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*Psychological contracting accross  
employment situations: PSYCONES*

**STATE OF THE ART**

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# EU RESEARCH ON SOCIAL SOCIAL SCIENCES AND HUMANITIES

## *Psychological Contracting across Employment Situations* **PSYCONES**

Current Evidence concerning Employment Contracts and  
Employee/organizational Well being among Workers in Europe

### **State of the Art**

Project HPSE-CT2002-00121  
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## Foreword

Under the Fifth Framework Programme of the European Union for Research and Technological Development (RTD), the Key Action *"Improving the socio-economic knowledge base"* set broad and ambitious objectives: first, to improve our understanding of the structural changes taking place in European society, second, to identify ways of managing these changes and to promote the active involvement of European citizens in shaping their own futures.

A further important aim was to mobilise the research communities in the social sciences and humanities at the European level and to provide scientific support to policies at various levels, with particular attention to EU policy fields.

Since the launch of the Key Action in 1999 more than 1600 research teams coming from 38 countries have been mobilised. Although most important collaborative efforts are undertaken at the EU level, the participation of new Member States is already considerable with 189 teams out of 1676 teams coming from these countries.

Socio-economic research requires an effective dissemination strategy and the development of such a strategy is a top priority. It should be recognised that there is a broad range of potential users of this type of research apart from the research community, policy makers at various levels and civil society, the citizens of Europe constitute an integral target group.

Different users require different types and levels of information with respect to the results arising out of EU socio-economic research. While the research community may be interested in "raw" results of many of the +/- 200 research projects supported to date, some other users require more analytical information. The latter audience is targeted by our Publication Series at the level of State of the Art Reports. These represent reports normally produced by the Projects in their first year of implementation and they reflect the current state of the art of the specific topic of research to be dealt by each individual project.

The present report was prepared in the frame of the project ***"Psychological Contracting across Employment Situations"*** **PSYCONES**, funded by the Third Call of the Key Action "Improving the Socio-economic Knowledge Base".

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This report wants to outline the ‘state of the art’ with regard to research and facts and figures relevant for the PSYCONES project, as previously defined by Isaksson et al. (2003, p.1): ‘*The general aim of the PSYCONES project is the investigation of how changing patterns of employment relations affect well-being and quality of life for European citizens. More specifically, we propose to investigate the ‘psychological contract’ as a possible intervening factor affecting the relationship between degree of job permanency and individual well-being.*’

In order to guarantee the relevance for the project, two considerations should be taken into account. As a first consideration, the review is mainly focused on studies using samples stemming from the participating PSYCONES countries (Sweden: Bernhard & Isaksson, 2003; Spain: Caballer, Gracia, Peiró & Ramos, 2003; Belgium: De Cuyper & De Witte, 2003; The Netherlands: De Jong & Schalk, 2003; UK: Guest & Clinton, 2003; Israel: Krausz & Staynvars, 2003; Germany: Rigotti & Mohr, 2003) and on European facts and figures, without however neglecting the formulation of theories and important findings from elsewhere. This report summarizes the research findings described in the reports provided by the different national teams, based on national and international databases. The national teams reported on two main research questions: synthesize national research on the association (1) between the employment contract and different outcome variables and (2) between the psychological contract and those same outcome variables. The part reporting on facts and figures is partly based on these same reports, supplemented with data from different European institutions.

Secondly, this report is in line with the conceptual model as used in the pilot study (figure 1), preceding the actual main study of PSYCONES (see also: Isaksson et al., 2003). The overarching objective of the model is to evaluate the effects of ‘contract permanency’ (formal contract, agency versus direct hire, volition) on employee well-being, including attitudes and self-reported behaviors and including both context-free (i.e. outside the workplace; e.g. general health) and context-specific (i.e. work-related; e.g. job satisfaction) measures. The psychological contract (PC), defined in terms of content, state and features, is supposed to intervene in this relationship. Finally, control variables possibly confounding these relationships, were identified.

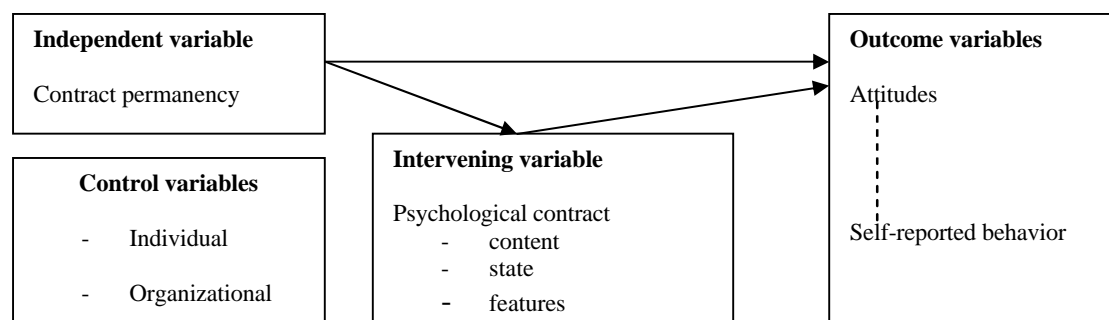


Figure 1. The conceptual model as used in the pilot.

This model acts as a guideline for the content of this paper, as is further illustrated in figure 2. The introductory chapter defines the crucial concepts: the employment contract (chapter 1.1.) and the PC (chapter 1.2.). The latter is situated within the theoretical discourse, facilitating the interpretation of the research results. The description of the employment contract is focused on the degree of permanency (permanent versus temporary) and the country-specific legal framework and practices, again enabling interpretations of research results described in the second chapter.

This second chapter summarizes research results with contract permanency and the psychological contract as central variables. First, the type of employment contract is related to crucial aspects inherent to the contract and especially relevant when focusing on temporary workers (chapter 2.1.1): preference of contract ('volition'), choice and motives. A second section (Chapter 2.1.2.) is reserved for the link between the employment and the psychological contract. In the following paragraph (Chapter 2.1.3.), research results with regard to the employment contract and several dependent variables, questioned in the pilot, are studied. A summary of research concerning the PC in its relationship to those same dependent variables is presented in chapter 2.2., particularly paying attention to both the content and the state of the PC. For both the employment contract and the PC, missing variables, i.e. variables not included in the pilot study but frequently reported in literature, will be reported in a separate section.

For the purpose of this report, the dependent variables are grouped into three categories. The first group captures employee prospects: research findings with regard to job insecurity, employability and contract expectations are presented. Secondly, employee well-being is focused by summarizing the main research results on attitudes (job satisfaction), behavior (sick leave, sick presence and accidents) and different health-related variables (psychological well-being, psychosomatic complaints, work-life interference). A final group has to do with organizational outcomes, i.e. variables that are of direct relevance when taking an organizational perspective: performance, organizational citizenship behavior, turnover intention and organizational commitment. Even though this group was included in the pilot study, the objectives of the PSYCONES project may be rephrased to: *'the 'psychological contract' as a possible intervening factor affecting the relationship between degree of job permanency and both individual and organizational well-being.'*

The third chapter deals with the control variables. This chapter reports on facts and figures concerning temporary employment in general and comparatively across the PSYCONES countries. A general introduction concerning the role of temporary employment in total employment (chapter 3.1.) and the evolution of temporary employment (chapter 3.2.) precedes the discussion of the relationship between the independent variable, contract permanency, and the different control variables: on an individual level (chapter 3.3.2.), gender, occupation, education, family situation, work hours, pay and fringe benefits, tenure and job characteristics are included. In the conceptual model, work involvement was also considered to be a control variable, but as this is rather an 'attitude' and not an 'objective fact', this variable will be discussed in the second chapter, when dealing with attitudes. On an organizational level, we include the sector of employment and the size of the organization (chapter 3.3.1.). The third chapter thus reports on important facts and figures, comparing the PSYCONES countries with each other and paying attention to their situation as compared to the European average.

The general aim of this synthesis report is to investigate to what extent the PSYCONES conceptual model is in line with former research findings and to identify crucial research gaps (chapter 4). The national teams of the PSYCONES project reported on two main research questions: synthesise national research on the association 1) between the employment contract and the different outcome variables as defined in the conceptual model, including the PC and 2) between the PC and those same variables.

