links turnover intention to organisational commitment, job satisfaction and performance.

Elsewhere, like Butler's (2007) work, this article is relevant to research on role conflict in general. It demonstrates the existence of coping strategies and their partial effectiveness. The individual, far from being a passive figure, can cope effectively. In this case, in light of the significant influence exerted by context in this field, which presents obstacles to successful generalisation, it seems that coping, be it problem- or emotion-oriented, does yield results. However, it would be useful to gain a deeper understanding of coping, and this could be done in a number of ways.

One option would be to establish a longitudinal research programme which would make it possible at once to check the stability of coping strategies and to examine their functioning as the stressful situation developed. A second avenue would involve striving to integrate the temporal aspect and completing it by taking into account the resources which the individual might use in order to cope. It seems that social support, perceived control over the conditions of the stressful situation and a number of personal variables such as self-esteem or site of control may be of interest. Finally, it would be fruitful to compare cases in which students prioritise work over studies and vice versa. In each of these cases, the most effective strategies could be discerned. With a view to this, it may be very enlightening to consider the reasons why students take on paid work. A survey entitled 'Living Conditions' and carried out in 2006 by the Observatoire de la Vie Etudiante in France stressed that French students' financial means amount on average to €582 per month, and 42% of this comes from remuneration for work. It therefore seems that it would be useful to distinguish between different sets of circumstances according to the proportion of the student's overall budget which comes from paid work, as well as taking into account other motivating factors such as social acclaim or a desire to gain insight into the world of work.

In management terms, this study demonstrates how important it is for companies to detect WSC as early as possible so as to take it in hand before the turnover behaviour which would be detrimental to both parties begins to surface. Barling et al (1995) referred to the importance of the quality and quantity of work in the way in which this type of role conflict arises and how serious it goes on to become. It seems equally important to us, however, to look at how universities tackle the problem. Whilst employers seek to adapt to the requirements of this sector of the workforce by offering mainly weekend hours and the state exempts student incomes from taxation so as to bolster their financial position, universities have yet to contribute to this overall tendency despite being at the heart of the system in question.

Unlike in North America, French universities make few changes to timetables with a view to accommodating human-resource management issues. Similarly, distance or e-learning courses are not particularly ad-

vanced in France for the first few years of higher education; meanwhile, postgraduate courses of this type have enjoyed greater success, but have still not become widespread. Moreover, a number of French universities have developed work-based courses through the French system of apprenticeships,<sup>14</sup> which consists in attaching each student to a particular employer with a contract which combines work with training. Employers have welcomed this scheme because, on the one hand, the assistance and tax benefits which it brings make the apprentices' labour inexpensive and, on the other hand, the scheme involves a trial period which is long enough (generally at least one year) for future employees to be spotted. However, the number of French universities having joined the scheme is still low, as French academics still believe that the training obtained through it is inferior (in academic terms) and that students opting for this route are less able to think. In the French universities which are most heavily involved in the scheme, 10% of staff have joined, but many institutions, and often the most prestigious ones, offer no such programme.

Be that as it may, experience tends to show that, firstly, many students would leave the university system sooner if the apprenticeship scheme were not in place and, secondly, far from being a handicap as is often assumed when selection procedures for training programmes are underway, coping with WSC often stands out as a sign that young students are committed to and serious about their undertakings. An increasing number of employers deem this scheme to be educationally fruitful in that it instils a sense of maturity in young people by offering them exposure to real-life experiences, particularly where organising work and performance requirements is concerned. Training institutions should follow suit, accepting that this experience is a true asset and that it tells of an ability to adapt unflinchingly to changes at work despite the stress which role conflict brings about.

**Acknowledgements** : We extend our thanks to the three anonymous reviewers for the quality of their recommendations. We want to thank as well the editor, Louis Hébert, for his patience, the encouragements, the quality and the rigor of his work.

**Olivier BRUNEL** is assistant professor at the university Lyon 3. Since his PhD in marketing, his research interests focus on the study of decision processes of individuals facing contradictory choice situations. This, in particular, includes the stress and its management both in contexts of consumption and within the company.

**François GRIMA** is assistant professor at the UPEC and is associated professor at RMS. His research domains concern, in particular, the management of role conflicts regarding their consequences and the management strategies developed by both the employees and the companies.

