



**HAL**  
open science

# Work and the future as represented by French adolescents: the role of secondary school type and anticipated duration of post-secondary education

Isabelle Soidet, Lucie Bonnefoy, Isabelle Olry-Louis

## ► To cite this version:

Isabelle Soidet, Lucie Bonnefoy, Isabelle Olry-Louis. Work and the future as represented by French adolescents: the role of secondary school type and anticipated duration of post-secondary education. *International Journal for Educational and Vocational Guidance*, 2022, 10.1007/s10775-022-09575-7 . hal-03875027

**HAL Id: hal-03875027**

**<https://hal.science/hal-03875027v1>**

Submitted on 28 Nov 2022

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

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

**Work and the future as represented by French adolescents:  
the role of secondary school type and anticipated duration of post-secondary education**

**Isabelle Soidet\*, Lucie Bonnefoy\*, and Isabelle Olry- Louis\***

\* Department of Psychology, University Paris Nanterre, Nanterre, France.

**Corresponding author:** Isabelle Soidet, [isoidet@parisnanterre.fr](mailto:isoidet@parisnanterre.fr),

**ORCID :** I. SOIDET : 0000-0002-1411-4151; L. BONNEFOY : 0000-0002-1135-4563; I. OLRYS-LOUIS :  
0000-0003-0649-282X

**Abstract**

This study, conducted in France, sought to describe the organization of the content of social representations that secondary-school students undergoing transitions constructed of work and their own future, taking two variables into account: their type of secondary school and the anticipated duration of their post-secondary education. 669 adolescents enrolled at three types of secondary schools were recruited. They were given two free-association tasks (with the inductors “work” and “your future”). Our results highlight the place occupied by money and post-secondary education in all of the representations, which seem to constitute new social norms for them. Revealing specific organizations of social representations according to secondary school type and to the anticipated duration of post-secondary education, they underscore the advantage of taking this subjective variable into account to better understand the place occupied by contemporary uncertainties and to more successfully integrate the variable into support aimed at helping students plan their transitions.

**Key words**

Future, work, social representations, adolescents, uncertainty

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

The issue of the growing uncertainty individuals feel when faced with academic and professional choices (Kalleberg, 2009) has become central in a world that is losing its bearings. Yet, even in an “age of uncertainty” (Blustein, 2019), it is still under-documented, particularly when it comes to adolescents and emerging adults (Gutman et al., 2012; Gutman & Schoon, 2012; Lechner et al., 2016), for whom constructing academic and professional aspirations is one of the most important developmental tasks (Arnett, 2007; Schoon & Silbereisen, 2009; Young et al., 2001). In what terms do young people subject to this uncertain social context, who will soon have to plan their future working life, develop their representations of work and their future (Roussiau & Le blanc, 2001)? This question is particularly crucial given that representations of the future are now viewed as giving meaning to the present (Baumeister et al., 2016) and influencing academic and career choices (Savickas, 2005).

While young people's expectations have been mainly understood by vocational psychology from the point of view of the professions targeted or represented (Guichard, 1993), the speed with which professional activities are evolving and transforming encourages us to rethink this traditional conceptual and intervention-based framework (Masdonati & Rossier, 2021). Today, the issue of work becomes most prominent, first of all as an empirical object to be documented among young people, whether from the perspective of work activity (Soidet et al., 2018), relationships to work (Masdonati et al., 2016), decent work (Cohen-Scali et al., 2020), the meaning given to work (Steger et al., 2016) or the sustainability of careers being considered (De Vos et al., 2020). But the notion of work is also the cornerstone of more integrative theoretical approaches aimed at simultaneously considering the respective influences of the intra-personal, social and socio-economic systems (Patton & MacMahon, 2016). Not only is work central to a complex system, but it also incorporates issues of temporality and the future. In this sense, examining the representations of both work and the future that young people forge in an increasingly fragile world allows us to understand the relative space made for work within broader and more personal anticipations. Moreover, it may be fruitful to compare how uncertainties are expressed in each of these representations.

How do young people enrolled at different types of secondary schools, and anticipating different educational goals for themselves, represent work and the future? How are these representations structured and do they interrelate with each other? These are the questions of focus in this study, which involved French secondary school students who were enrolled: a) in middle school, in classes (4th or 3rd year in the French system) obliging them to choose the educational track that they will follow until the end of high school, b) in a vocational high school offering a short, job-oriented program of training c) in a general high school offering a more abstract

education aimed at preparing them for higher education. Providing answers to these questions may make it possible to enhance available career-development models and improve forms of support aimed at helping these adolescents develop their career aspirations.

### **From socio-economic uncertainty to the uncertainty of adolescents' representations**

#### **Psychological and structural uncertainties: a few characteristics specific to the French context**

Structurally, before the COVID-19 pandemic began worsening employment all over the world in early 2020, young people in France had already been experiencing a certain vulnerability compared to their peers in other countries. While at that time the average unemployment rate in France was 8.5% (Eurostat, 2019), the rate for young people ages 15 to 24 in France was 19.2% (compared to 5.6% in Germany, 6.7% in the Netherlands and barely 4% in the United States). According to Galland (2008), by focusing job flexibility on certain population categories that include young people, the French economy is turning young people into an adjustment variable in an uncertain context. Furthermore, in a country where degrees are highly valued, employment for young people in the first four years after they exit the education system varies greatly depending on the level of education they attain – the unemployment rate for those with a university degree was 9.4% in 2018, compared to 43.4% for those without one. It is easy to see how, in many countries, this helps create a new norm of “college for everyone” regardless of social background or academic performance (Duru-Bellat, 2006; Gutman & Schoon, 2012) and leads a growing number of young people to pursue higher education and simultaneously increase the uncertainty young people feel when planning a future career (Seiffge-Krenke et al., 2012). Finally, in France and many other industrialized nations, the conditions surrounding entry into the workforce and maintaining employment have become increasingly precarious since the 1980s (Kalleberg, 2009; Lechner et al., 2016, Vignoli & Mallet, 2012).

In this context of vulnerability, some studies have attempted to estimate the sense of uncertainty felt by young people with regard to their future. Psychologically speaking, in recent years, some studies in the UK (Croll, 2009; Gutman et al., 2012; Gutman & Schoon, 2012) and the US (Staff et al., 2010) have observed a small but significant percentage of adolescents who did not know what they wanted to do in the future regarding their educational or occupational plans. An international survey (Épiphanie & Sulzer, 2008; Galland, 2008) had already shown that young people (ages 16-29) in France, Italy and eastern European countries had low confidence about the future and the possibility of orienting their lives in a favorable direction, in particular when compared to their peers in the US and northern Europe. In sum, the young people in France were subject to a

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

more highly marked structural and psychological uncertainty than those in many other industrialized nations (Galland, 2008).

### **Collective and individual meaning and aspirations**

In response to the increasing uncertainty observed in the socio-economic realm, professional identities may be growing more fragile (Fraccaroli, 2007). This may manifest both in temporal structuring and in lasting employment in large groups, career accomplishment and emotional commitments to the organization, all of which are made more difficult. Among French adolescents, the subjective uncertainty felt by high-school students about to graduate was compared to that of young people who have just left the educational system and are waiting to find work. It was higher, and accompanied by greater dissatisfaction with regard to the future, in the former group. This uncertainty is designed as lack of clarity in representations of the future and difficulty in imagining a more expansive future that leads some to overrate activities done “outside of work” or pursued “for oneself and others” (Le Blanc & Laguerre, 2001).