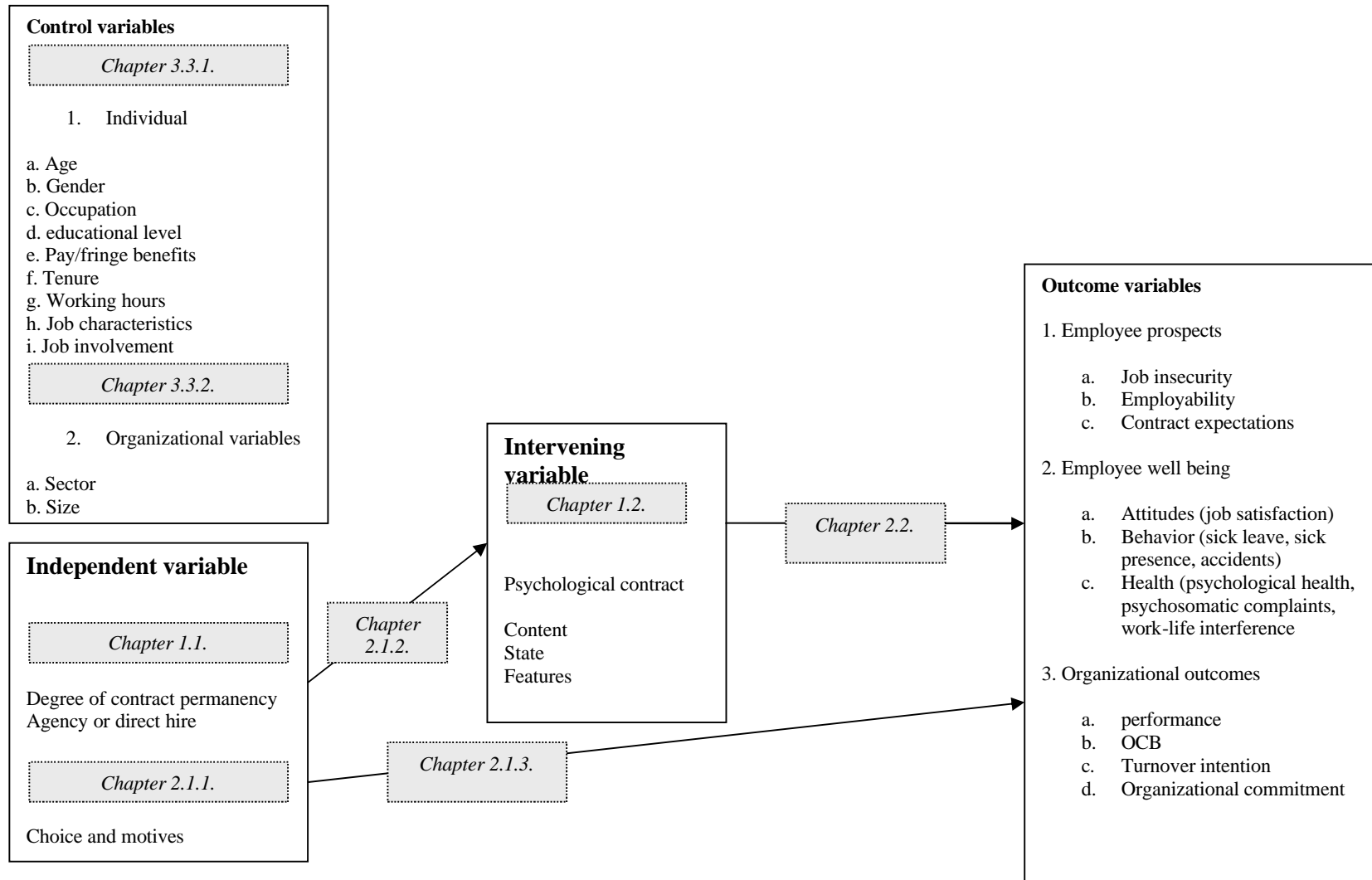


Figure 2. The conceptual model acts as a guideline for the contents of this report.

## **1. Definitions of the Employment and the Psychological Contract**

The conceptual framework of PSYCONES wants to explore the implications of different employment contracts on employee's prospects, attitudes and behavior and organizational outcomes, thereby allocating a crucial role to the psychological contract. Both these concepts are subject to confusion, since a large definitional variation, both across countries and authors, exists.

### **1.1. The employment contract**

What is temporary employment? This is the central question of this paragraph. We first situate temporary contracts within the flexibility debate, in order to come to a (both national and international) useful definition. We then turn to the difficult question of how different employment contracts can be classified. In order to facilitate the interpretation of international similarities and differences, an overview of existing types of employment situations across countries is given.

#### **1.1.1. Definitions of temporary / permanent work**

Articles and data concerning temporary work are often if not mostly framed within the broad flexibility debate, implying more than contractual flexibility (e.g. Apel & Engels, 2002; Benach, Amable, Muntaner & Benavides, 2002; Brewster, Mayne & Tregaskis, 1997; De Grip, Hoevenberg & Willems, 1997; De Jonge & Geurts, 1997; Dekker, 2001; Kaiser, 2002; Martens, Nijhuis, Van Boxtel & Knottnerus, 1999; Raghuram, London & Larsen, 2001). When talking about typical employment, it is implicitly assumed that there is a 'standard' employment form, generally applied in all societies: 'Thus the ability to purchase goods on credit, to have bank loans, to arrange housing and to provide pension arrangements are dependent, to some degree in every European country, on having a full-time, long-term job' (Brewster, Mayne & Tregaskis, 1997). This standard is described as full-time, permanent employment with one employer. Atypical, contingent or precarious employment deviates from this standard on one or more of these dimensions (De Cuyper & De Witte, 2003; Gallagher & Mclean Parks, 2001; Rigotti & Mohr, 2003). This distinction is clearly stated in the definition of contingent work provided by Polivka and Nardone (1989, p.11): 'Any job in which an individual does not have an explicit or implicit contract for long-term employment or one in which the minimum hours worked vary in a non-systematic manner.' It is also apparent in the Swedish Employment Protection Law (1974), stating that an open-ended contract is the standard (Bernhard & Isaksson, 2003). In order to delineate the research focus, temporary work as opposed to permanent work should be well-defined. We start by defining flexibility, later concretized towards temporary work.

In trying to put dimensions into the flexibility debate, the work of Atkinson (1984) is prominent, distinguishing between internal and external flexibility, according to whether or not measures apply to the workforce employed by the organization. Taking the example of fixed term contract workers, this raises difficulties since they are traditionally classified as external, even though they are formally part of the organization's workforce. A criterion based on whether the flexibility measure is contractual or temporal (influencing working times; e.g. sabbatical leaves, part-time work) is laid down to describe the temporary workforce more accurately. Both temporal and contractual flexibility should be considered as numerical as opposed to functional and differ from new employment forms aiming at

flexibility at a company-level as for example call-centers (e.g. Dormann, Zapf & Isic, 2002; Metz, Rothe & Degener, 2001; Moltzen & Van Dick, 2002), telework (Büssing & Broome, 1999; Ertel & Kauric, 2000; Konradt & Schmook, 1999; Wieland, 2001) and virtual teams (e.g. Geister, 2002; Martens & Goetz, 2000). In case of contractual flexibility, the organization's manpower meets the flexibility need by a range of contractual forms. Contractual flexibility, although highly correlated, is not a synonym for temporary employment. Subcontracting for example, defined as employees temporarily working for another company without the permanent contract with their actual employer being broken, cannot be considered as temporary work. In Sweden, Germany and to some extent in the Netherlands, this also accounts for agency offices. A clear definition of temporary work is needed.

The OECD (2002) suggests the following definition: *'A job may be regarded as temporary if it is understood by both employer and employee that the termination of the job is determined by objective conditions such as reaching a certain date, completion of an assignment or return of another employee who has been temporarily replaced.'* Simplifying, temporary employment is considered as dependent employment of limited duration, differentiating between jobs offering the prospect of a long lasting employment relationship and those not doing so. Accordingly, permanency is a contract characteristic.

The OECD definition seems to fit the PSYCONES-project, since national definitions show considerable overlap. For example, the Belgian research of Vander Steene et al. (2001) defines temporary work as 'each type of employment for which objective definitions for terminating the contract exist.' Moreover, European research fits this definition. For example, within the Labour Force Study carried out by the Dublin Institute (<http://qb.soc.surrey.ac.uk/qb1/surveys/lfs/>, see also: Goudswaard & Andries, 2002), temporary are 'those employees who say that their main job is non permanent in one of the following ways: fixed period contract, agency temping, casual work, seasonal work, other temporary work', easy translatable to the OECD-definition.

However, the Dutch definition traditionally and legally used (Central Bureau of Statistics, 2002, [www.cbs.nl](http://www.cbs.nl)), poses a problem, in that it adds an assumption about minimum working hours ('...for at least 12 hours with limited duration and/ or with no fixed number of hours'). According to Dutch standards, those working less than 12 hours per week are unemployed. The specification 'no fixed number of hours' may be better suited for research on temporal flexibility. Therefore, the OECD-definition (2002) will be used throughout this project, not claiming that this is the only one suitable for cross-national research.

**Typical versus Atypical or Non-contingent versus contingent: flexibility defined**

International differences in defining and using concepts are widespread, as is illustrated by the concept of 'flexibility'. Whereas in the U.S. 'contingent work' is the preferred descriptor for flexible employment situations, the E.U. refers to this kind of labour as 'atypical' work. British and German literature deviate from this norm by using 'flexibility'. In Spain, the preferred term to study 'lack of stability' is precarious work, including both temporary and part-time contracts. However, some authors (e.g. Agulló, 1997) see precarious work as an even more complex construct defined by four dimensions: temporality (limited in duration), vulnerability (lack of work control, reduced negotiating capacity), salary level (workers' economic dependency on work and the risk for material deprivation) and accessibility to social benefits and unemployment insurance.



### 1.1.2. Types of employment contracts

One of the biggest challenges in the investigation of contract forms is to find a coherent classification, meeting national regulations and fitting cross-national research. Different research-oriented typologies exist (table 1). Most list different contract forms, not necessarily exclusively focused on temporary employment. However, debate is still going on: ‘... no agreement on the use of employment categories has been reached among researchers’ (Benavides, Benach, Diez-Roux & Roman, 2000, p.500).

**Table 1. Different classification schemes of employment contracts.**

Focus	Authors	Types of contracts
Overall employment	Dekker (2001)	Nonparticipant, unemployment, nonregular employment (part-time, temporary, temporal flexibility), regular employment, self-employment, more than one job
	Benavides, Benach, Diez-Roux & Roman (2000)	Small employers, full- and part-time permanent employees, full- and part-time fixed term employees, full- and part-time sole traders, full- and part-time temporary contracts
Flexible employment	Boockman & Hagen (2001)	Fixed term contracts, temporary work agency employment, freelance work, marginal part-time work
	Apel & Engels (2002)	(1) Irregular dependent employment <ul style="list-style-type: none"> <li>- Subsidized work in the 2<sup>nd</sup> labor market</li> <li>- Subsidized work in the 1<sup>st</sup> labor market</li> <li>- Marginal part-time work</li> </ul> (2) Regular dependent employment <ul style="list-style-type: none"> <li>- Part-time work</li> <li>- Short-term contracts</li> <li>- Shift work</li> <li>- Temporary agency workers</li> </ul> (3) Independent work <ul style="list-style-type: none"> <li>- Free contract / contract for work</li> <li>- Illicit work</li> <li>- Family workers</li> </ul>
Temporary employment	OECD (2002)	Fixed term contracts, temporary agency workers, contracts for specific tasks, replacement contracts, seasonal work, on-call work, daily workers, trainees (apprenticeships), persons in job creation schemes.