14. The French law which governs apprenticeships requires that apprentices be younger than 26 when the programme begins. The apprentice must have a work contract, be paid on the basis of a percentage (no greater than 75%) of the minimum wage for the longest training programmes and spend the majority of their working hours at work and the remainder studying.

## BIBLIOGRAPHY

- Adebayo, D.O. (2006). Workload, Social Support, and Work-School Conflict among Nigerian Non-traditional Students. *Journal of Career Development, 33*(2), 125-141.
- Adebayo, D.O., Sunmola, A.M., & Udegbe, I.B. (2008). Subjective Wellbeing, Work-School Conflict and Proactive Coping among Nigerian Non-Traditional Students. *Career Development International, 13*(5), 440-455.
- Aldwin, C.M., & Revenson, T.A. (1987). Does Coping Help ? A Re-Examination of the Relation Between Coping and Mental Health. *Journal of Personality and Social Psychology, 53*, 337-348.
- Anderson, J.C., & Gerbing, D.W. (1988). Structural Equation Modelling in Practice: a Review and Recommended Two-Step Approach. *Psychological Bulletin, 103*(3), 411-423.
- Ashforth, B.E., Kreiner, G.E., & Fugate, M. (2000). All in a Day's Work: Boundaries and Micro Role Transitions. *Academy of Management Review, 25*(3), 472-491.
- Barling, J., Rogers, K.A., & Kelloway, E.K. (1995). Some Effects of Teenagers' Part-Time Employment: The Quantity and Quality of Work Make The Difference. *Journal of Organizational Behavior, 16*, 143-54.
- Baron, R.M., & Kenny, D.A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bedeian, A.G., & Armenakis, A.A. (1981). A Path-Analytic Study of the Role Consequences of Role Conflict and Ambiguity. *Academy of Management Journal, 24*(2), 417-424.
- Beehr, T.A., & Newman, J.E. (1978). Job Stress, Employee Health and Organizational Effectiveness: a Fact Analysis Model and Literature Review. *Personnel Psychology, 23*(4), 234-254.
- Beehr, T.A., & McGrath, J.E. (1996). The Methodology of Research And Coping: Conceptual, Strategic And Operational-Level Issues, in M. Zeidner & N.S. Endler (Eds), *Handbook of Coping, Theory, Research, Applications* (pp. 64-82), New-York : John Wiley and sons.
- Benson, J., & Hagtvet, K.A. (1996). The Interplay Among Design, Data Analysis, And Theory In The Measurement of Coping, in M. Zeidner & N.S. Endler (Eds), *Handbook of Coping, Theory, Research, Applications* (pp. 64-82), New-York : John Wiley and sons.
- Bentler, P.M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin, 107*(2), 238-246.
- Billings, A.G., & Moos, R.H. (1984). Coping, Stress, and Social Resources among Adults with Unipolar Depression. *Journal of Personality and Social Psychology, 46*(4) 877-891.
- Bolger, N. (1990). Coping as a Personality Process: a Perspective Study. *Journal of Personality and Social Psychology, 59*(3), 525-537.
- Bollen, K.A. (1989). A New Incremental Fit Index for General Structural Equation Models. *Sociological Methods and Research, 17*, 303-316.
- Borgi, S. (2002). L'influence des perceptions de rôles sur l'intention de départ volontaire chez les commerciaux. *Revue de Gestion des Ressources Humaines, 44*(avril-juin), 80-95.
- Brown, S.P., & Peterson, R.A. (1993). Antecedents and Consequences of Salesperson Job Satisfaction: Meta-Analysis and Assessment of Causal Effects. *Journal of Marketing Research, 30*, Février, 63-77.
- Brunel, O. (2002). *Les stratégies d'ajustement au risque alimentaire, modèle théorique et test empirique*. Thèse de doctorat, Université Lyon 3.
- Butler, A.B. (2007). Job Characteristics and College Performance and Attitudes: a Model of Work-School Conflict and Facilitation. *Journal of Applied Psychology, 92*(2), 500-510.
- Butler, S.R., & Snizek, W.I. (1976). The Waitress-Diner Relationship: a Multivariate Approach To The Study of Subordinate Influence. *Sociology of Work and Occupation, 3*, 207-222.
- Byod, N.G., Lewin, J.E., & Sager, J.K. (2009). A Model of Stress and Coping and Their Influence on Individual and Organizational Outcomes. *Journal of Vocational Behavior, 75*, 197-211.