While initially research on adolescent anticipations related to the future obtained contradictory results, linked to the use of often-questionable methodologies (Nurmi, 91), we now have more consensual knowledge referring to the areas of life aspirations or future orientations. Defined as the visions that individuals develop of their future, life aspirations are believed to influence the goals and expectations that adolescents set for themselves (Bandura et al., 2001). They are particularly malleable in this developmental period, affected by information gathered and shared social experiences, especially with peers, and focus on their future family and career roles (Ellison et al., 2014). Inspired in part by the work of Nuttin, future orientation is defined by Seginer and Lilach (2004) as a subjective construction of the future that guides a person's actions and decisions, supplying them with a foundation for setting objectives, making plans, exploring options and making commitments. Developed within cultural and institutional contexts that fuel normative expectations and shared knowledge about the future, it revolves mainly around hopes and fears. It is affected by the development and proximity of developmental tasks to be completed and is thought to be focused on the themes of education and training for young adolescents, while those related to family and future careers are considered to apply to all ages (Nurmi, 1991). This body of work is of interest, but it would be useful to describe adolescents' anticipations not only by giving their contents but also by touching upon the methods for collecting and analyzing data. A relevant way of understanding them would be to gather social representations bearing specifically on the future, since social representations present the advantage of having been theorized and combined with well specified collection and analysis methods.

### **Social representations of work and the future**

The theory of social representations (SRs) was introduced by the pioneering work of Moscovici, who drew inspiration from the Durkheim approach to studying social realities through representations, developing it in the field of social psychology. Defined as “a socially developed and shared form of knowledge having a practical application and supporting the construction of a reality shared by a social group” (Jodelet, 1989/2003, p. 53), SRs fulfil several roles in individuals' daily lives: they serve as a device for understanding and explaining the surrounding reality and they also guide and justify the behavior of individuals and groups.

SRs can be understood from their content and the structure of this content. According to the central core theory, a SR is made up of several interconnected central elements that form a core (Abric, 1994). It is stable and consistent, constituting a consensual basis for the normative system of a group that symbolizes the identity of the representation. Gravitating around it are a large number of hierarchized peripheral elements that are more contextualized and play a protective role with regard to the core. The elements in the peripheral system appear more flexible and variable because they depend on contextual, historical or ideological conditions; they facilitate the individual modulation of the social representation within a group.

The SRs are generally collected using word-association tasks. We can note the absence (to our knowledge) of available data on SRs among young people using the inductor “future” or “your future”. Studies conducted with the inductor “work” showed that SRs related to work are organized around two opposites: first, financial and economic aspects (*money, salary* etc. being the most associated items) and second, the constraints and human side of work (*enjoyment, knowledge, atmosphere* etc.). These two opposites are both good candidates for the central core (Flament, 1996). More precisely and from a more theoretical perspective, Mercure and Vultur (2010) have distinguished two sets of meanings attributed to work. The first, economic and focused on the idea of having, sees work as a tool for physical trade. The other set is non-instrumental: it is experiential, based on experiences of work, and covers personal development of the self and collective aspects linked to social value, interpersonal bonds and recognition from others. It also became clear that both the content and structure of the SRs related to work varied according to the nature of the inductor word used (“work”, “employment” etc.) and above all according to the social memberships of the individuals surveyed (Negura & Savoie, 2016). Several studies have clearly shown that sharing activities in a professional or educational setting promotes the interiorization of ways of thinking and acting specific to the groups of individuals concerned (Bataille, 2000). The French study by Roussiau and Le Blanc (2001) is exemplary in that it used these approaches to gain access to the representational system developed by senior-year high-school students starting with the inductor word

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

“work”. Differentiated SRs were revealed: high school students working toward a general baccalauréat diploma had a perception of work comparable to “school-related duty” or in other words, homework (*duty* and *school* were the terms most highly associated with work), the motivational aspects (*effort, success, concentration, reflection, thoroughness, necessity*) and health aspects (*stress, fatigue, overwork, health*) appearing to be more peripheral. In contrast, high-school students working toward a vocational baccalauréat diploma were characterized by an instrumental representation of work (*money, salary, pay*) seen as a tool for entering the workforce (*employment, working life, independence, autonomy*) and testifying to a certain professional maturity (*company, responsibility, obligation, professional experiences, meetings, constraints*). High-school students working toward a technical baccalauréat diploma were characterized by an intermediate perception with a large number of associations linked on the one hand to the educational context (*studies, high school, class* etc.) and on the other hand to instrumental aspects of work (*salary, money*) and issues related to inclusion in the workforce (*unemployment*).

### **Aims and hypotheses of this study**

In summary, it seems advantageous to understand young people’s anticipations using the SRs related to their future and to compare them to the SRs related to work. For both groups of SRs, a developmental effect can be observed when those of younger middle-school students are compared to those of high-school students, while a contextual effect can be tested by comparing the representations of vocational high-school students with those of general high-school students, the former having more concrete work experience via their internships and being closer in time to their entry into the workforce. Finally, we also want to test the potential effect of an anticipation variable not taken into account in current studies: the anticipation of the estimated duration of post-secondary education for the two groups of SRs. Exploring this variable will involve special attention, in that it is more likely to lead to the development of new knowledge on the themes explored compared to the variable of the type of school attended, which is frequently taken into account in this type of research.

Several hypotheses underlie this work. The first one (H1) has to do with the central core structuring the organization of the SRs of the entire sample, of which we try to predict the content for each indicator. It can be broken down into three sub-hypotheses.

H1a – When it comes to the work-related SRs, the elements of the central core are expected to relate explicitly to its instrumental vs. experiential purposes (Flament, 1996; Mercure & Vultur, 2010). Alongside these elements, in line with previous studies, we believe that a new element could appear, in the form of an allusion to university studies, which is currently appearing as a new social norm (Duru-Bellat, 2006; Gutman & Schoon, 2012).

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

H1b – Future-related SRs are expected to relate to the personal and family spheres on the one hand and the professional and socio-economic spheres on the other and to be expressed in particular in the form of hoped-for objects and vague fears (Ellison et al., 2014; le Blanc & Laguerre, 2001; Nurmi, 1991; Vignoli & Mallet, 2012).

H1c – Given the importance of work and what it can give access to in young people's concerns and future projections (Fraccaroli, 2007; Galland, 2008), we hypothesize that some elements could be common to the central cores of SRs specific to work and the future.

The following two hypotheses are related to the peripheral elements of the representations examined, which we know are more sensitive to psycho-social variations. We therefore expect, for these elements, differences linked to two sources of variations.

The first is constituted by secondary school type (H2). By building on the literature, which underscores both a developmental effect linked to maturity and influence from cultural and institutional contexts on adolescents' perception of work and the future, we postulate differences between those of middle-school students and high-school students, on the one hand, and between those of vocational high-school students and general high-school students on the other. More specifically:

H2a – For the inductor “work”, we expect work-related SRs that are more academic among middle-school students than among high-school students, and SRs that are more concrete and contextualized among vocational high-school students than among general high-school students (Flament, 1996; Roussiau & Le Blanc, 2001).

H2b – For the inductor “future”, we expect fewer expressions of fear among middle-school students given that concerns related to entering the workforce are farther away in time for them (Seginer & Lilach, 2004). We also expect representations of the future to be more polarized on work among vocational high school students who have already integrated its norms through the professional internships they have completed, compared to those of general high school students who are supposed to be more concerned with the different spheres of life (Bataille, 2000).

The second source of variation is constituted by the anticipated duration of the post-secondary education (H3). Since we know that anticipation gives meaning to the present, differences are expected for the two inductors depending on the anticipated duration of the planned post-secondary education: long, short or non-existent.

H3a – For the “work” inductor, the expectation is for students contemplating long university studies to have a more abstract and idealized vision of work than those who are thinking of shorter studies or none at all, and may



## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

be more worried about the potential risks inherent to joining the workforce in the near future (Seginer & Lilach, 2004).

H3b – For the “future” inductor, uncertainties may be expressed differently depending on the anticipated duration of the post-secondary education. In keeping with studies showing more certainty about the future among adolescents with more academic qualifications (Épiphanie & Sulzer, 2008; Galland, 2008), we expect to find a greater sense of uncertainty among young people who do not plan to pursue higher education.