The OECD classification (2002) is unique in its focus on temporary employment. This categorization proves useful in comparing countries by referring to both contract type and duration and thus fits the PSYCONES project. An important remark has to do with agency workers. In some countries those workers can have permanent contracts with the agency. Accordingly, they are not temporary workers as such. However, considering that their work assignments are always of limited duration and that the PSYCONES questionnaire focuses on employment forms in the organization employees perform work at (‘Do you have a permanent contract with THIS organization?’), we classify them as temporary. The same reasoning is followed for subcontractors. Since our project explicitly aims at studying the degree of contract permanency, we add ‘permanent employment’ to the classification, taking into account that this category also shows considerable differences with regard to security, at least in some countries. Some civil servants (= those being in government service) cannot be dismissed unless they severely violate the law. We will refer to this group as ‘civil servants – lifelong’. This specific permanency status differs from the traditional open-ended contracts in which dismissal is possible after respecting a period of notice. Figure 3 presents the contracts, as they will be used throughout the PSYCONES main study.<sup>1</sup> In the next paragraph, we will outline to what extent the proposed model applies to the PSYCONES countries.

<sup>1</sup> This categorisation deviates from the initial proposal, used in the pilot study, in that ‘period of notice’ is not considered as a crucial dimension and in that the model is orientated towards employment in the organisation in which one is currently employed. This new categorisation took into account the differences experienced in the pilot study.

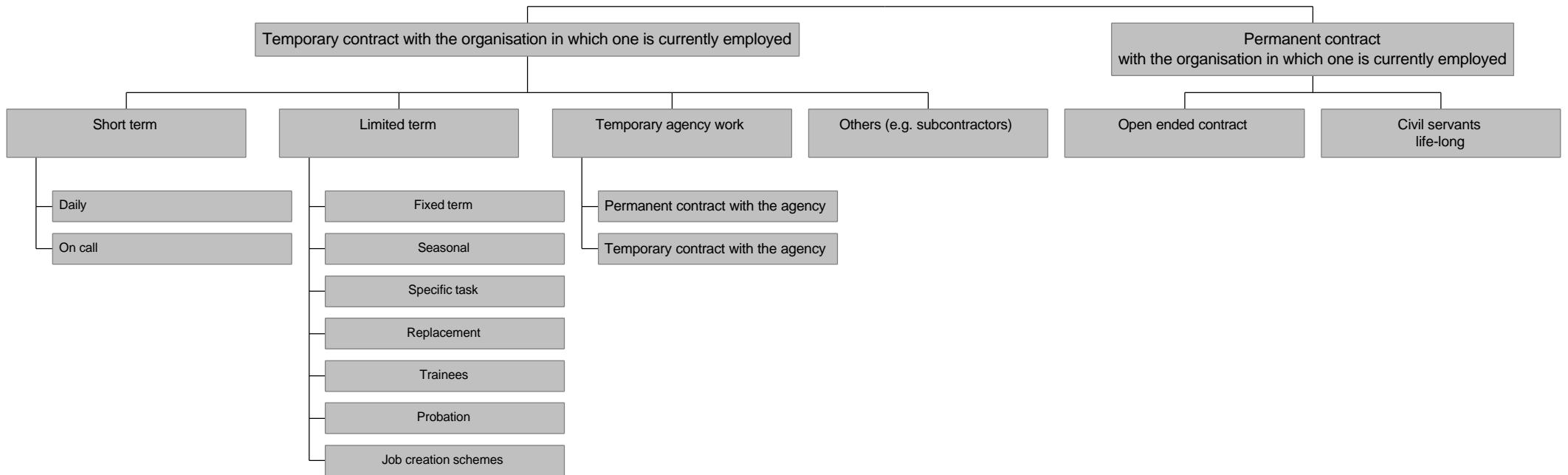


Figure 3. Types of employment contracts used in the PSYCONES research.



### 1.1.3. Types of temporary employment across countries

Assessing the extent to which the scheme in figure 3 fits national labor markets, is performed by describing country-specific labor market features. This may ease the interpretation of both the research findings, described in chapter 2, and the facts and figures (chapter 3). We summarize this by listing employment contracts across countries (table 2) and by providing percentages on the different contracts (table 3) .

#### a. Belgium

Permanent contracts (over 85% of paid employment<sup>2</sup>) are the norm: both unions and employers recommend them. They offer thorough protection against dismissal, installed by a period of notice, often translated into a financial compensation. In mutual agreement, a probationary period can precede. Civil servants (about 30% of paid employment) may have temporary, permanent and lifelong contracts.

Temporary work is defined by law (<http://meta.fgov.be>) as ‘the activity, based on a formal employment contract, which aims at the replacement of a permanent worker or the meeting of a temporary increase in the amount of work or the assistance with an exceptional work’. Most common is the fixed term contract (ending date set in advance), used when the amount of work increases. A second group is defined by objective conditions other than time frame (replacement/specific task/seasonal work), lasting until the condition is fulfilled. Temporary contracts with the same employer are legally limited in number: after three contracts, employees can claim a permanent contract. This group of contracts, referred to as ‘contracts of limited duration’ (8.8%), is to be distinguished from temporary agency work (TAW; 2.5%), pointing to temporary employment by an agency (the contract is within the agency and is temporary) to work for a user firm (Delbar & Leonard, 2002; Storrie, 2002b), allowed in the cases previously mentioned (replacement, temporarily increase, exceptional work). In order to stimulate the recruitment of less employable persons, a recent law (10/2000) enables agency offices to offer a permanent contract to those workers. It is however too early to evaluate the measure in any respect. Interestingly, Belgian research (e.g. Martens, Nijhuis, Van Boxtel & Knottnerus, 1995; Vander Steene, Sels et al., 2001) distinguishes between the same two categories, which are contracts of limited duration and TAW.

These two groups – contracts of limited duration and TAW – do not cover the whole range of temporary contracts. Apprenticeships and different measures aiming at the integration of vulnerable workers through temporary work arrangements, generally not exceeding a 12-month period, are other examples. Daily and on-call workers are a strong minority within the group of temporary contracts.

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<sup>2</sup> The exact percentage differs according to the source of information. For more information: De Cuyper & De Witte, 2003 (WP1-Belgium)

## b. Germany

Based on the expected positive impact of deregulating labor laws, different modifications with regard to temporary employment have been made since the 1980s, among which the allowance of limited term contracts for up to 24 months (1996). However, compared to other European countries, Germany is still one of the most legislated countries (Schömann & Schömann, 2001), not being a leader in promoting flexibility as is illustrated by the high number of workers employed on permanent full-time contracts (Walwei, 2003). All permanent contracts, even when probationary, are subjected to a period of notice, with the exception of employees working in the public sector ('Beamte'), who cannot be dismissed.<sup>3</sup>

The use of temporary contracts is restricted by specific regulations, fitting the proposed categorization: contracts for specific tasks, for a temporary increase of work and for replacement are covered. Those recently graduated or having personal reasons are allowed on temporary contracts. Also a settlement of court and contracts used to ease the transition to permanent work are well grounded. TAW has a 40-year history, the first agency being founded in 1962. Not until ten years later, the government created the law on labor lending (1972<sup>4</sup>). Several changes have been made since; the most recent is the extension of maximal contract duration from three to 24 months and the requirement to consider TAW and permanent work as equal after 12 months (Jahn & Rudolph, 2002a; 2002b). Short-term contracts e.g. daily/on-call) are few within the agency sector. The contract with the agency can be temporary or open-ended. Even though TAW has a poor reputation, based on known cases of misuse, politicians and employees see TAW as a means to ease transition from unemployment to permanent employment.

This transition issue is a hot topic, since a high unemployment rate characterizes the labor market: official statistics (January 2003; <http://www.destatis.de>) found 4.6 million people unemployed, ranging from 5% (West) to 18% (East) which illustrates the tremendous differences, still existing more than ten years after unification. The political discussion resulted in the creation of the Hartz-commission, aiming at further deregulating of legislative rigidities and lowering unemployment by assigning a key role to temporary work (Heckel, Greven & Marschall, 2002). Most measures resemble job creation schemes, reflected in the enhancement of youth unemployment (e.g. Apel & Engels, 2002).

## c. Israel

Till the late 80s, 85% of all workers were unionized and protected by collective labor agreements, resulting in the feeling of life-long job security. This perceived permanency status has since been weakened with the rate of employees currently unionized estimated at 42% (Cohen, Haberfeld, Mundlak & Saporta, in press). Note however that being on a permanent contract is not a legal status but instead is merely an important clause of the collective contract between employers and unions.

The rate of union membership and coverage by collective agreements considerably overlaps, but still there are differences due to 'enlargement agreements' dictating employee equality within organizations and/or sectors and to the existence of intra-organizational boards, representing the rights of all workers.

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<sup>3</sup> Collective agreements may differ from this general outline.

<sup>4</sup> Gesetz zur Regelung der gewerbsmäßigen Arbeitnehmerüberlassung

Whereas union membership is estimated at 42%, the rate of coverage is 56%. The percentage of those referred to as 'externals' (not a union member, not protected; working conditions are defined outside collective labor relations systems) mounts up to 34% (Cohen, Haberfeld, Mundlak & Saporta, in press).

The decrease in union power has been accompanied by a sharp increase in less secure and shorter contracts, of which the maximum term is defined by collective agreements. Some organizations extend this term by hiring employees for close to the maximum period, dismiss them and rehire them after a short break. Personal contracts providing individual benefits and including a fixed term cover 30% of all workers. Other contracts of limited duration include those temporary and directly (without the existence of a third party) employed without exact time specifications. Agency workers are a minority estimated at 5.8% (Nadiv, 2003). More than half of them are aged below 30 and about one third works on a part-time basis, which is more than the 27% of the total salaried population (Ziloni, 2000). The agencies are strictly controlled by law (requirements, accreditation, demands, area of application). Exceeding nine months of contract duration immediately converts the external contract into an internal one, at the expense of the client company. This situation has to be distinguished from subcontracting, e.g. software houses hiring out its employees to clients.