- Canabal, M.E. (1998). College Student Degree of Participation in the Labor Force: Determinants and Relationship To School Performance. *College Student Journal*, 32, 597-605.
- Carver, C.S., & Scheier, M.F. (1994). Situational Coping and Coping Dispositions in a Stressful Transaction. *Journal of Personality and Social Psychology*, 66(1), 184-195.
- Carver, C.S, Scheier, M.M, & Weintraub, J.K. (1989). Assessing Coping Strategies: a Theoretically Based Approach. *Journal of Personality and Social psychology*, 56(2), 267-283.
- Centre d'études et de recherches sur les qualifications (Céreq) (2001). *Quand l'école est finie... premiers pas dans la vie active de la Génération 98*. Paris : Edition Céreq.
- Chip, P-E., & Scherer, E. (1992). Les comportements de coping: étude de leur structure théorique et élaboration d'une échelle en français. *Revue Européenne de Psychologie Appliquée*, 42(4), 285-294.
- Christensen, A.J., Smith, T.W., Turner, C.W., Holman, J.M., & Gregory, M.C. (1990). Type of Hemodialysis and Preference For Behavioural Involvement: Interactive Effects on Adherence in End-Stage Renal Disease. *Health Psychology*, 9, 225-236.
- Chumpitaz Caceres, R., & Vanhamme, J. (2003). Les processus modérateurs et médiateurs : distinction conceptuelle, aspect analytiques et illustrations. *Recherche et Applications en Marketing*, 18, 67-100.
- Churchill, G.A., Peter, J.P. (1984). Research Design Effects on the Reliability of Rating Scales: a Meta-Analysis, *Journal of Marketing Research*, 21(4), 360-375.
- Churchill, G.A. (1979). a Paradigm For Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16, February, 64-73.
- Collins, D.L., Baum, A., & Singer, J.E. (1983). Coping With Chronic Stress at Three Mile Island : Psychological and Biochemical Evidence. *Health Psychology*, 2, 149-166.
- Conseil Economique et Social (CES) (2007). Rapport sur le travail des étudiants.
- Costa, P., Somefield, M., & McRae, R.R. (1996). Personality and Coping: a Reconceptualization, in M. Zeidner & N.S. Endler (Eds), *Handbook of Coping, Theory, Research, Applications* (pp. 44-63), New-York : John Wiley and sons.
- Courpasson, D. (1995). Eléments pour une sociologie de l'action commerciale: les paradoxes de la modernisation dans la banque. *Sociologie du Travail*, 1, 135-172.
- Cox, T., Griffiths, A., & Rial-Gonzalez, E. (2000). Research on Work-Related Stress. European Agency for Safety and Health at Work.
- De Ridder, D.D. (1997). What Is Wrong With Coping Assessment? A Review of Conceptual and Methodological Issues. *Psychology and Health*, 12, 417-431.
- Didellon, L., & Valette-Florence, P. (1996). L'utilisation des indices d'ajustement dans les modèles d'équation structurelles: présentation et recommandations d'usage. Acte des XIIème journées des IAE, 111-125.
- Eby, L.T., Casper, W.J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and Family Research in IO/OB: Content Analysis and Review of the Literature (1980-2002). *Journal of Vocational Behavior*, 66, 124-197.
- Edwards, J.R., & Rothbard, N.P. (2000). Mechanisms Linking Work and Family: Clarifying The Relationship Between Work and Family Constructs. *Academy of Management Review*, 25, 1, 178-99.
- El Akremi, A. (2006). Analyse des variables modératrices et médiatrices par les méthodes d'équations structurelles, dans Roussel, P., & Wacheux, F. *Management des ressources humaines* (2006), Bruxelles, de Boeck.
- Endler, N.S., & Parker, J.D.A. (1990). Multidimensional Assessment of Coping: a Critical Evaluation. *Journal of Personality and Social Psychology*, 58(5), 844-854.
- Feifel, H., & Starck, S. (1989). Coping With Conflict Situations: Middle-Aged and Elderly Men. *Psychology and Aging*, 4, 1, 26-33.