Finally, the last hypothesis (H4) has to do with relationships maintained by the different sources of variation and their ability to reveal that subgroups that show contrast from the point of view of their SRs related to work and the future. Although we do not exclude the idea of a certain overlap between the type of secondary school and the anticipated duration of post-secondary education when it comes to the nature of the SRs produced, we expect the psychological “anticipated duration of higher education” variable to have a greater capacity to make detailed distinctions from the point of view of the hopes and fears. Anticipating further education implies a certain confidence in the future and a distance from immediate career concerns. Conversely, not anticipating further study exposes one to greater vulnerability, if only from the point of view of employment prospects.

## Method

### Context of study and procedure

The data collection took place as part of a scientific and pedagogical project implemented by the Groupe d'Études sur le Travail et la Santé au Travail (Work and Workplace Health Research Group) with the commitment of the Ile-de-France region. The project consisted of an essay competition on the topic of work for students held from 2016 to 2018 at volunteer secondary schools (Edey-Gamassou & Prunier-Poulmaire, 2018; Olry-Louis et al., 2018). Prior to the essay-writing completed with their teachers, the students were asked to fill out a questionnaire in class, an activity that took around 15 minutes.

### Participants

669 people participated in this study, including 340 who identified as females, and 323 as males (Table 1). As for the percentages, 50.7% of the participants came from the 4th or 3rd year of middle school (according to the French system), and 49.3% from the 2nd year of high school. A total of 36.9% were enrolled in general high school and 12.4% in vocational high school, mainly in the fields of management, safety or fashion.

### Measures

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

The questionnaire applied was composed of two free-association tasks, a traditional method for investigating SRs (Lo Monaco et al., 2016). The participants had to say the first four words that came to mind when they thought about “work” and then “your future”. They then had to estimate the number of years of higher education that they expected to complete using the following item: “At the end of this school year, approximately how many years do you plan to spend on your studies (from 0 to 10, 0 meaning no further studies).” Next, they had to answer some brief questions aimed at collecting socio-demographic characteristics (age, sex, class and type of secondary school).

INSERT TABLE 1 HERE

### **Data processing**

The “anticipated duration of post-secondary education” variable was constructed by recoding the answers to this question. Taking into account the number of years until respondents would earn their baccalauréat diploma, the numbers of years provided were transformed into one of the following answer modalities: long studies (4 or more years of higher education), short studies (1 to 3 years of higher education) or no higher education (0 years). Table 2 shows that apart from non-responses, 35.72% of the students planned to complete short studies, 34.08% long studies and 19.73% planned to end their studies with the baccalauréat. The distribution of answers is differentiated according to the type of secondary school attended: while the majority of middle-school students and general high-school students wanted to pursue long studies (58.33% and 39.47% respectively) or short studies (48.24% and 42.54%), most students enrolled at vocational high schools planned to pursue short studies (38.55%) or to stop their education (27.71%).

INSERT TABLE 2 HERE

The evocations produced in response to the inductor words were processed using IRaMuTeQ software, and two analyses were conducted in this way. While the first is a mainstay of the study of social representations (Lo Monaco et al., 2016), the second allowed us to explore the psychological “anticipated duration of post-secondary education” variable in greater detail.

The prototypical analysis method (Bonnec et al., 2002 ) is based on two indices that can be calculated for every associated word: the frequency of its appearance in the population and its average rank of appearance in the association chain. In this way, we can distinguish four sub-groups corresponding to the two dichotomized indices: low frequency vs. high frequency and low rank of appearance vs. high rank of appearance (Lo Monaco et al., 2016). The answers considered to have a high frequency are the ones mentioned by over 10% of the

population. Among those considered to have a low frequency, only the ones mentioned by 5 to 10% of the population were retained.

By focusing on the frequency of elements, the correspondence factor analysis (CFA) can be used to simultaneously study the variables and the content of the representation (Deschamps, 2003). By identifying factor axes, this type of analysis sheds light on the organization of the elements of social representation. This analysis is based solely on responses having a minimum frequency of 10.

### Results

#### Preliminary analysis: quantitative indicators relative to the production of SRs

As mentioned in Table 3, the various evocations produced by the participants were grouped on the basis of widely used indicators (Lambert et al., 2009). The answers designate the total number of evocations produced<sup>1</sup>, the types of answers refer to the different evocations produced and the Hapax number corresponds to the number of types produced by a single participant (Flament & Rouquette, 2003). Diversity and rarity indices varying between 0 and 1 were calculated. The lower they were, the more the elements produced were shared by all the respondents. In light of these elements, the “work” inductor gave rise to the production of a larger number of words than the “future” inductor ( $t(668) = 12.1, p < 0.001$ ) and these words had a more structured representation (diversity of .192 for “work” and .243 for “future”).

INSERT TABLE 3 HERE

#### Social representations of work

The “work” inductor elicited a wide range of evocations, four of which may be considered candidates for the central core given their high frequency and low average rank of appearance: *money*, *salary*, *tiring* and *studies* (Table 4). The first two terms, having neighboring meanings, refer to classical instrumental aspects resulting from work and are associated with two attributes, one of which, *tiring*, can be seen as a result of working, while the other, *studies*, is a necessary precondition for working. In the absence of elements identified as frequent but with a high average rank of appearance, only the contrasting second zone of lower frequency and low rank of appearance can be commented upon. It encompasses certain human attributes presented initially or appearing as the result of work (*determination*, *motivation*, *perseverance*, *effort*, *seriousness*, *duty*, *responsibility*, *obligation*, *labor*, *success*, *long*) and attributes of the act of working (*writing*, *working*, *useful*) with its risks

---

<sup>1</sup> The number of answers corresponds to the number of evocations produced by the participants. An evocation can consist of one or more words.

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

(*unemployment*) and temporality covering the period from school to adult life (*long, hard, school, orientation*<sup>2</sup>, *adult*). The zone of low frequency and high rank of appearance, with its great variety, evokes above all the spatio-temporal and human environment of work (*boss, co-workers, company, office, schedule, time, punctuality, getting up early, organization*). It also underscores a few anticipated positive effects of work (*passion, learning, enjoyment, reflecting*), or to the contrary its potential deleterious effects (*difficult, boredom, stress*), the necessary personal traits (*courage, concentration, respect, thoroughness, patience, ambition*) and the various spheres of life (*future, life, family, profession*).

INSERT TABLE 4 HERE

### **Variations in “work” SRs according to secondary school type and anticipated duration of post-secondary education**

As for potential variation according to training type, the evocations produced by the middle-school students, initially compared to those of the high-school students, proved to be very close to them. Differentiations are limited to peripheral elements: the word *studies* is relegated to the periphery for middle-school students, while the terms *time* and *passion* appear only in the high-school students' evocations. The comparison of the three types of secondary schools appears more discriminating (Table 5). As for the candidates for the central core, the evocation of *schedules* was specific to vocational high-school students, while *efforts* and *studies* came up only among general high-school students (see the first two columns). As for the peripheral elements (see the last two columns), the general high-school students' evocations resembled those of the middle-school students in that they associate personal constraints (*duty, obligation, effort, responsibility, respect*) and academic constraints (*working, learning, difficult*) with a more distant point in the future (*time, future, boredom*). We find evocations of this time among the vocational high-school students (*future, boredom*), associated with personal or professional states that can be understood as generated by work activity (*success, seriousness, courage, independent*) and with constraints specific to the work environment (*getting up early, boss*). The term *passion* was specific to general high-school students.

INSERT TABLE 5 HERE

We also see certain variations linked to anticipations of the duration of the future post-secondary education (Table 6). The central-core candidates common to the three durations of post-secondary education are *money, salary* and *tiring*, to which *schedule* is added for short or non-existent studies, *studies* for short studies

---

<sup>2</sup> We have chosen to keep the French word cited by the participants, which refers to educational and vocational guidance.