Concluding: lifetime employment has eroded due to the current economic situation. Most employees are 'temporary', formally or informally, and easy to dismiss when facing financial difficulties.

#### d. The Netherlands

Historically, permanent jobs are part of the social capital, having several advantages, as e.g. a high level of social security (Ester & Vinken, 2000). Different types of permanent arrangements exist (e.g. on-call / agency workers). Recently the government recognized the need for flexibility in order to cope with increasing international competition, the sovereignty of the customer and the changing macro-environment (Schippers & Steijn, 1999), resulting in legally founded measures aiming at better security and facilities for temporaries. A combination of advantages for both employer and employee is aimed at (Pot, Koene & Pauwe, 2001; Van Ginkel, Van Lin & Zwinkels, 2002), as becomes clear in the 'Flexibility and Security Act' (01/1999), which acts as the legal basis of the social and political acceptance of flexible employment (Van Den Toren, Evers & Commissaris, 2002). This is referred to as 'Flexicurity' (Van Oorschot, 2001). The core elements are the allowance to renew contracts more easily, the mitigation of the dismissal procedure for regular employment and the installation of a phase model which basically means that after three consecutive contracts with a fixed ending date (maximum total duration of three years), the contract automatically becomes permanent. When it comes to TAW, the first 26 weeks are not regulated and the contract – even when permanent – is always with the agency.

Several temporary work arrangements serving different purposes reside within this legal framework: the majority of temporary workers are used for seasonal work, for buffering changes in productivity, for the replacement of a core worker or for the temporary expansion of company activities. More recently, temporary employment is used to evaluate new employees: they are hired with the explicit aim to offer them a permanent contract when positively evaluated. Fixed term contracts (defined by a time period) with or without probation, amount to 23.8% of temporary employment (OECD, 2002).

Jobs mediated by agency offices (36.8%) and on-call workers (27.3%) are very prominent (OECD, 2002). Within the agency sector, on-call and fixed term contracts exist. For reasons of clarity, we will not distinguish between these different forms. Other arrangements, like seasonal workers, job creation schemes and trainees cover 12.1% of all temporary employment. Taking the three most prominent forms of contracts (permanent, fixed term and on-call contracts, all applicable to TAW), over 80% of the private labor market is covered, equaling 99% of the total workforce.

#### e. Spain

Unlike other countries, permanent employment is not the standard in Spain: during the last decade, fixed term contracts made up a large majority of all contracts formalized. E.g. in 2002, 9.0% of all contracts established was permanent, 35.68% was fixed term for a specific task, 43.96% was fixed term because of production demands, 7.07% was a replacement contract, the remaining 4.30% included other forms of temporary employment, as e.g. training and apprenticeships (INEM, 2002).

This trend is reflected in the relatively low percentage of employees currently working on a permanent contract (60.40%, Spanish Active Population Survey- Encuesta de Población Activa, 2003, 2nd term, INE, 2003). Except for civil servants who are lifelong employed, most of these permanent contracts can be ended after respecting a period of notice, ranging from no notice (when compelling reasons are proven) to three months with exception of higher managers for whom this is broadened to seven months. For temporary workers (30.60%), the variation in the period of notice is limited and rather short. The share of temporary workers decreased by only three percent during the past five year, even though the government introduced several measures to reduce temporary employment. The decrease rate is higher for men as compared to women for whom the rate is still increasing. In the private sector, the rate decreased by 7%, while in the public sector, there has been an increase (CES, 2003). Next to the governmental policies, also social agents aim at reducing the share of temporary arrangements by the promotion of employment stability, in which the compatibility with the use of temporary contracts to fulfill production needs is included in the negotiation criteria. In fact, during 2002 and 2003, there is a trend towards more temporary contracts being transformed into permanent ones. However, the Spanish labor market still has a high rate of temporary workers. Moreover, only 8.2% of all contracts were part time with a minority working part time on a voluntary base. This is often mentioned as one of the reasons to explain the enduring high rates of temporary contracts, implying that it might be important to identify the reasons for the low preference of part time work. Accordingly, the European Joint Employment Report (2002) identifies three key actions: the decrease of unemployment, the increase of employment rates, especially with regard to permanent and part time employment and the decrease of regional differences on these indexes.

Definitions of temporary employment as taken from the Spanish Labour Force Survey are in line with Eurostat-definitions. Fixed term contracts refer to contracts terminated by objective conditions (e.g. reaching an agreed upon date, fulfillment of a task/service, replacement). Within this category, several uses other than those specified, stand out in that they have a certain tradition: temporary contracts can be used in order to respond to changing market circumstances or production needs (e.g. seasonal employment), for those who recently finished university or professional training (medium/high degree;

duration six months to two years) and for apprenticeships (for those aged between 16 and 21; duration six months to two years). Apprenticeships are more numerous among those having completed Primary School or professional training. Job creation schemes for hard-to-place employees (OECD, 2002) also exist. For these contracts, differences with regard to the duration of the contract are far more decisive as compared to the dimension 'period of notice': e.g. 54.2% of the contracts installed to cope with increasing production demands last less than one month, 24.6% less than a week.

Law defines temporary agencies ('Empresa de Trabajo Temporal') (14/1994) as 'enterprises whose main activity is to 'transfer' employees to user enterprises'. Employees always have temporary contracts with the agency. Due to changes in legislation (1999) and because of the deceleration of employment creation, both the number of agencies and the number of agency workers have decreased during the period 1999-2002. Finally, Spanish law does not define on-call or daily contracts.

#### f. Sweden

According to the 1974 Employment Protection Law, which is basically intact, the standard is an open-ended contract, valid until further notice (Bernhard & Isaksson, 2003). Direct permanent and life-long employment exists in the public sector, even though exceptional. Agency workers usually have a permanent contract, with agencies being subjected to the same regulations as other companies. As a result, TAW is not seen as a sector distinct from others. Collective agreements are widespread for TAW (OECD, 2002). A feature of several of those agreements is a basic monthly salary and the principle of equality. This guaranteed monthly salary (80 to 90% of normal salary) forces the agency to take into account the risks associated with hiring workers on a permanent base, thereby limiting the chances for lower skilled workers to get a (permanent) job via the agency and limiting the segment of the labor market to those where one is relatively certain to find a job (Bergström, 2003).

The most common temporary contract is fixed term, with subgroups according to contract duration. Replacing a permanent worker outweighs other reasons, due to generous regulations for parental leave and part-time work during children's pre-school years, resulting in contracts with relatively long duration. This is especially prevalent in the public sector, employing a majority of women. Efforts to broaden the equality principle during the 1990s resulted in stricter regulations of repeated renewals (three years out of five on a replacement contract convert the contract into a permanent one), resulting in a decrease in this contract form from 45% to 32% of all temporary contracts. Since seniority is a governing principle, those working on fixed term contracts of long duration are not considered to be disadvantaged, in that they have the same period of notice as permanent employees. The same accounts for agency workers. Still, the situation for agency workers is slightly more insecure, since they are more easily confronted with dismissal due to shortage of work. As a consequence for further research, seniority (the duration of the contract) might be more decisive as compared to the period of notice.

On-call and daily contracts are used for replacements of shorter duration, e.g. in case of sick leave. This type increased from 5% up to 20% during the past decade. Contracts used for project work or specific well-defined tasks (18%), probation (10%) and seasonal (5%) work increased slightly. In contrast, apprenticeships, trainees and various job creation schemes (e.g. community work during unemployment) show a declining trend, together accounting for about 15% of temporary arrangements.



g. United Kingdom

National legislation used to provide little protection, regardless of contract type (Bronstein, 1991; Goudswaard & Andries, 2002; OECD, 2002). However, recent legislation<sup>5</sup> ameliorated the situation of fixed term workers. Where there was no limit on the maximum contract duration, recently four years of successive employment automatically converts the contract into a permanent one.<sup>6</sup> The non-renewal of a fixed-term contract and the expiration of a task-based contract are now dismissals in law, implying that an employee with a one-year's service has the right to a written explanation and the right not to be unfairly dismissed. If the contract lasted for at least two years and is not renewed because of redundancy, the employee will have the right to statutory redundancy payment. Moreover, fixed term employees should be informed about permanent vacancies (Guest & Clinton, 2003). However, the preceding legislation still holds to some extent (no reasons needed for hiring and no limit on the maximum number of contract renewals). (Brown, Deakin, Nash & Osxenbridge, 2000) report on the development of employment contracts in recent years and found these to be highly standardized and formalized. The role of legislation in influencing employment contracts has significantly increased as the role of the trade unions diminished. However, the legislation is more likely to be adhered to by organizations if trade union presence is strong. For agency workers, changes are expected under the EU's Agency Worker Directive. While several institutions, such as the Trade Union Congress, are in favor of the proposed legislation to provide greater equality, others, e.g. the Department of Trade and Industry, expect this to result in a contraction of the temporary sector, damage the competitive advantage of flexible contracts, greater bureaucracy and will be impractical to implement (Guest & Clinton, 2003).

When it comes to statistics as reported by the OECD (2002), fixed term contracts are by far the most common temporary work form (48.3%). Seasonal workers are only a small minority of the temporary work force, totaling 4.1%. Other forms of temporary work account for 38.7%. TAW is a rather unclear concept in the UK, not only complicating estimations on percentages, but also the issue of which employees to include. According to the CIETT (2000, in OECD, 2002), some of the self-employed are part of the temporary agency force. For reasons of comparability, we stick to the OECD definition (2002), only taking into account dependent employment: accordingly, TAW covers 15.8%.

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<sup>5</sup> Working Time Directive (1998), National Minimum Wage (1999); European Works Council Directive (1999); Employment Relations Act (1999); Fixed –Term Employees Regulations (2002).

<sup>6</sup> Note that this period is still longer when compared to the other countries already discussed.