- Felton, B.J., & Revenson, T.A. (1987). Age Differences in Coping with Chronic Illness. *Psychology and Aging*, 2, 164-170.
- Fisher, C.D., & Gitelson, R. (1983). A Meta-Analysis of The Correlates of Role Conflict and Ambiguity. *Journal of Applied Psychology*, 68(2), 320-333.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R.J. (1986). Dynamic of a Stressful Encounter: Cognitive Appraisal, Coping and Encounter Outcomes. *Journal of Personality and Social Psychology*, 50(5), 992-1003.
- Folkman, S. (1984). Personal Control and Stress and Coping Processes: a Theoretical Analysis. *Journal of Personality and Social Psychology*, 46(4), 839-852.
- Folkman, S., & Lazarus, R.S. (1980). An Analysis of Coping in a Middle-Aged Community Sample. *Journal of Health and Social Behavior*, 21, 219-239.
- Folkman, S., & Lazarus, R.S. (1985). If It Changes It Must Be a Process: Study of Emotion and Coping During Three Stages of a College Examination. *Journal of Personality and Social Psychology*, 48(1), 150-170.
- Folkman, S., & Lazarus, R.S. (1988). Coping As a Mediator of Emotion. *Journal of Personality and Social Psychology*, 54(3), 446-475.
- Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models With Unobservable and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Frone, M.R., Russell, M., & Barnes, G.M. (1992). Antecedents and Outcomes of Work-Family Conflict: Testing a Model of the Work-Family Interface. *Journal of Applied Psychology*, 77, 65-78.
- Gerbing, D.W., & Anderson, J.C. (1988). An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment. *Journal of Marketing Research*, 25, 186-192.
- Glaser, B.G., & Strauss, A.L. (1967). The Discovery of Grounded Theory, Chicago: Aldine.
- Gramling, L.F., Lambert, V.A., & Pursley-Crotteau, S. (1998). Coping in Women: Theoretical Introduction. *Journal of Advanced Nursing*, 28(5), 1082-1091.
- Greenhaus, J.H., & Beutell, N.J. (1985). Sources of Conflict Between Work and Family. *Academy of Management Review*, 10, 76-88.
- Greenhaus, J.H., & Powell, G.N. (2006). When Work and Family Are Allies: a Theory of Work-Family Enrichment. *Academy of Management Review*, 31, 72-92.
- Greenhaus, J.H., Parasuraman, S., & Collins, K.M. (2001). Career Involvement and Family Involvement As Moderators of Relationships Between Work-Family Conflict and Withdrawal From a Profession. *Journal of Occupational Health and Psychology*, 6(2), 91-100.
- Grima, F. (2004). Faire face au conflit de rôle: analyse des stratégies d'ajustement des responsables de formation professionnelle continue. *Revue de Gestion des Ressources Humaines*, 52, 47-62.
- Gunthert, K.C., Cohen, L.H., & Armeli, S. (1999). The Role of Neuroticism in Daily Stress and Coping. *Journal of Personality and Social Psychology*, 77(5), 1087-1100.
- Hang-yue, N., Foley, S., & Loi, R. (2005). Work Role Stressors and Turnover Intentions: a Study of Professional Clergy in Hong Kong. *International Journal of Human Resource Management*, 16(11), 2133-2146.
- Hobfoll, S.E. (2002). Social and Psychological Resources and Adaptation. *Review of General Psychology*, 6(4), 307-324.
- Holahan, C.J., & Moos, R.H. (1991). Life Stressors, Personal and Social Resources, and Depression : a 4 - Year Structural Model. *Journal of Abnormal Psychology*, 100, 31-38.
- Hu, L.T., & Bentler, P.M. (1999). Cut-off Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modelling*, 6, 1-55.