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

and *effort* for long studies (see the first two columns of the table). Peripheral elements (identifiable in the last two columns) appear on the one hand common to all three anticipated durations of post-secondary education, in reference to work, as a possibility (*future*) that requires *duty* and *seriousness* in the face of *difficulties* and *boredom*. But some of them seem differentiated, the specificities concerning positive traits (*perseverance* and *responsibility* when short or long studies are planned), relationship to work (*obligation* or *passion* in the same case), or work contexts (*co-worker*, *boss* or *profession* in the same case, *punctuality* and *getting up early* if no further study is involved ).

INSERT TABLE 6 HERE

### **Social representations of the future**

For the “your future” inductor, four evocations appeared in the high frequency and low average rank of appearance zone: *money*, *work*, *family* and *studies* (Table 7). The element *success* appears in the contrasting zone of high frequency and high average rank of appearance. All of these elements can be considered candidates for the central core of the representations of the future. In the contrasting zone of low frequency and low average rank of appearance, certain objects expected in the near future are mentioned (*car*), alongside aspects related to what is hoped for in the future (*happiness*, *rich*, *happy*, *dream*, *passion*, *love*, *hope*) and other elements related to worries (*fear*, *difficult*, *uncertain*, *courage*). In the high rank and low frequency zone, we find themes close to the evocations related to the major milestones of life (*child*, *marriage*, *housing*, *house*, *profession* etc.) or centered around key values (*freedom*, *autonomy*, *responsibility*, *help*, *friendship*, *discovery*) or sensations (*joy*, *enjoyment*).

INSERT TABLE 7 HERE

### **Variations in “future” SRs according to secondary school type and anticipated duration of post-secondary education**

Comparisons of SRs according to secondary school type, in which middle-school and high-school students contrast with each other in the first analysis, showed a high degree of similarity among the candidates for the central core. However, in the second analysis, we note the absence of the word "studies" among the vocational high school students (Table 8, first two columns). The peripheral elements are constituted by radically different objects mentioned by vocational high-school students (*car*, *housing*, *marriage* referring to stages of adult life in the personal and familial spheres) and general high-school students (*happiness*, *travel*, *educational path* referring to states, activities and choices to be made). The peripheral evocations of middle-school students

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

bring together both perspectives with *child, house, car* on the one hand and *rich, difficult, happiness* and *profession* on the other.

INSERT TABLE 8 HERE

As for variations linked to the anticipated duration of post-secondary education (Table 9), the place occupied by *studies* differs: while students who expect to pursue long post-secondary studies make it a choice candidate for the central core, those without plans to pursue higher education after earning the baccalauréat diploma do not mention this term. Furthermore, although positive states such as happiness and life events such as marriage and children are the most shared peripheral evocations, they are rounded out by specific objects among those expecting to pursue long studies (*travel*), pecuniary evocations (*salary, rich*) and choices to be made in the near term (*educational path*) among those planning to pursue short studies and negative emotional evocations among those who are not planning to pursue higher education at all (*difficult, fear, stress*).

INSERT TABLE 9 HERE

### **Organization of all the SRs collected for the two inductors**

Applying a CFA to all of the discursive materials collected for the inductors under study, we tried to account for all of the results (Figure 1). Because the “anticipated duration of post-secondary education” variable is a relevant psychological variable for our issue, and reveals quite differentiated results, we have used it as an active variable in the CFA presented, the “secondary school type” variable not being taken into consideration here. Note that the interpretation of the factorial axes was carried out on the basis of the analysis of the evocations contributing the most to their extraction, and that these evocations are not all visible in figure 1. This essentially reveals the evocations distinguishing the groups.

The first correspondence factor axis accounts for 62.22% of the variance. It is relative to the content (material, temporal and human) of the examined SRs. It relates in its negative end to a relatively imprecise (*vague*) perception of the future, characterized only by desired material objects (*money, car*), associated with a temporally restricted vision of work (*schedule, punctuality*). The positive end showed more diversified expectations regarding the future (*family, employment, friendship*) and work (*ambition, responsibility, salary, obligation, effort*), in which different possibilities seemed feasible (*choice, studies, orientation*). Finally, this axis shows a contrast between students that do not want to pursue a higher education (on the negative end, where the only the material evocations occur) with those who expect to pursue long higher education studies (positive end, where diversified and open evocations appear). The second factor axis accounts for 37.78% of the variance. It is relative to the level of abstraction of the examined SRs. The negative end is characterized by a rather idealized

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

and abstract vision of work (*profession, work, reflect, organization, independence*) and a future (*happiness, love, profession*) that is not very well defined (*uncertain*). The positive end offers more specific and balanced perceptions, from the point of view of spheres of life and the future (*health, marriage, work, orientation, educational path, studies*) and work (*life, future, employment, family*), some tangible elements also being identifiable with regard to work in terms of risks (*hard, unemployment*) and necessary positive traits (*courage, determination*). It is at this end, marked by concrete and well defined representations in all spheres of life that we find, clearly positioned, the group of students planning to pursue short post-secondary studies, as opposed to the other two groups that appear more at the negative end, which is marked by more abstract and less defined representations.

**Fig 1.** Plan 1-2 of factorial correspondence analysis for SRs of “work” and “your future” according to anticipated duration of post-secondary education

INSERT FIGURE 1 HERE

This CFA shows SRs that are quite differentiated according to the variable examined. The group anticipating long studies has a relatively positive vision of the future (*passion, love, choice*) associated with efforts to be made (*courage*) and anchored in a view of work that proves to be quite traditional (*profession, company, co-workers, office, obligation* etc.), making it possible to apply positive traits or values (*thoroughness, responsibility, ambition*) and remaining subordinate to the knowledge gained (*learning*). The group mentioning short studies offers a relatively optimistic representation of the future (*nice, long, enjoyment, salary*) that is rather dependent upon their coming *orientation*, combined with a perception of work that sees it as accessible (*employment, future*) in spite of difficulties (*hard*) and requiring a certain *determination*. The group of students not planning to pursue a higher education seems more worried about their future (*uncertain, fear*), which they associate mainly with *profession* and a certain *freedom* obtained. It testifies to a perception of work that is structured by temporal aspects and constraints (*schedule, punctual, getting up early, tiring, seriousness* etc.) and by financial aspects (*money*), symbolizing on their own a certain *success*.

### Discussion

In order to compare the main results to the hypotheses previously put forward, for the inductor “work”, firstly, we had thought we would be able to identify central elements linked not only to the purposes of work, whether instrumental or experiential, but also to pick out elements more closely linked to a higher education, which has taken on great importance in French society as it places high value on degrees (H1a). We noticed that for our population, the expected experiential purposes took shape around issues of health (*tiring*) and post-

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

secondary education (*studies*) and related to a central financial element (*money, salary*). As for the peripheral elements, we had postulated that middle-school students might develop a more academic vision of work, while vocational high-school students might have a more specific and contextualized representation of it (H2a). The results are compatible with this hypothesis and allow us to describe it in greater detail. It seems that middle-school and vocational high-school students share a number of elements linked to the long term and to academic and personal constraints (*learning, work, duty, obligation* etc.), evocations of an intense and irrational emotional state qualifying work (*passion*) being specific to general high-school students. The representation of high-school students seem at this level more anchored in a form of reality that is oriented toward work (*seriousness, boss, getting up early* etc.), positive (*success*) and statutory (*independent*, which in French can also mean freelance). We had also expected specific peripheral elements according to the anticipated duration of post-secondary education, with a more idealized and abstract representation among students planning a long post-secondary education and a vision marked by more immediate concerns over entering the workforce among students not planning to pursue any higher education. Our results are in line with this hypothesis and enable us to specify it in greater detail and to round out the previous observations on secondary school types. Young people who want to pursue either a long or short higher education are characterized by a vision of work that is both conventional (*co-workers, boss, profession, obligation*) and idealized (*passion*), and those wanting to stop after earning the baccalauréat diploma have a view of work that is more restrictive (*punctuality, getting up early*) and specific (*independent, courage*).