## h. Conclusion

The tables below give an overview of the main findings. Table 2 summarizes which contract types are covered across countries; table 3 provides percentages on contracts that can be found in all countries.

**Table 2. Employment types across countries.**

	Belgium	Germany	Israel <sup>7</sup>	Neth.	Spain	Sweden	UK
Short term (daily / on-call)	few	few	?	also permanent	?	?	?
TAW	temporary	permanent	temporary	most temporary	temporary	most permanent	temporary and permanent
Fixed term	?	?	?	?	?	?	?
Seasonal	?	?	?	?	?	?	?
Specific task	?	?	?	?	?	?	?
Replacement	?	?	?	?	?	?	?
Trainees	?	?	?	?	?	?	?
Job creation schemes	?	?	?	?	?	?	few
Permanent	?	?	no legal status	?	?	?	?
Permanent life long	?	?	?	?	?	very few	very few

? = employment type present in the specific country; ? = employment type not present in the specific country.

Most contract forms are represented: the fixed term contract, but also seasonal employment, contracts for a specific task, replacement contracts and job creation schemes are well-defined. Permanent contracts exist in all countries, except for Israel: there, the labor market is organized differently, complicating comparisons.

There are some differences when it comes to TAW, in that workers possibly have permanent contracts with the agency in the Netherlands and in the UK. This is very frequently so in Sweden and always so in Germany. In Belgium, Israel and Spain, agency workers always have temporary contracts. Short-term contracts are rare in Belgium and Germany and non-existent in Spain. In the Netherlands, short-term contracts are not exclusively reserved for temporary workers. Permanent life-long contracts exist in five countries out of seven and this only in the public sector. In Belgium ('statutair ambtenaar'), Germany ('Beamte') and Spain ('funcionarios'), this type of contract is rather common. In Sweden and the UK, very few contracts are characterized by lifelong employment.

Since the percentages in table 3 stem from survey data<sup>8</sup>, they must be interpreted as illustrations of the relative importance of contract forms. Permanent contracts still are the norm, even though Spain can be considered as an outlier. For more information, we refer to chapter 3. Fixed term contracts are by far the most common form of temporary employment, outweighing TAW and apprenticeships in all countries. The category 'other' refers to those temporary contracts not covered by the other categories: the relative high percentages of this category when compared to other temporary arrangements, points to the enormous diversity of contracts across countries.

<sup>7</sup> Israeli information does not stem from structured documents or academic writings, but was gathered by means of personal communication.

<sup>8</sup> Since this survey only took into account European countries, data for the Israeli situations are missing.

**Table 3. Percentages on employment contracts across countries (Source: Third European Survey on Working Conditions, <http://www.eurofound.eu.int>).**

	Belgium	Germany	Neth.	Spain	Sweden	UK
Permanent	88.7%	86.6%	81.9%	64.6%	85.8%	81.8%
Fixed*	5.7%	8.5%	11.3%	27.1%	8.8%	9.2%
TAW	2.5%	.6%	2.4%	2.3%	.5%	2.2%
Apprentice	.4%	2.1%	.3%	1.4%	.4%	.4%
Other	2.4%	2.1%	3.7%	4.3%	4.3%	4.1%
?	.3%	.2%	.4%	.4%	.1%	2.3%

\* 'Fixed' refers to contracts of limited duration, including fixed term contracts, contracts for specific tasks and replacement contracts.

## 1.2. The psychological contract

Although the concept is not extensively studied across countries, there seems to be as many definitions as there are authors, resulting in different measurement practices, in turn influencing research results. We first discuss the definitions, paying attention to the ongoing debate. Secondly, different types of psychological contracts will be discussed, based on different research approaches.

### 1.2.1. Definitions of the psychological contract

Van den Brande (2002a) gives an historical overview of PC definitions (see annex 1; other definitions found are added). In these definitions, the past and ongoing debates are reflected.

An important milestone in the history of psychological contract (PC) research is the shift from questioning both parties, employer and employee (e.g. Herriot & Pemberton, 1995; based on earlier concepts of the PC, e.g. Schein, 1978), to questioning the individual perception of the employee, first introduced by Rousseau. Framed this way, the PC is a cognitive model rather than an exchange concept (Arnold, 1996; Guest, 1998b). This solves the often cited problem of who represents the organization - formerly put in practice by integrating both human and administrative contract makers (Overlaet 1997, in Dierickx, 2000), and the problem of disagreeing parties. Most recent research is based on the definition of Rousseau or on those founded on it (e.g. Mclean Parks, Kidder & Gallagher, 1998), illustrated by the definitions used in two Belgian PhD theses (De Vos, 2002; Van Den Brande, 2002a). Also in Dutch literature, Rousseau's definition is used most frequently. However, not all researchers currently having the PC as a research topic agree: Swedish studies (Isaksson, Bernhard & Gustafsson, 2003; Isaksson, 2001; Knocke, Drejhammar, Gönas & Isaksson, 2003) emphasize the importance of investigating both perspectives but empirical data focus on only one side.

Another point of debate is whether the PC has to do with expectations (e.g. Overlaet, 1997 in Dierickx, 2000; Kotter, 1973), obligations (Herriot & Pemberton, 1995; Rousseau, 1990; 1995) or both (Mclean Parks, Kidder & Gallagher, 1998). However, all authors can be expected to agree, using different wordings and referring to expectations or obligations based on perceived promises.

Although definitions share important characteristics (implicit, informal, subjective, based on mutuality, obligatory and dynamic), the PC is a heterogeneous concept. The definition chosen for PSYCONES can be seen as a compromise, avoiding to get caught in the debate: '*...the perceptions of reciprocal expectations and obligations implied in the employment relationship* (Isaksson et al., 2003, p.3).'

### 1.2.2. Four research directions, resulting in different types of PC

Even though the concept was introduced by Argyris in the 1960s, research kicked off with Rousseau. Different directions of research emerged, all aiming at a better understanding of the PC: content- and feature-, state- and process-oriented research.

#### a. Examining the content of the psychological contract

The content of the PC refers to the ‘concrete terms being part of the perceived exchange relationship’ (Rousseau & Tijouriwala, 1998). It is difficult if not impossible to make an exhaustive list of content-items, since this list theoretically contains thousands of items. Using a limited subset of items for which scales are developed, researchers face the problem that until today no consensus on what scales and which items to use is reached (De Vos, 2002; Van Den Brande, 2002a).

The content-oriented approach is illustrated by listing some suggestions on what topics to include, (table 4). Robinson, Kraatz, and Rousseau (1994) and Schalk and Freese (1996) suggested a list of employee and employer obligations, used by different researchers in describing the PC-content (De Jong, 2001; Freese & Schalk, 2000; Huiskamp & Schalk, 2002; Janssen & Schuiling, 1998; Schouten, 2002) in the Netherlands. For example, Dutch employees feel obliged to work overtime when needed, to show extra-role behavior and to protect confidential information. Loyalty is important when the individual rather than the organizational career is concerned. Important organization’s obligations are clarity, justice and open communication.

The Belgian research of De Vos, Buyens, and Schalk (2002), based on a literature review, considerably overlaps. E.g. when talking about ethics, issues including competitor support, proprietary protection and minimum stay may be covered. HRM includes support and respect for private life. Factor analyses (N1=388 – newly recruited employees; N2=155 – IT professionals) reveal that employer’s obligations resulted in the intended six factors, whereas employee’s obligations (newly recruited employees) revealed 5 interpretable factors.

**Table 4. The content of the PC.**

Obligations of the employee		Obligations of the employer	
Robinson, Kraatz & Rousseau (1994)	De Vos, Buyens & Schalk (2002)	De Vos (2002)	De Vos, Buyens & Schalk (2002)
Working overtime	Job performance	Job content	Job content
Loyalty	Flexibility	Opportunities for personal development	Opportunities for career development
Extra-role behavior	Extra-role behaviors	Social aspects	Social aspects
Notice	Loyalty	Human Resource Management policy	Support
Transfers	Employability	Rewards	Rewards
Competitor support	Ethics		Respect for private life
Proprietary protection			
Minimum stay			

Kotter (1973), Portwood and Miller (1976), Coyle-Shapiro and Kessler (2000) and Guest and Conway (2000a) are other contributing authors, not only intending to develop questionnaires, but also wanting to map PC-types. We will illustrate the research domain of content-based PC types by presenting the most famous classifications.

Drawing on the work of Macneil (1985) Rousseau distinguishes transactional and relational contracts (Robinson, Kraatz & Rousseau, 1994; Rousseau, 1990). However, not all contracts can be empirically classified, resulting in additional types (figure 4), based on two dimensions.

		Time frame	
		Short	Long
Tangibility	High	transactional	balanced / team player
	Low	transitional	relational

**Figure 4. Types of psychological contracts according to Rousseau**

Shore and Barksdale (1998) developed another typology, using Rousseau’s (1990) list of items. Analyses on 327 part-time MBA students revealed four clusters, presented in figure 5.

		Balance employer – employee	
		Balance	No balance
Level of obligations	High	Mutual high	Employee over-obligation
	Low	Mutual low	Employee under-obligation

**Figure 5. Types of psychological contracts according to Shore and Barksdale (1998)**

A third typology is found in the work of Tsui, Pearce, Potter and Tripoli (1997), distinguishing a quasi-spot contract (relationship in which the investments of both parties are low), a mutual investment contract (high mutual exchange), underinvestment and overinvestment. Note that this research is based on HR-practices. Schalk, Freese and Van den Bosch (1995) distinguish an implicit and an explicit PC.