- Igalens, J., & Roussel, P. (1998). *Méthodes de recherche en gestion des ressources humaines*, Paris : EconomicA.
- Jackson, S.E., & Schuler, R.S. (1985). a Meta-Analysis and Conceptual Critique of Research on Role Ambiguity and Role Conflict in Working Setting. *Organizational Behavior and Human Decision Processes*, 36, 16-78.
- Jennings, J.E., & McDouglad, M.S. (2007). Work-Family Interface Experiences and Coping Strategies: Implications For Entrepreneurship Research and Practice. *Academy of Management Review*, 32(3), 747-760.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., & Snook, J.D. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity*, New York : J. Wiley & Sons.
- Kahn, R.L., & Byosiére, P. (1992). Stress in Organizations, in M. Dunnette & L. Hough (Eds), *Handbook of Industrial and Organizational Psychology* (3) (pp. 571-650), Palo Alto, CA: Consulting Psychologists Press.
- Karasek, R., & Theorell, T. (1990). *Healthy Work: Stress, Productivity and the Reconstruction of Working Life*, New York, Basic Books.
- Karatepe, O.M., & Baddar, L. (2006). An Empirical Study of the Selected Consequences of Frontline Employees' Work-Family Conflict and Family-Work Conflict. *Tourism Management*, 27, 1017-1028.
- Kemery, E.R., Bedeian, A.G., Mossholder, K.W., & Touliatos, J. (1985). Outcomes of Role Stress: a Multisample Constructive Replication. *Academy of Management Journal*, 28, 363-375.
- Kirchmeyer, C. (1993). Nonwork-To-Work Spill over: Challenging The Common View of Conflict-Ridden Domain Relationships. *Basic and Applied Social Psychology*, 13, 231-249.
- Kohn, P.M. (1996). On Coping Adaptively With Daily Hassles, in M. Zeidner & N.S. Endler (Eds), *Handbook of Coping, Theory, Research, Applications* (pp. 182-201), New-York : John Wiley and sons.
- Krahn, H. (1991). Youth Employment, in R. Barnhorst & L. Johnson (Eds), *The State of The Child in Ontario*, 139-159, Toronto, Oxford University Press.
- La Mutuelle Des Etudiants (LMDE) (2007), *La santé des étudiants 2005-2006*, Paris.
- Lazarus, R.S., & Folkman, S. (1984). Emotions and Adaptation: Conceptual and Empirical Relations, University of Nebraska Press, in Nebraska symposium on motivation, 175-266.
- Lepore, S.J., Evans, G.H. (1996). Coping With Multiple Stressors in the Environment, in M. Zeidner & N.S. Endler (Eds), *Handbook of Coping, Theory, Research, Applications* (pp. 350-377), New-York : John Wiley and sons.
- Major, B., Richards, C., Cooper, M.L., Cozzarelli, C., & Zubeck, J. (1998). Personal Resilience, Cognitive Appraisals, and Coping: An Integrative Model of Adjustment to Abortion. *Journal of Personality and Social Psychology*, 74(3), 735-752.
- Markel, K.S., & Frone, M.R. (1998). Job Characteristics, Work-School Conflict, and School Outcomes among Adolescents: Testing a Structural Model. *Journal of Applied Psychology*, 83, 277-287.
- Marks, S.R. (1977). Multiple Roles and Role Strain: Some Notes on Human Energy, Time, and Commitment. *American Sociological Review*, 42, 921-936.
- McFarlane-Shore, L., Newton, L.A., & Thornton, G.C. (1990). Job Organizational Attitudes in Relation To Employee Behavioural Intentions. *Journal of Organizational Behavior*, 2, 57-67.
- McRae, R.R. (1984). Situational Determinants of Coping Responses: Loss, Threat, and Challenge. *Journal of Personality and Social Psychology*, 46(4), 919-928.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis. an Expanded Sourcebook*, Second Edition, London: Sage.
- Mortimer, J.T. (2003). *Working and Growing Up in America*. Cambridge MA: Harvard University Press.