For the inductor “your future”, we had postulated that the candidates for the central core would refer to a financial aspect but have an openness to different areas of life in the form of fears and hopes (H1b). Although among the five candidates for the central core we found – as expected – words related to financial aspects (*money*) and the various spheres of life (*work, family, studies*), no element suggesting fears was identified. The hopes seemed to take form first and foremost in the notion of *success*. An analysis of the peripheral elements offers a distinction according to secondary school type. In contrast to our hypothesis (H2b), the SRs of the middle-school students in our sample stood out less from those of the high-school students than between those of the two types of high schools, which refer to specific spheres: general high-school students mentioned states, activities and choices that are rather characteristic for young people (*happiness, travel, educational path*), while vocational high-school students were oriented more toward the traditional stages of adult life (*car, housing, marriage*). In keeping with our hypothesis about the “anticipated duration of post-secondary education” variable, adolescents without plans for higher education were more uncertain and above all more concerned about their



## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

future than the others (*difficult, fear, stress*). Those who planned to pursue short post-secondary education seemed more focused on upcoming orientation choices (*educational path*) and the hope of substantial compensation (*salary, rich*).

We can learn quite a bit by comparing the SRs of the two inductors. To start with, as we had supposed (H1c), a few elements are candidates for the cores of both SRs. *Money*, first of all, which appears central, *studies* next, although this element seems more volatile for vocational high-school students and those with no plans for higher education. *Work*, finally, itself appears to be a candidate for the central core of the SR related to the future, the opposite not being true regardless of subgroup.

The last hypothesis (H4) had to do with the capacity of the psychological “anticipated duration of post-secondary education” variable to reveal subgroups that show contrast from the point of view of their SRs related to work and the future, compared to the “secondary school type” variable, which is more traditional and objective. Our results clearly indicate the advantage of taking the “anticipated duration of post-secondary education” variable into account in this type of research. It revealed concerns about the future held by young people with no plans to pursue higher education, while adolescents who planned to do post-secondary studies focused more readily on the difficult issue of the orientation choices to be made. It thus allowed us to form a more accurate idea of the effects, on the SRs related to work and the future, of the place occupied by the social norm “higher education for all” in the context of uncertainty that characterizes our society today. This point is to be taken in the context of the fact that, as we had supposed, post-secondary education is an element that is most often a candidate for the central core, except for those individuals who do not plan to continue their education. This result shows the increasing power of the new social norm “higher education for all”, shared by 80% of adolescents in France according to the 2018 Pisa survey (Insee, 2020), although there are some disparities depending on social origin, even with an equivalent level of schooling.

### **Theoretical implications**

Concerning the field of SRs, some of our results confirm several elements obtained by Roussiau and Leblanc (2001) with the inductor work. In particular, it seems that vocational high-school students are still characterized by a certain professional maturity and general high-school students by a duty to study. However, differences in results appear, the most notable being a reference to passion for general high schools only, so far not underscored. Should we see in this a form of optimism that is more characteristic of this population of young people? In addition, this study made it possible to identify elements that are more specific to college students, for which we did not have any work in France. For example, from this age, we see a reference to studies in the

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

peripheral zone and overall a representation of work close to general high-school students. The study also highlights a more concrete perception of work, essentially taking into account its constraints among adolescents who are not considering higher education. In an unprecedented way, we have also brought elements for understanding SRs that adolescents develop about their future, which cannot be summed up in the professional sphere alone. Overall, this appears to be mainly based on a hope of success, financially but also within different areas of life (work, family, studies). In addition, as previously observed for work, the way *middle-school* students perceive their future is more similar to that of *general high-school students than that of vocational high-school students*, taking up the classic attributes of entering adulthood. Finally, fears about the future appear relatively specific to students not considering higher education, as if they seemed more permeable to contextual uncertainty. To go further on this point, it would seem beneficial to us to have, in future studies, a scale for measuring the feeling of uncertainty. With reference to the theories of counselling psychology, our results point to the importance of giving greater prominence to work representations, on the one hand, and of articulating them, on the other hand, with anticipations of the future. Indeed, simultaneously considering the representations of work and of oneself in the future allows for the expression of general life goals in connection with the person's identity, based on processes of identification and differentiation (Auzoult, 2018; Baumeister et al., 2016). Integrating personal wishes and fears, as much as the social categories to which it would be possible to belong in the future, the possible selves are thus summoned (Cinnirella, 1998; Markus & Nurius, 1986). We now know that over the course of a person's life, they serve both as interpretative frameworks for current experiences and as standards to be attained through the behaviors implemented. We can see here how advantageous it is for vocational psychology to integrate concepts developed in social psychology in order to understand, in a context of generalized uncertainty and fragility of work, the contents developed by young people in terms of social representations of work and anticipations of self.

### **Limitations**

Some elements in particular will need to be corrected in upcoming studies aimed at comparing these representations with those collected among students during the pandemic. One concerns the imbalance in the numbers of the three sub-groups from different secondary schools, which may have an impact on the results relating to SRs on the total sample, through a lesser influence of the elements characterizing the group with small numbers (83 students in VHS against 339 MS and 247 GHS). Subgroups with equivalent numbers of participants must be formed in future research.. The other limitation lies in the order of presenting the inductors “work” and “your future”, which should have been counter-balanced, especially since we lack studies allowing us to discuss

our results relating to the inductor "your future". For example, regardless of the inductor offered, money is the central element of the SRs. If this result is relatively consistent with the previous research available with the inductor "work", this same result is more difficult to interpret for the inductor "your future" due to a lack of balance between the two inductors. We cannot rule out a contamination effect from the order in which our two inductors are presented ("work" then "your future"). Another possibility would be an effect of the instructions: the word "your" was placed before "future" – might that have elicited a more individual vision?

### **Conclusions and practical implications**

In spite of these main limitations, what conclusions can we draw from this large collection of results? First of all, it seems that the centrality of money found with the two inductors could reflect a model of society in which money is king and individual and material concerns take precedence over collective and immaterial concerns (de Blic & Lazarus, 2007). Apart from the fact that a similar observation was recently highlighted by Bellare et al. (2019) in an American and Israeli population, the observation of the also significant place occupied by *success* in the SRs seems to advocate for this interpretation.

Next, it can be observed that apart from the term *tiring*, mentioned in connection with the inductor "work" and referring to its deleterious effects on health, the candidate elements for the central cores for "work" and "future" have generally positive connotations. The few fears mentioned are limited to peripheral elements, which are more malleable to the effects of contexts and apply more clearly to the group that does not plan to pursue any post-secondary education. While international surveys (Épiphane & Sulzer, 2008; Galland, 2008) underscore the fact that young people in France with fewer academic qualifications have less confidence in life, our results suggest that this trend takes shape in a period before a diploma is earned, linked to whether higher education is anticipated or not.

In summary, the differences in SRs show more contrasts between general high-school students and vocational high-school students than between middle-school students and high-school students. Furthermore, our results are compatible with the idea of an interiorization of ways of thinking and acting among the school groups the students belong to (Bataille, 2000; Blustein, 2011).

From the point of view of its practical implications in terms of support for young people as they embark upon transitions, the study's results suggest that contemporary uncertainties should not be interpreted as inevitable (Gutman & Schoon, 2012; Kenny et al., 2010). They encourage us to view assistance provided to young people for their decisions on future orientations and transitions as opportunities to express and share fears, desires and introspection during interactions among peers (Olry-Louis & Soidet, 2020). They also suggest the advantage to

be gained from facilitating discussion among students from these three different types of secondary schools, particularly in the form of testimonials from students who have already made their transition and interactive tours of other schools led by the students themselves. In a more general way, perceived uncertainty over the future could become a subject of focus in support work, providing material for introspection and discussion in terms of its motivational and emotional aspects. Similarly, the relationship to work could be more systematically investigated, in particular with a more detailed exploration of its social and symbolic aspects, which are often obscured by its instrumental aspect in the minds of many young people (Edey-Gamassou & Prunier-Poulmaire, 2018). This strikes us as especially relevant with regard to the results of an international survey (Galland, 2008) highlighting the fact that young people in France overrate having “meaningful work” that they are “passionate about”.