Recently, authors stress the shift from an old to a new PC, in which employability and flexibility hold the edge (e.g. Anderson & Schalk, 1998; Berner, 1999; Bernhard, 2001; Gasperz & Ott, 1996; Hall & Moss, 1998; Huiskamp & Schalk, 2002). Freese and Schalk (2000) state that ‘finding a balance between flexibility and security is the core issue in psychological contracting in the Netherlands today’, thereby capturing the core dimensions of the discussion, which may not be limited to this country. Anderson and Schalk (1998) have suggested that aspects as exchange and future employability are replacing the traditional (security, loyalty and continuity) aspects within the Dutch PC. The work of Hiltrop (1995) is the most famous in this regard, followed by Robinson, Kraatz, and Rousseau (1994), Robinson (1996), Herriot and Stickland (1996) and Guest and Conway (2000a). Table 5 summarizes some authors relying on this typology. The question if there is an entirely new PC is still a subject of debate.

**Table 5. The old and the new psychological contract.**

Belgium	(Vancrombrugge, 2000)	Two factors are found, reflecting the old and the new dimension (N=144).
Germany/ Switzerland	Berner (1999)	Even though organizational restructuring may establish the transition from an old to a new form of PC, the survivors still favor the old contract to a large extent.
Neth.	Anderson & Schalk (1998)	Aspects like more exchange and focus on employability are replacing the old aspects.
	Huiskamp and Schalk (2002)	Obligations of the organization are currently centered on clarity, justice and open and direct communication.

As illustrated in the previous overview, the disadvantage of a content approach is the difficulty of developing standardized tools. Content-based research is a good option when it comes to studying idiosyncratic aspects of the PC. When the development of typologies is concerned, factor structures are not very stable across employment situations (Van Den Brande, 2002b). An illustration are the Swedish studies (Isaksson et al., 2003; Isaksson, Josephson & Vingård, 2003): validation and factor analyses resulted in poor reliabilities for employer obligations and in a one-factor solution for employees obligations. None of these studies report results in terms of types of PC, but instead, the measures are indicators of the level or scope of mutual expectations.

#### b. Examining the features of the psychological contract

This type of research concentrates on finding universal dimensions, enabling international comparisons because a standardized measure can be developed. This is illustrated in the Israeli PhD of Setter (2000), examining the question of universality. Data on 625 workers showed that the PC is essentially universal, even though the strength of the inherent obligations may differ across respondents. However, this might be a 'anticipatory PC', defined by Belgian researchers as 'a naïve and imperfect schema about a future deal that enumerates what kind of promises employees are willing to make towards their future employer and what rewards employees can expect to receive from their future employer' (Meganck, Buyens & Jordens, 2003). In the study of Meganck et al. (2003) it was showed that last-years students already have a mental model resembling the PC

In two well-known studies (Mclean Parks, Kidder & Gallagher, 1998; Rousseau & Mclean Parks, 1993), it is claimed that transactional and relational contracts differ on five dimensions: time frame, tangibility, scope, stability and focus. Different Dutch researchers built on and extended this work (e.g. Freese, Heinen & Schalk, 1999; Kidder, 1998; Schalk, Freese, Bot & Heinen, 1998; Van Den Brande, 2002b; Van Rijckevorsel, 2000) add individualization and power distance, derived from the work of Rousseau and Schalk (2000) on international comparisons. Principal component analysis on data of 1.106 employees resulted in ten dimensions<sup>9</sup>. Ulbricht and Bernhard (2003) add employability. Confirmative factor analysis, using a sample of university employees and employees from a middle-sized company, showed the best fit for a six factor solution<sup>10</sup> for the first and a five factor solution<sup>11</sup> for the second sample. The research of Freese and Schalk (2000) is different, in that it applies the dimensions to the Dutch situation. The dimensions focus, time frame and scope are focused, the others are highly dependent on professions and contracts. The focus of Dutch employees is broadly socio-economic, the time frame is more transactional due to a larger proportion of fixed term contracts and the short tenure of most employment relationships. Finally, employees do not mix private and working life (De Jong & Schalk, 2003; Freese & Schalk, 2000).

Next, PC-types can be constructed, illustrated by the study of Van den Brande (2002a) describing six types. The profiles of respondents clustering together were elaborated, concluding that those fit the dual society theory with the instrumental, the weak and the loyal contract, representing weak positions:

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<sup>9</sup> employee entitlements: tangibility, long term involvement, personal treatment, equal treatment, carefulness regarding agreements; employee obligations: open attitude, loyalty, personal investment, flexibility, respect for authority

<sup>10</sup> time frame, stability, scope, particularism and the two foci

<sup>11</sup> (stability, tangibility, particularism and the two foci)

1. instrumental PC (employees perceive to have high expectations but low obligations; 19.5%)
2. weak PC (respondents have low scores on both expectations and obligations; 19.5%)
3. loyal PC (respondents stress the long term involvement in exchange for loyalty; 19.5%)
4. strong PC (respondents have high scores on both dimensions; 4%)
5. unattached PC (respondents have low expectations concerning long term involvement; 14.5%)
6. investing PC (respondents perceive having high obligations and moderate expectations; 23%)

Note that this typology shows overlap with the content-based ones. E.g. the unattached equals the new PC. However, only a small percentage of the respondents is characterized by this type, implying that the transformation from an old to a new PC may not be overestimated. The old PC resembles the loyal PC. In comparison to Rousseau's (1995) model, the instrumental and the transactional contract are comparable, the investing and the relational contract share the characteristics of loyalty, long-term engagement, personal investment and treatment. The strong and the team player and the weak and the transitional contract are two other pairs. Also the model of Shore and Barksdale (1998) can be freely translated to her model.

The feature-approach responds to the disadvantages of the content-approach. However, Ulbricht and Bernhard (2003) doubt that the PC can be sufficiently investigated by context-free instruments.

### c. Examining the state of the psychological contract

Shore and Tetrick (1994) define violation of the PC as 'the reactive process whereby the employee receives information from the organization which suggests that an obligation with the contract terms has not been met', pointing to a discrepancy between what is met and expected. Accordingly, fulfillment measures the extent to which both parties think the terms of the PC have been met. This can be illustrated by Dutch research (De Jong, 2001; Freese & Schalk, 2000; Ten Brink, Den Hartog, Koopman & Muijen, 1999) (table 6). The violation of the PC can concern individual aspects of the PC: e.g. when the employee sees job insecurity as a violation of the PC (Borg, 1992).

**Table 6. Fulfillment of employer's obligation in the Netherlands.**

Job content	Employees are not enthusiastic about the challenging and stimulating content of jobs. They are satisfied with the possibilities to work in teams.
Opportunities of personal development	The organization frequently falls short with regard to education, training and the possibilities to grow.
Social aspects	Employee expectations are best fulfilled on the topic of work atmosphere and least fulfilled when it comes to appreciation and working conditions.
Human Resource Management Policy	Expectations on justice, clarity and communication are not entirely fulfilled by the organization, but expectations on providing opportunities to balance work and life are fulfilled.
Rewards	Organizations do not succeed in fulfilling these expectations, since employees expect a better fit between salary and reward for special duties.

In Spain, occupational studies from 1996, 1999 and 2002, exploring the entry of youngsters into the labor market, included variables directly or indirectly referring to the state of the PC, questioning the equity of compensations and the discrepancy between compensations received and expected. The 1999 and 2002 studies also explored the fulfillment of the promises made by the employer. Results show that most people perceive a high degree of fulfillment (63.4% in 1999 and 55.2% in 2002 perceive many or very many promises fulfilled). However, in 1999, 7% of youth in Valencia and 10% in Madrid and Barcelona thought that the company had not complied with the commitments. Still, data suggest a declining trend between 1999 and 2002. The same pattern appears for other variables. Most subjects

(ranging from 61.7% to 68.6%) perceive pay equitable with contributions. However, the percentage perceiving reasonable to high compensations declines. With respect to the adjustment of pay levels received and expected, results show a match for 65.7% to 74.9%. Again, people receiving income below expectations are increasing (García-Montalvo, Peiró & Soro Bonmatí, forthcoming).

As a remark: there is a conceptual difference between breach and violation. The first refers to the cognitive awareness, whereas in the second emotional reactions are involved. Moreover, several factors contribute to the experience of both violation and breach: the type/size of the breach and the perceived responsibility.

Even though most research focuses on violation/breach (Cavanaugh & Noe, 1999; McClear & Taylor, 1998; Robinson, Kraatz & Rousseau, 1994; Robinson & Rousseau, 1994; Turnley & Feldman, 1999), the state of the PC also covers fairness and trust. Trust when used in the PC context should be considered as a relational rather than a situational variable, a personality trait or attitude, thereby following Petermann, Neubauer, and Gruenheidt (1992) in their critics on the one-sided definition of trust. Moreover, these authors are convinced that trust includes various facets, some of which may be neglected in research, reminding us to the PC debate. Even though the additional dimensions of fairness and trust are not yet frequently used – except for the Swedish studies (Isaksson et al., 2003; Isaksson, Josephson & Vingård, 2003), investigating the state of the PC with trust as the critical dimension – they should be incorporated when examining the range of antecedents and consequences of the PC, as was suggested by Guest (1998a), thereby defining the state of the PC in terms of the extent to which promises are kept, how fair they are perceived to be and trust in whether they are likely to be delivered in the future.

#### d. Examining the process of psychological contracting

This area focuses on change over time, often measured with newcomers (De Vos, 2002; Robinson, Kraatz & Rousseau, 1994; Thomas & Anderson, 1998). There is not that much research done, even though theories exist. Rousseau (1995) states that internal and external factors contribute to change. Roe & Schalk (1996) assume that the employee compares actual and expected behavior. When differences are noticed, changes in the PC occur when the discrepancy is out of acceptance and tolerance boundaries.

The Belgian study of De Vos and Buyens (2001) defining the process as the way in which employees change perceptions concerning promises to perceived reality, is worth mentioning. Analyses on a sample of 333 respondents indicate that newcomers adapt their perceptions to reality during the first six months. This does not count for all terms (e.g. organizational promises on career development and financial compensation stay at the same level). The research stresses the importance of the reciprocity principle, stating that employees will lower or heighten the perception on their own promises depending on whether they evaluate the organizational contributions as negative or positive. It must be noted that the significance of the relationships differs depending on the specific content dimension, supporting the perspective of the PC as a multidimensional concept.