- Mortimer, J.T., Lorence, J., & Kumka, D.S. (1986). Work, Family and Personality; Transition To Adulthood, Norwood : Ablex Publishing.
- Naumann, E., Widmier, S.M., & Jackson, D.W. (2000). Examining the Relationship between Work and Propensity To Leave Among Expatriate Sales People, *Journal of Personal Selling & Sales Management*, 20(4), 227-241.
- Netemeyer, R.G., Brashear-Alejandro, T., & Boles, J.S. (2004). A Cross-National Model of Job-Related Outcomes of Work Role and Family Role Variables: a Retail Sales Context. *Journal of the Academy of Marketing Science*, 32(1), 49-60.
- Netemeyer, R.G., Maxham, J.G., & Pullig, C. (2005). Conflicts in the Work-Family Interface: Links to Job Stress, Customer Service Employee Performance, and Customer Purchase Intent. *Journal of Marketing*, 69, 130-143.
- Neveu, J-P. (1993). L'intention de départ volontaire chez le cadre: contribution à l'étude du roulement du personnel. Thèse de Doctorat, Université de Toulouse 1.
- Observatoire de la Vie Étudiante (OVE) (2006). Conditions de vie.
- Paulhan, I. (1992). Le concept de coping. *L'année Psychologique*, 92, 545-557.
- Paulhan, I., & Bourgeois M. (1995). Stress et coping, les stratégies d'ajustement à l'adversité, Paris : PUF.
- Paulhan, I., Nuissier J., Quintard B., Cousson F., & Bourgeois, M. (1994). La mesure du coping. Traduction et validation française de l'échelle de Vitaliano, *Annales Médicales de Psychologie*, 152(5), 292-299.
- Pearlín, L.I., & Schooler, C. (1981). The Structure of Coping. *Journal of Health and Social Behavior*, 19, 2-21
- Perrot, S. (2001). L'entrée dans l'entreprise des jeunes diplômés, Paris, Economica.
- Preacher, K.J., & Leonardelli, G.J. (2001). Calculation for the Sobel test: an interactive calculation tool for mediation tests (Computer software). <http://www.unc.edu/preacher/sobel/sobel.htm>.
- Quivy, R., & Van Campenhoudt, L. (1995). *Manuel de recherche en sciences sociales*, Paris : Dunod.
- Rafaëli, A. (1989). When Cashiers Meet Customers: An Analysis of The Role of Supermarket Cashiers. *Academy of management Journal*, 32, 245-273.
- Raffety, B.D., Smith, R.E., & Ptacek, J.T. (1997). Facilitating and Debilitating Trait Anxiety: Trait Anxiety, Situational Anxiety, and Coping With An Anticipated Stressor : a Process. *Journal of Personality and Social Psychology*, 72(4), 492-506.
- Rivolier, J. (1989). *L'homme stressé*, Paris : PUF.
- Roussel, P., Durrieu, F., Campoy, E., & El Akremi, A. (2002). *Méthodes d'équations structurelles : Recherche et Applications en Gestion*, Paris : Economica.
- Schaubroeck, J, Cotton, J.L., & Jennings, K.R. (1989). Antecedents and Consequences of Role Stress: a Covariance Structure Analysis. *Journal of Organizational Behavior*, 10, 35-58.
- Sieber, S.D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39, 567-578.
- Sobel, M.E. (1982). Asymptotic Confidence Intervals For Indirect Effects in Structural Equation Models, in S. Leinhardt (Eds), *Sociological Methodology* (pp. 290-312), Washington: American Sociological Association.
- Steinberg, L., & Cauffman, E. (1995). The Impact of Employment on Adolescent Development. *Annals of Child Development*, 11, 131-166.
- Steinberg, L., Fegley, S., & Dornbusch, S.M. (1993). Negative Impact of Part-Time Work on Adolescent Adjustment: Evidence from a Longitudinal Study, *Developmental Psychology*, 29, 171-180.
- Stone, A.A., & Neale, J.M. (1984). New Measure of Daily Coping: Development and Preliminary Results. *Journal of Personality and Social Psychology*, 46(4), 892-906.

- Tannock, S., & Flocks, S. (2003).  
"I Know what it's Like To Struggle": The Working Lives of Young Students in An Urban Community College. *Labor Studies Journal*, 28(1), 1-30.
- Terry, D.J. (1994).  
Determinants of Coping: The Role of Stable and Situational Factors. *Journal of Personality and Social Psychology*, 65(5), 895-910.
- Tett, R.P., & Meyer, J.P. (1993).  
Job Satisfaction, Organizational Commitment, Turnover Intention, and Turnover: Path Analyses Based on Meta-Analytic Findings. *Personnel Psychology*, 46, 259-293.
- Thoits, P.A. (1991).  
On merging identity theory and stress research. *Social Psychology Quarterly*, 54(2), 101-112.
- Trockel, M.T., Barnes, M.D., & Egget, D.L. (2000).  
Health-Related Variables and Academic Performance among First Year College Students: Implications For Sleep and Other Behaviors. *Journal of American College Health*, 49, 125-131.
- Tubre, T.C., & Collins, J.M. (2000).  
Jackson and Schuler (1985) Revisited: a Meta-Analysis of The Relationships Between Role Ambiguity, Role Conflict, and Job Performance. *Journal of Management*, 26(1), 155-169.
- Williams, K., & Alliger, G. (1994).  
Role Stressors, Mood Spillover, and Perceptions of Work-Family Conflict in Employed Parents. *Academy of Management Journal*, 37, 837-868.
- Zeidner, M., & Saklofske, D. (1996).  
Adaptative and Maladaptive Coping, in M. Zeidner & N.S. Endler (Eds), *Handbook of Coping, Theory, Research, Applications* (pp. 505-531), New-York : John Wiley and sons.
- Zierold, K.M., Garman, S., & Anderson, H.A. (2005).  
A Comparison of School Performance and Behaviors Among Working and Nonworking High School Students. *Family Community Health*, 28(3), 214-224.