### References

- Abric, J.-Cl. (Ed.) (1994). *Pratiques sociales et représentations* [Social and Practical Representations]. Presses Universitaires de France.
- Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, 1(2), 68–73. <https://doi.org/10.1111/j.1750-8606.2007.00016.x>
- Auzoult, L. (2018). *Penser l'avenir. Structure, dynamique et ancrages des pensées tournées vers l'avenir* [Think about the future. Structure, dynamics and anchors of forward-looking thoughts]. Presses universitaires de la Méditerranée.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72, 187–206. <https://doi.org/10.1111/1467-8624.00273>
- Bataille, M. (2000). Représentation, implicitation, implication ; des représentations sociales aux représentations professionnelles [Representation, implicitation, implication: from social representations to professional representations]. In C. Garnier & M.L Rouquette (Eds.), *Les représentations en éducation et formation* [Representations in education and training](pp. 165-189). Editions Nouvelles.
- Baumeister, R., Vohs, K., & Oettingen, G. (2016). Pragmatic prospection: how and why people think about the future. *Review of General Psychology*, 20, 3-16. <https://doi.org/10.1030000060>
- Bellare, Y., Michael, R., Gerstein L.H., Cinamon R.G., Hutchinson, A., Kim T.S, & Choi Y. (2019). Future perceptions of U.S and Israeli young male adults. *Journal of Career Development*, 46(4), 351-365. <https://doi.org/10.1177/0894845318763956>
- Blustein, D. L. (2011). A relational theory of working. *Journal of Vocational Behavior* 79, 1–17. <https://doi.org/10.1016/j.jvb.2010.10.004>
- Blustein, D. L. (2019). *The importance of work in an age of uncertainty: the eroding work experience in America*. Oxford University Press.
- Bonnec, Y., Roussiau, N., & Vergès, P. (2002). Categorical and prototypical analysis: A study on the quality-process in hospital institutions. *European Review of Applied Psychology*, 52(3–4), 213–220.
- Cinnirella, M. (1998). Exploring temporal aspects of social identity : the concept of possible social identities. *European Journal of Social Psychology*, 28, 227-248.
- Cohen-Scali, V., Masdonati, J., Disquay-Perrot, S., Ribeiro, M. A., Vilhjálmssdóttir, G., Zein, R., Kaplan-Bucciarelli, J., Moumoula, I., Aisenson, G., & Rossier, J. (2020). Emerging adults' representations of work: A qualitative research in seven countries. *Emerging Adulthood*. <https://doi.org/10.1177/2167696820963598>

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

- Croll, P. (2009). Educational participation post-16: A longitudinal analysis of intentions and outcomes. *British Journal of Educational Studies*, 57(4), 400-416. <https://doi.org/10.1111/j.1467-8527.2009.00445.x>
- de Blic, D., & Lazarus, J. (2007). *Sociologie de l'argent* [Sociology of money]. La Découverte. <https://doi.org/10.3917/dec.debli.2007.01>
- Deschamps, J. C. (2003). Analyse des correspondances et variation des contenus de représentations sociales [Correspondence analysis and variation in the content of social representations]. In J. C. Abric (Ed), *Méthodes d'étude des représentations sociales* [Methods of studying social representations ](179-199). Eres.
- De Vos, A., Van Der Heijden, B. I., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117. <https://doi.org/10.1016/j.jvb.2018.06.01102.x>
- Duru-Bellat, M., (2006). *L'inflation scolaire – Les désillusions de la méritocratie* [School Inflation - The Disillusionment of Meritocracy]. Seuil.
- Edey-Gamassou, C., & Prunier-Poulmaire, S. (Eds.) (2018). *Ecrivons le travail ! Lycéens et chercheurs : écritures croisées sur le travail* [Let's write the work! High school students and researchers: cross-writing about work]. Octarès.
- Épiphane, D. & Sulzer, E. (2008). Les jeunes et le travail : des aspirations fortes dans des modèles sociétaux différents [Young people and work: strong aspirations in different societal models]. In A. Stellingier & R. Wintrebert, (Eds), *Les jeunes face à l'avenir : une enquête internationale* [Youth people facing the future: an international survey ] (pp.54-78). Fondation pour l'innovation politique.
- Ellison, N., Wohn, D., & Greenhow, C., (2014). Adolescents' visions of their future careers, educational plans, and life pathways: The role of bridging and bonding social capital experiences. *Journal of Social and Personal Relationships*, 31(4), 516-534. <https://doi.org/10.1177/0265407514523546>
- Eurostat (2019, 30 août). Unemployment statistics. <https://ec.europa.eu/eurostat/documents/2995521/10080615/3-30082019-BP-FR.pdf/4285667c-8457-4899-93ea-84f5f1eda530>
- Flament, C. (1996). Les valeurs du travail, la psychologie des représentations sociales comme observatoire d'un changement historique [The values of work, the psychology of social representations as an observatory of historical change.]. In J.-C. Abric (Ed.), *Exclusion sociale, insertion et prévention* [Social exclusion, integration and prevention ](pp.113-124). Erès.
- Flament, C., & Rouquette, M.-L. (2003). *Anatomie des idées ordinaires. Comment étudier les représentations sociales* [Anatomy of ordinary ideas. How to study social representations]. Armand Colin.
- Fraccaroli, F. (2007). L'expérience psychologique de l'incertitude au travail [Psychological Experience of Job Insecurity]. *Le travail humain* 70(3), 235-250. <https://doi.org/10.3917/th.703.0235>
- Galland, O. (2008). Les jeunes et la société : des visions contrastées de l'avenir [Young people and society: contrasting visions of the future]. In A. Stellingier & R. Wintrebert, (Eds), *Les Jeunes face à leur avenir : une enquête internationale* [Youth people facing the future: an international survey ] (pp. 17-53). Fondation pour l'innovation politique.
- Guichard, J. (1993). *L'école et les représentations d'avenir des adolescents* [School and adolescent representations of the future]. Presses Universitaires de France.
- Gutman, L. & Schoon, I. (2012). Correlates and consequences of uncertainty in career aspirations: Gender differences among adolescents in England. *Journal of Vocational Behavior*, 80, 608–618. <https://doi.org/10.1016/j.jvb.2012.02.002>
- Gutman, L. M., Schoon, I., & Sabates, R. (2012). Uncertain aspirations for continuing in education: Antecedents and associated outcomes. *Developmental Psychology*, 48(6), 1707-1718. <https://doi.org/10.1037/a0026547>
- Institut national de la statistique et des études économiques (2020). *France, Portrait social* [France, Social portrait], édition 2020. <https://www.insee.fr/fr/statistiques/4928952>
- Jodelet, D. (Ed.) (2003). *Les représentations sociales* [Social representations]. Presses Universitaires de France (œuvre originale publiée en 1989). <https://doi.org/10.3917/puf.jodel.2003.01>
- Kalleberg, A. L. (2009). Precarious work, insecure workers: Employment relations in transition. *American Sociological Review*, 74(1), 1–22. <https://doi.org/10.1177/000312240907400101>