### 1.3. Conclusion: the employment contract and the psychological contract

Atypical, contingent, precarious or flexible work covers all contracts that differ from the standard employment contract. This definition includes numerical, functional and organizational flexibility and is far too broad for our research focus. A first refinement is narrowing the flexibility-issue to contractual flexibility, pointing to a range of contractual forms aimed at meeting production or expertise needs. Still, contractual flexibility covers more than solely temporary work, urging us to define temporary employment as a concept. The OECD-definition (2002), basically considering temporary work as *dependent employment of limited duration*, fits the PSYCONES purpose in furthering conceptual clarity. However, when it comes to research, it must be guaranteed that we question the same type of employment situations. Again, we rely on the classification of contract types as suggested by the OECD, finding most contract types covered in all participating countries, even though differences with regard to TAW and civil servants cannot be denied. Note also that we rephrased the OECD classification towards *employment within the current organization*.

Whereas the employment contract is explicit, formal and objective, the PC refers to the informal contract implicit in the relationship between employee and employer/organization. Here the definition as it will be used throughout the PSYCONES project takes into account the different issues of debate and tries to find a compromise between opposite views. Consequently, the PC is defined as *'the perceptions of reciprocal expectations and obligations implied in the employment relationship'* (Isaksson et al., 2003, p.3). Types of PC were hard to describe, partly due to the different research areas: the content, features, state and the process of the PC. All have their own methodological / theoretical practices and difficulties, resulting in different typologies. For the PSYCONES project, we decided to include measures with regard to the content and the state of the PC as these are most commonly used and documented and as they are expected to be of crucial importance when focusing on the differences between permanent and temporary workers. The disadvantages connected to content-oriented PC research are not applicable to the research as we are indeed interested in the level or scope of mutual expectations, focused on differences between permanent and temporary workers. We did not include 'the process of the PC' as a variable, because of the nature of the employment contract of temporary workers, which is indeed very limited in time.

## 2. Psychological literature

This section wants to map country-specific research with regard to the conceptual model as defined for PSYCONES (figure 1; figure 2). The relation between the employment contract (temporary versus permanent employment) and several variables and between the PC and those same variables will be discussed.

### 2.1. The employment contract in relation to...<sup>12</sup>

Whereas short-term organizational advantages (cost-cutting, effective adjustment of operations) of using flexible contracts are clear (Brewster, Mayne & Tregaskis, 1997; OECD, 2002), those for the employee are less univocal: in a UK study (Tremlett & Collins, 1999), questioning 607 workers who were temporary employed or had been in the past 12 months, 68% could cite benefits of temporary work including flexibility, choice of work, its role as a stepping-stone and variety of work. Less often cited were the need for less commitment and pressure. In contrast, 79% (mainly agency male and younger workers), cited drawbacks, including insecurity, lack of benefits, uncertain wages, being treated differently from permanent workers and the difficulty of building work relationships (see also: OECD, 2002).

It can be expected that temporary work results in both positive and negative outcomes, even though empirical studies (e.g. Paoli & Merllié, 2002) and theoretical perspectives (in: De Witte et al., 2002a) are mainly negatively oriented: e.g. the theory of Atkinson distinguishes peripheral (temporary) and core (permanent) workers. Work stress literature points to job characteristics, which are supposed to be inferior for temporary workers. However, the boundaryless, the knowledge or the free worker, for whom temporary work is a 'way of life' with possibly more positive results as a consequence (e.g. Silla, Sora & Gracia, 2003), becomes an important research area when studying temporary work. We will list research evidence for different variables, starting with the characteristics inherent to the employment contract (volition, choice). Then we will discuss the employment contract in its relationship to the PC and finally, in its relationship with three types of outcome variables (employee prospects, employee well-being and organizational outcomes).

#### 2.1.1. Choice and motives

In international literature (see annex 2.1.), choice mostly refers to whether one voluntarily chooses temporary work, roughly distinguishing two types of workers: involuntary employees and voluntary workers, preferring temporary work for whatever reason (e.g. Krausz, 2002). The group of so-called 'free' or 'boundaryless' workers fits this last group. Two assumptions are implicitly made: first, even contracts that appear inferior may be preferred, and second, those who work on their contract of choice are better off (Krausz & Staynvars, 2003). This last assumption will be examined in its relationship with other variables, but for now we refer to the study of Krausz (2000), illustrating the importance of

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<sup>12</sup> In describing the different relationships, international surveys (e.g. OECD, European Survey for Living and Working Conditions) are frequently used, providing a large data source and being mostly representative. However, standards of measurement differ from psychological research in that single-item measures are frequently used. As a consequence, the reliability of those measures is unclear.

choice when trying to understand mixed results. Reasons or 'motives' for working temporarily broaden the volition issue and highlight the diversity of temporary workers.

All national reports illustrate the preference for a permanent contract by a large majority of temporary workers (De Witte, Vander Steene, Dejonckheere, Forrier & Van Hootegem, 2001; García-Montalvo, Palafox, Peiró & Prieto, 1997; García-Montalvo & Peiró, 2000b; Goudswaard, Kraan & Dhondt, 2000; Gustafsson, Kenjoh & Wetzels, 2001; Klein Hesselink, Koppens & Van Vuuren, 1998; Miedema & Klein Hesselink, 2000; Muffels, Dekker & Stancanelli, 1999; Remery, Van Doorne-Huiskes & Schippers, 2002; Russo, Gorter & Molenaar, 1997; Sanders, Nauta & Koster, 2002; Steijn, 1999; Tremlett & Collins, 1999; Van Ginkel, Van Lin & Zwinkels, 2002; Wav-Steunpunt, 2002). Accordingly, only a minority of temporary workers is in the contract of choice, in Belgium ranging from 5% to 14.1% (Duts, 1994). In the UK survey of Tremlett and Collins (1999), just under a quarter of the 607 respondents did not want a permanent job.<sup>13</sup>

Women and younger workers are strongly over-represented in the group of involuntary workers in most countries (e.g. Arvidsson, 1997; Bellaagh & Isaksson, 1999; Pekkari, 1999; Wav-Steunpunt, 2001), even though the Belgian research of De Witte, Vander Steene, Dejonckheere, Forrier, and Van Hootegem (2001) modifies this finding by stating that younger workers try to make a virtue of temporary work by stressing the opportunities to explore the labor market. For women, the picture is sharper: e.g. in Spain women are often forced to accept a contract with worse employment conditions (e.g. working temporary), because they need a more flexible time schedule. Other individual variables related to the preference topic can be found in the study of Krausz, Bizman and Braslavsky (2001), examining attachments styles. Anxious/ambivalent persons scored relatively higher in their preference for a temporary contract as compared to the secure and avoidant persons. Contrary to the hypotheses, the avoidants did not differ from the secure style in expressing preferences for a permanent contract.

There are different motives to work temporarily, the most prevalent of which is the absence of permanent work (Arvidsson, 1997; Bellaagh & Isaksson, 1999; De Witte et al., 2001; Duts, 1994; Hancke, 2001; Miedema & Klein Hesselink, 2000; Muffels, Dekker & Stancanelli, 1999; Pekkari, 1999; Russo, Gorter & Molenaar, 1997; Slinkman, 1999; Tremlett & Collins, 1999; Van Den Toren, Evers & Commissaris, 2002; Van Der Meer & Wielers, 2001; Ziloni, 2000), with percentages ranging from 25% to 50%. This illustrates that most accept a temporary job awaiting a permanent contract, implying the aim of becoming permanently employed<sup>14</sup>. In the UK, focus group discussions as part of the research of Tremlett and Collins (1999) indicated that the desire for permanent employment was a function of felt insecurity and life style. Overall, results seems to hint at the bridging function of contingent work to balance work/family life or to get into the labor market whereas it seems to be a trap for those occupying weaker positions (e.g. women, foreigners) (Bernhard & Isaksson, 2003).

Most of the studies concerning choice are associated with contract type; however, in Sweden some studies investigate the topic of 'work of choice'. Aronsson and Göransson (1999), using data of the Labour Market Survey (N=1564), found half of the temporary workforce not in their preferred

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<sup>13</sup> Polivka (1996) in a US study found 30.5% of temporary workers in their contract of choice.

<sup>14</sup> The resemblance with studies focussing on part time employment is remarkable: part time work is usually associated with women, enabling them to combine work and household (Beltran, 2000). However, the main motive for doing part-time jobs is the difficulty to find a full-time job (Active Population Survey, Spain).

occupation. Within the permanent group, this lowers to 38%. Of the temporary employees occupying their job of choice, 58% would change jobs if getting a permanent contract. Only one out of fourth permanents would accept a temporary job if his or her preferred work is guaranteed. The results from Aronsson, Dallner and Gustafsson (2000) show the same tendency: 38% of temporary and 64% of permanent employees are doing the work they prefer. Moreover, 40% of temporary and 20% of permanent employees are not employed in the work place and occupation they would prefer. However, there is a large variation within temporary workers: 43% of the project employees and almost every second of the substitutes are in both the desired workplace and the desired occupation. In contrast, almost half of the seasonal/on-call workers were found in the situation of double exclusions. These findings point to the interest of examining the trade-off between contract and work of choice: indeed, working on a temporary contract is more likely to be associated with an undesired occupation and workplace. A UK-study (Tremlett & Collins, 1999) resembles the Swedish research, in that the work of choice was questioned: the UK Department of Education and Employment report a study of 607 workers who were either currently in temporary employment (58%) or who had been in the past 12 months. Nearly half of those still in temporary employment would accept their present job if it were offered on a permanent basis but about 40% definitely would not. The remainder set specific conditions (e.g. earning more). Closely related, Peiró, García-Montalvo and Gracia (2002) have analyzed the demographic and psychosocial antecedents of the resistance to accept different flexibility features of jobs. Both set of variables proved significant to predict the resistance to different job flexibility facets.