**APPENDIX 1:**<sup>15</sup> Exploratory Factor Analyses

Aspects	To manage the stress associated with my difficulties in reconciling work expectations with study-related demands...	$\lambda$	$\alpha$
Self-accusation 1	I thought that I had brought the situation about myself	0.855	0,84
Self-accusation 2	I realised that I had brought the problem about myself	0.801	
Self-accusation 3	I told myself that, all in all, I had been asking for it	0.672	
Self-accusation 4	I thought that I had had something to do with it	0.714	
Escape from reality 1	I dreamed up a fantasy world to forget the real one	0.832	0,88
Escape from reality 2	I focused on fictitious elements or fantasies to feel good	0.863	
Escape from reality 3	I took refuge in an imaginary world	0.792	
Escape from reality 4	I dreamed of a better world to comfort myself	0.797	
Fatalism 1	I resigned myself to the situation	0.771	0,78
Fatalism 2	I told myself that there was nothing I could do about it	0.761	
Fatalism 3	I told myself that I had no choice but to resign myself to the situation and accept it	0.796	
Cognitive repression 1	I did all I could to avoid thinking about this problem	0.768	0,73
Cognitive repression 2	I avoided thinking about this problem too much	0.862	
Confrontation 1	I fought to overcome the situation	0.790	0,91
Confrontation 2	I did all I could to overcome this difficult situation	0.831	
Confrontation 3	I poured all my energy into resolving the problem	0.796	
Social support-seeking 1	I spoke about my problem with my family	0.774	0,91
Social support-seeking 2	I sought comfort from those close to me	0.857	
Social support-seeking 3	I explained my problem to those close to me	0.836	
Social support-seeking 4	I sought support from those around me	0.917	
Social support-seeking 5	I sought comfort in my immediate environment	0.908	
		Kaiser-Meyer-Olkin measure of sampling	0.807
		Bartlett's test of sphericity: approximate chi-square	2938.69
		Bartlett's test of sphericity: df	210
		Bartlett's test of sphericity: significance	Lower than 0.001
		% of variance explained	70.417
Oblimin rotation with Kaiser normalisation			

15. The scales used for all constructs are six-point Likert scales.

## Stress

Aspects	Working while studying or training makes me feel ...	$\lambda$	$\alpha$
Stress 1	Worried	0.802	
Stress 2	Anxious	0.862	0,88
Stress 3	Frightened	0.746	
	Kaiser-Meyer-Olkin measure of sampling	0.780	
	Bartlett's test of sphericity: approximate chi-square	754,16	
	Bartlett's test of sphericity: df	6	
	Bartlett's test of sphericity: significance	<0,001	
	% of variance explained	74,028	

## Turnover Intention

Aspects	On the subject of my professional workload, I can say that (please answer all questions by ticking only one box per statement)	$\lambda$	$\alpha$
Turnover intention 1	I am planning to look actively for a new job in the coming year.	0.89	
Turnover intention 2	I often think about resigning.	0.82	0.84
Turnover intention 3	I will probably look for a new job in the coming year.	0.92	
	Kaiser-Meyer-Olkin measure of sampling	0.682	
	Bartlett's test of sphericity: approximate chi-square	427	
	Bartlett's test of sphericity: df	3	
	Bartlett's test of sphericity: significance	0.000	
	% of variance explained	76.70	

## WSC

Aspects	On the subject of my professional workload, I can say that (please answer all questions by ticking only one box per statement)	$\lambda$	$\alpha$
WSC 1	I am tired when I go to classes because of my work	0.836	
WSC 2	The demands and responsibilities which come with work interfere with my school or university work	0.771	
WSC 3	I spend less time studying and working for study reasons because of my job	0.779	0.84
WSC 4	I think about my job a lot while I am in study-related activities	0.767	
	Kaiser-Meyer-Olkin measure of sampling	0.764	
	Bartlett's test of sphericity: approximate chi-square	344.88	
	Bartlett's test of sphericity: df	6	
	Bartlett's test of sphericity: significance	<0.001	
	% of variance explained	62.223	