- Kenny, E. M., Walsh-Blair, L. Y., Blustein, D. L., Bempechat, J., & Seltzer, J. (2010). Achievement motivation among urban adolescents: Work hope, autonomy support, and achievement-related beliefs. *Journal of Vocational Behavior*, 77(2), 205–212. <https://doi.org/10.1016/j.jvb.2010.02.005>
- Lambert, N. M., Graham, S. M., & Fincham, F. D. (2009). A prototype analysis of gratitude: varieties of gratitude experiences. *Personality and Social Psychology Bulletin*, 35(9), 1193–1207. <http://doi.org/10.1177/0146167209338071>
- Le Blanc, A., & Laguerre, F. (2001). Significations des incertitudes des lycéens à l'égard du futur [Meanings of uncertainties concerning the future among high school students: the role of work values and process of relative valorization]. *L'orientation scolaire et professionnelle*, 30(1), 9-28. <https://doi.org/10.4000/osp.5675>
- Lechner, C. M., Tomasik, M. J., & Silbereisen, R. K., (2016). Preparing for uncertain careers: How youth deal with growing occupational uncertainties before the education-to-work transition. *Journal of Vocational Behavior* 95–96, 90–101. <https://doi.org/10.1016/j.jvb.2016.08.002>
- Lo Monaco, G., Piermattéo, A., Rateau, P., & Tavani, J. L. (2016). Methods of study of the structure of social representations: a critical review and agenda for future research. *Journal for the Theory of Social Behaviour*, 47(3), 306-331. <http://doi.org/10.1111/jtsb.12124>
- Markus, H. & Nurius, P. (1986). Possibles selves. *American Psychologist*, 41, 954-969. <https://doi.org/10.1037/0003-066X.41.9.954>
- Masdonati J., Fournier G., Pinault M., & Lahrizi I. Z. (2016). The evolution of work values during the school-to-work transition : The case of young adults in the "missing middle". *International Journal for Educational and Vocational Guidance*, 16 (2),189-212. <https://doi.org/10.1007/s10775-015-9300-z>
- Masdonati, J., & Rossier, J. (2021). Vers une orientation au service de la durabilité [Towards an orientation in the service of sustainability].In V. Cohen-Scali (Ed), *Psychologie de l'orientation tout au long de la vie, défis contemporains et nouvelles perspectives*[Lifelong guidance psychology, contemporary challenges and new perspectives]. Dunod.
- Mercure, D., & Vultur, M. (2010). *La signification du travail : nouveau modèle productif et ethos du travail au Québec* [The meaning of work: New productive model and work ethos in Quebec]. Presses de l'université de Laval. <https://doi.org/10.4000/lectures.1226>
- Negura, L. & Savoie, C. (2016). Le travail représenté : diversité, dynamisme et spécificité de sa réalité [The work represented: diversity, dynamism and specificity of its reality]. In Lo Monaco, G., Délouvé, S. & Rateau, P. (Eds.), *Les représentations sociales : théories, méthodes et applications* [Social representations: theories, methods and applications]. de Boeck.
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review*, 11(1), 1–59. [https://doi.org/10.1016/0273-2297\(91\)90002-6](https://doi.org/10.1016/0273-2297(91)90002-6)
- Olry-Louis, I. & Soidet, I. (2020). Faire parler l'expérience étudiante en orientation pour soutenir la capacité à s'orienter[Take advantage of the student's experience in career guidance to enhance the capability to decide for the future]. *Pratiques psychologiques*, 26(4), 317-346. <https://doi.org/10.1016/j.prps.2020.06.004>
- Olry-Louis, I., Soidet, I., & Tavani, J.-L. (2018). Contenu et structure des représentations adolescentes du travail [Content and structure of adolescent representations of work]. In S. Prunier-Poulmaire & C. Edey-Gamassou (Eds.), *Ecrivons le travail ! Lycéens et chercheurs : écritures croisées sur le travail* [Let's write the work! High school students and researchers: cross-writing about work] (pp. 228-235). Octarès.
- Patton, W., & McMahon, M. (2014). *Career development and systems theory: Connecting theory and practice*. Sense Publishers.
- Roussiau, N., & Le Blanc (2001), Représentations sociales du travail et formation scolaires ou professionnelles des lycéens. Approche comparative [Social representations of work and academic or vocational trainings of high schools students: comparative approach]. *L'orientation scolaire et professionnelle*, 30(1), 9-28. <https://doi.org/10.4000/osp.5688>
- Savickas, M. L. (2005). *The Theory and Practice of Career Construction*. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (p. 42–70). John Wiley & Sons, Inc.

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

- Seginer, R., & Lilach, E. (2004). How adolescents construct their future: The effect of loneliness on future orientation. *Journal of Adolescence*, 27(6), 625–643. <https://doi.org/10.1016/j.adolescence.2004.05.003>
- Schoon, I., & Silbereisen, R. K. (2009). *Conceptualising school-to-work transitions in context*. In I. Schoon & R. K. Silbereisen (Eds.), *The Jacobs foundation series on adolescence. Transitions from school to work: Globalization, individualization, and patterns of diversity* (p. 3–29). Cambridge University Press. <https://doi.org/10.1017/CBO9780511605369.001>
- Seiffge-Krenke, I., Persike, M., Chau, C., Hendry, L.B., Klopp, M., Terzini-Hollar, M., Tam, V., Rodriguez Naranjo, C., Herrera, D., Menna, P., Rohail, I., Veisson, M., Hoareau, E., Luwe, M., Loncaric, D., Han, H., & Regusch, L. (2012). Differences in agency? How adolescents from 18 countries perceive and cope with their futures. *International Journal of Behavioral Development*, 36(4), 258-270. <https://doi.org/10.1177/0165025412444643>
- Soidet, I., Blanchard, S., & Olry-Louis, I. (2018). S'orienter tout au long de la vie : bilans et perspectives de recherche [Lifelong guidance: reviews and research perspectives]. *Savoirs*, 18(3), 13-51. <https://doi.org/10.3917/savo.048.0013>
- Staff, J., Harris, A., Sabates, R., & Briddell, L. (2010). Uncertainty in Early Occupational Aspirations: Role Exploration or Aimlessness?. *Social forces; a scientific medium of social study and interpretation*, 89(2), 659–683. <https://doi.org/10.1353/sof.2010.0088>
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The Work and Meaning Inventory. *Journal of Career Assessment*, 20, 322-337. <https://doi.org/10.1177/1069072711436160>
- Vignoli, E. & Mallet, P. (2012). Les peurs des adolescents concernant leur avenir scolaire et professionnel : structure et variations selon le niveau scolaire, le sexe et la classe sociale [Adolescents' fears about their school and career future: Structure and variations across academic level, sex, and social class.]. *Les Cahiers Internationaux de Psychologie Sociale*, 2(2), 249-282. <https://doi.org/10.3917/cips.094.0249>
- Young, R. A., Valach, L., Ball, J., Paseluikho, M. A., Wong, Y. S., DeVries, R. J., McLean, H., & Turkel, H. (2001). Career development in adolescence as a family project. *Journal of Counseling Psychology*, 48(2), 190–202. <https://doi.org/10.1037/0022-0167.48.2.190>

## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 1**

*Composition of the study sample by type of establishment and gender*

	MD	GHS	VHS	No answers	Total
Females	161	141	38	/	340
Males	175	105	43	/	323
No answers	3	1	2	/	6
Total	339	247	83	/	669
%	50,67%	36,92%	12,41%	/	

*Note.* MD = Middle School ; GHS = General High School ; VHS = Vocational High School



## ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 2**

*Distribution of population according to anticipated duration of post-secondary education and training type*

	No studies	Short studies	Long studies	No answers	Total
MS	62	110	133	34	339
GHS	47	97	90	13	247
VHS	23	32	5	23	83
Total	132	239	228	70	669
%	19,73%	35,72	34,08%	10,4%	

*Note.* MD = Middle School ; GHS = General High School ; VHS = Vocational High School

**Table 3**

*Description of data collected for inductors "work" and "your future"*

	Work	Your future
Number of answers	2671	2553
Number of types	515	621
Number of hapax	275	345
Diversity	.192	.243
Rarity	.533	.555
Average word per participant	M = 3.66 (SD=0.77)	M = 2.95 (SD = 1.48)

*Note.* Average word per participant correspond the mean number of evocations evoked by each participant.

ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 4**

*Evocations for the inductor "work" according to their rank of appearance and frequency*

		Average rank of appearance			
		Low $\leq 2.35$		High $> 2.35$	
High >10%	Money	235	2		
	Salary	134	2.3		
	Tiring	123	2.3		
	Studies	67	2.3		
Frequency	Effort	58	2	Schedule	59 2.4
	Seriousness	42	2.2	Difficult	42 2.4
	Duty	37	1.7	Future	40 2.4
	Hard	35	1.6	Boredom	38 2.6
	Responsability	33	2.2	Time	33 2.4
	Working	31	2	Passion	30 2.5
	Perseverance	24	2.2	Learning	29 2.6
	Obligation	22	2.2	Boss	26 3
	School	21	2.3	Co-workers	21 2.8
	Success	19	2.1	Courage	21 2.5
	Future	19	2.3	Stress	20 2.9
	Motivation	17	1.8	Concentration	19 2.4
	Determination	17	1.9	Company	18 2.7
	Writing	15	1.7	Career	18 2.9
	Unemployment	12	2.3	Respect	16 2.6
	Adult	12	2.3	Enjoyment	16 2.8
	Long	12	2.1	Thoroughness	15 2.4
	Labor	11	1.8	Office	14 2.7
	Orientation	10	2.1	Punctuality	13 2.9
	Useful	10	2.2	Reflecting	13 2.5
			Getting up early	12 2.8	
			Organization	12 2.8	
			Life	12 1.9	
			Family	10 3.6	
			Ambition	10 3.1	
			Patience	10 2.4	

ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 5**

*Evocations of work according to training type*

	High frequency, low rank			High frequency, high rank			Low frequency, low rank			Low frequency, high rank		
VHS	Money	48	1.6	Schedule	18	2.6	Success	8	2	Boredom	7	2.4
	Salary	15	1.9	Tiring	14	2.3	Studies	6	2.2	Courage	6	3.2
							Seriousness	5	2.2	Independent	6	3.2
										Future	5	2.8
										Enjoyment	5	2.8
										Getting up early	5	3.2
										Boss	5	2.6
GHS	Money	85	2	Tiring	55	2.5	Duty	18	1.5	Difficult	18	2.4
	Salary	64	2.1	Studies	31	2.5	Hard	17	1.8	Future	18	2.4
	Effort	29	2.1				Obligation	16	2.2	Time	17	2.5
										Passion	16	2.4
MD	Money	102	2.2	Salary	55	2.6	Studies	30	2.2	Schedule	31	2.5
	Tiring	54	2.1				Effort	27	1.8	Learning	25	2.6
							Responsibility	22	2.1	Difficult	20	2.4
							Duty	18	1.9	Boredom	19	2.6
							Working	18	2	Future	18	2.4
							Hard	17	1.5	Respect	15	2.7

*Note:* Only the evocations mentioned by at least 5% of the reference population were retained. VHS = Vocational High School ; GHS = General High School ; MD = Middle School.

Table 6

	High frequency, low rank			High frequency, high rank			Low frequency, low rank			Low frequency, high rank			
No S.	Money	58	1.9	Tiring	35	2.8	Studies	9	1.8	Seriousness	10	2.3	
	Salary	19	2.2	Schedule	19	2.5	Boredom	8	2.1	Future	9	2.3	
							Long	7	2.1	Effort	9	2.9	
							Hard	6	1.7	Getting up early	8	2.8	
							Success	6	1.7	Difficult	7	2.7	
							Duty	6	1.3	Time	7	2.3	
										Punctuality	6	2.7	
										Working	6	2.3	
	Short S.	Money	79	1.9	Tiring	38	2.3	Effort	19	1.7	Future	16	2.4
		Salary	48	2.2	Schedule	25	2.3	Hard	18	1.8	Time	12	2.5
Studies		23	2				Seriousness	16	2.1	Boredom	12	3.2	
							Difficult	13	2.2	Perseverance	11	2.3	
										Boss	11	2.7	
Long S.	Money	70	2.3	Salary	53	2.4	Studies	20	2.3	Difficult	15	2.5	
	Tiring	40	1.9				Duty	17	1.8	Learning	15	2.9	
	Effort	24	1.9				Responsibility	15	2.1	Future	15	2.4	
							Obligation	13	2.2	Passion	14	2.9	
							Perseverance	12	2.3	Time	12	2.5	
							Working	11	2.1	Boredom	12	2.7	
										Co-worker	11	2.5	
										Boss	11	3.3	
										Profession	11	2.9	
										Seriousness	11	2.4	

*Evocations of work according to anticipated duration of post-secondary education*

*Note:* Only the evocations mentioned by at least 5% of the reference population were retained. No S. = No studies ; Short S. = Short studies ; Long S. = Long studies

ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 7**

*Evocations for the inductor "your future" according to their rank of appearance and frequency*

		Average rank of appearance						
		Low $\leq$ 2.28		High $>$ 2.28				
Frequency	High $>$ 10%	Money	136	2	Success	75	2.4	
		Work	120	2.2				
		Family	116	2.2				
		Studies	64	2.2				
			Happiness	30	1.9	Child	34	2.4
			Rich	26	1.9	Travel	34	2.4
			Car	24	2.2	Marriage	28	2.3
			Difficult	23	2	Housing	24	2.6
			Happy	21	2	Educational path	24	3.8
			Fear	19	2.2	Salary	22	2.3
			Dream	18	2.1	House	21	2.4
			Passion	17	2.2	Choice	19	3.1
			Uncertain	15	1.2	Enjoyment	19	2.4
		Low $<$ 10%	Love	13	2.2	Profession	17	2.9
			Hope	12	2.2	Joy	15	2.7
			Courage	10	1.2	Freedom	14	2.4
						Help	13	3.2
						Employment	13	2.3
						Health	13	2.6
						Autonomy	13	2.5
					Friendship	12	2.8	
				Discovery	11	3.2		
				Responsability	10	2.7		

ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 8**

*Evocations for "future" according to type of secondary school*

	High frequency, low rank			High frequency, high rank			Low frequency, low rank			Low frequency, high rank		
VHS	Money	19	1.8	Family	12	2.3	Car	6	1.7	Housing	7	2.6
	Success	11	2	Work	12	2.2				Marriage	6	2.5
GHS	Family	62	2.1	Success	31	2.7	Happiness	14	1.8	Travel	23	2.3
	Money	51	2							Educational path	15	3.8
	Work	44	2									
	Studies	26	2									
MS	Money	66	2				Child	21	2.3	Profession	15	2.8
	Work	64	2.3				Rich	17	1.7			
	Family	42	2.2				Difficult	15	2.1			
	Studies	36	2.2				House	14	2.3			
	Success	33	2.3				Happiness	14	2.2			
							Car	14	2.1			

*Note:* Only the evocations evoked by at least 5% of the reference population were kept. VHS = Vocational High School ; GHS = General High School ; MD = Middle School.

ADOLESCENTS' REPRESENTATIONS OF WORK AND FUTURE

**Table 9**

*Evocations for "future" according to anticipated duration of post-secondary education*

	High frequency, low rank			High frequency, high rank			Low frequency, low rank			Low frequency, high rank		
No S.	Money	27	1.9	Family	20	2.2	Happiness	6	1.8	Fear	8	2.2
				Work	19	2.3	Difficult	5	1.8	Studies	6	2.5
				Success	12	2.3	Marriage	5	2	Car	6	2.2
							Stress	5	1.6			
Short S.	Work	52	2.1	Family	42	2.4	Studies	19	2.2	Child	14	2.6
	Money	52	1.9	Success	30	2.5	Salary	12	2.3	Marriage	13	2.5
							Happiness	11	1.6	Educatio	11	3.6
							Rich	11	1.8	nal path		
Long S.	Money	45	2.1	Work	43	2.3	Happiness	12	2.1	Travel	20	2.5
	Family	43	1.9	Success	26	2.6	Happy	11	1.9	Child	15	2.3
	Studies	35	2.2									

*Note:* Only the evocations mentioned by at least 5% of the reference population were retained. No S. = No studies ; Short S. = Short studies ; Long S. = Long studies