#### **Summary 2.1. The relationship between employment contract and choice/motives**

Choice is identified as an important (intervening) variable to explain differences between and within contract types. Most temporary workers are not in their preferred contract. Especially younger and female workers stand out in this regard. Accepting a temporary contract is mainly due to the inability of finding permanent employment. In combination with more temporary workers not being in their occupation or workplace of choice, this variable is of crucial importance.

#### **2.1.2. The psychological contract**

This relationship is mainly discussed on a theoretical level only. Based on the dual market hypothesis of Doeringer and Piore (1985), Camara (2000) hypothesizes the following: the internal and the external market focus on respectively permanent and temporary workers. Since the internal market is based on stable relationships, the corresponding PC is characterized by an exchange, in which the employee offers loyalty and productivity, expecting stability and productivity in return. Within external markets, the lack of stability is predominant. In other words, PC theory assumes temporary workers to have transactional and asymmetrical PC's (De Witte & Näswall, 2003). In contrast to theoretical considerations, there is not much empirical research, illustrated by the fact that in Germany and Israel no research and in Spain only one study was found. Moreover, in Belgium and the Netherlands the scarce studies are not published, except for one article based on the Belgian data of the PSYCONES pilot study (Claes et al., 2002). A last example refers to all Swedish studies being conducted at the National Institute for Working Life. The second table of annex 2 summarizes what has been found<sup>15</sup>.

<sup>15</sup> We refer to the different national reports for more detailed information.

The few studies reported in the different national reports show mixed results. In Belgium, the most extensive study (Van Den Brande, 2002a), taking a feature-oriented approach, found no relationship at all. The Belgian PSYCONES pilot data (Claes et al., 2002) showed some differences with regard to contract permanency when taking a content-oriented approach: permanent employees more often report job security, career possibilities and a good work-life balance as organizational promises, whereas an interesting job is more often promised to temporary workers. The extent to which promises are kept, does not differ significantly between permanent and temporary workers. Overall, the differences between permanent and temporary workers with regard to the PC are rather small and are not exclusively in favor of the permanent workers. The other Belgian studies investigated the PC in a limited way (single item-measure, Vander Steene, De Witte et al., 2001), used very small (Hancke, 2001) or specific (Vancrombrugge, 2000) samples. The same goes for The Netherlands (De Bot, 1996; Dorenbosch, 2000). The samples were rather small and specific, but overall, no differences with regard to contract type (relational versus transactional: De Bot, 1996) or differences contradicting expectations were found: Dorenbosch (2000) found temporary workers having a more relational contract and more perceived obligations with higher fulfillment in comparison to permanent workers. The Spanish study (García-Montalvo et al., 2003) found a slight difference at the disadvantage of temporary employees on contract violation. On the contrary, the Swedish and British studies found clear relationships, with agency and temporary workers having narrower PC's (Isaksson, 2001; Millward & Hopkins, 1998), permanent workers expecting more from their employer (Coyle-Shapiro & Kessler, 2002; Isaksson et al., 2003) and showing less trust towards the employers (Isaksson, Bernhard et al., 2003). The studies of Guest and Conway (1998; 2000b; 2001) extended these results towards the state of the PC, illustrating that the flexible workforce can not be considered as a homogeneous group: fixed term contract workers report a better state of the PC compared to permanent workers, who in turn are better off than temporary workers. The Swedish and UK studies differ in results on the level of employee obligations: Isaksson, Bernhard and Gustafsson (2003) found no differences, Coyle Shapiro and Kessler (2002) found permanent workers experiencing more obligations.

There is only one study on the employer perspective (Knocke, Drejhammar, Gönas & Isaksson, 2003), finding a difference in employer's expectations related to contract duration, implying that employers have the same expectations for permanents and those on fixed term contracts with a relatively long duration. Moreover, the narrower expectations for those on short term contracts match the limited rights in terms of e.g. participation in courses. Contract duration thus is identified as a crucial dimension in understanding differences between permanent and temporary workers and even within the group of temporary workers.

The finding of Hancke (2001, Belgium), stating that agency workers have different contracts, depending on whom is regarded as employer, is of importance when related to Israeli legislation and its legal discussion on who the employer is. A qualitative research (Stainvarts, 2001) points to the formal division between the company and the agency, with the agency responsible for controlling and reprimanding their workers.

## **Summary 2.2. The employment contract and the psychological contract.**

Taking a content approach, mixed results are found, ranging from no relationship (De Bot, 1996) to contradictory findings: e.g. Dorenbosch (2000) found temporary workers having a more relational contract whereas Millward and Hopkins (1998) found more transactional contracts among the temporary workforce. Isaksson (Isaksson, 2001) found a narrower PC among agency workers. The Belgian study of Claes et al. (2002) found differences with regard to the specific content items of the PC, even though these differences were not merely at the advantage of permanent workers. However, permanent employees reported to perceive more organisational promises. We tend to conclude, taking into account the published studies only, that there is a relationship pointing to a more transactional and narrower PC among temporary workers.

The study of Van den Brande, studying the relationship on a feature-level found no relationship at all.

With regard to the state of the PC, mixed results revealed, with the perceived fulfilment being the same (Claes et al., 2002), higher (Dorenbosch, 2000) or slightly lower (García Montalvo et al., 2003) among temporaries as compared to permanents and with trust levels being lower among those permanent employed (Isaksson et al., 2003). However, as is illustrated in the studies of Guest and Conway (1998; 2000b; 2001) temporary workers are not a homogenous group, possibly explaining these results.

### **2.1.3. The outcome variables**

#### **2.1.3.1. Employee prospects**

##### **a. Job Insecurity**

Research relating the degree of permanency to levels of job insecurity points to an unambiguous consensus: temporary workers are less secure when compared to permanent workers (Claes et al., 2002; De Witte et al., 2002b; Goudswaard, Kraan & Dhondt, 2000; Guest & Conway, 2001; 2002b; Kinnunen & Nätti, 1994; Klein Hesselink, Koppens & Van Vuuren, 1998; Näswall et al., 2002; Rödiger, Rigotti & Mohr, 2003; Sverke, Hellgren & Gallagher, 2000; Van Breukelen & Allegro, 2000; Virtanen, Kivimäki, Elovainio, Vahtera & Cooper, 2001, see annex 2.3.). Temporary work and job insecurity are highly, though not perfectly correlated. In literature, this may raise confusion resulting in the interchangeable use of both terms.

However, the studies of Vander Steene et al. (2001) and Guest, Mackenzie Davey and Patch (2003) are not as straightforward as suggested. In the first study (Vander Steene, De Witte et al., 2001), differences were found among different types of temporary workers: agency workers have lower levels of insecurity in comparison to fixed term contract workers. The study of Guest et al. (2003) complicates the picture even more: comparing different types of work arrangements, results show temporary workers reporting higher but agency workers reporting lower levels of job insecurity as compared to permanent workers. After controlling for a range of individual and organizational factors, those on fixed-term contracts reported significantly lower and those on agency contracts slightly lower job insecurity, while those on temporary contracts reported marginally higher job insecurity levels. Moreover, being on the contract of choice was associated with lower levels of job insecurity. This finding was replicated by the study on the Belgian pilot data (Claes et al., 2002): after controlling for important background characteristics, those preferring their contract showed lower levels of job

insecurity. In this study, also the PC was identified as a mediating variable: a good PC (in terms of content and perceived fulfillment) reduced the effects associated with type of employment contract. Note also that even though a large literature exploring the determinants of perceived job security exists, ranging from economical and social studies to psychological studies, the picture is not yet fully clarified (Guest & Clinton, 2003).

In the recent future, Dutch research with job insecurity as main topic is expected to explode, due to its close relationship with the Flexibility and Security Act, raising interest by both scientists and policy makers. The general assumption is that in spite of better social security for all temporary workers, job insecurity will hold a high level (Fluit & Knegt, 1999; Klandermans & Van Vuuren, 1999; Klein Hesselink & Van Vuuren, 1999; Miedema & Klein Hesselink, 2000; Van Den Bos, 2000; Van Den Toren, Evers & Commissaris, 2002), because life long employment can no longer be guaranteed (Gasperz & Ott, 1996). OECD (2002) data point to the fact that after the introduction of the new laws and regulations in 1999, temporary employees are far less satisfied with the amount of job security as compared to their permanent peers, pointing to the fact that the new labor regulations have not met their intended aim.

#### b. Employability

Within the project, employability refers to ‘the possibility to find another job’. We fully realize this is only one answer to the question of defining employability. In annex 2.4. we display research relating to this narrow employability-concept. Other related issues will be discussed later on.

From the national reviews, we cannot derive explicit conclusions, since the Netherlands seem to be the only country heavily reporting on this issue. We tend to find that the possibility of finding a job outside the current organization is higher among temporary workers (De Feyter, Smulders & De Vroome, 2001; Dekker & Dorenbos, 1997; Muffels & Steijn, 1998; Remery, Van Doorne-Huiskes & Schippers, 2002; Schippers, Remery & Vosse, 2001; Slinkman, 1999; Zant, Alessie, Oostendorp & Pradhan, 2000), whereas the possibility of internal mobility is higher among permanent workers (Goudswaard, Kraan & Dhondt, 2000; Tijdens, 2000). This dual finding reflects reality: temporary workers more often change jobs. Note that these multiple changes may influence the perceived capacity to change jobs, not learning us whether or not they found a better or more suited job. Moreover, the more frequent actual job changes among temporary workers may be inspired by a search towards more security (Forrier, Sels, Hootegem, Witte & Steene, 2002)<sup>16</sup> or in the case of agency workers, may be due to complete reliance on the agency (Duts, 1994), not furthering employability levels. The internal mobility policies of Dutch organizations are primarily a privilege for permanent workers, not linked to external numerical flexibility.

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<sup>16</sup> Forrier et al. (2002) found out that temporary workers more frequently take up the responsibility of financing training courses themselves, but they do not intent to do so because of employability-founded reasons, but because of a search towards more job security.

### c. Contract (employee) expectations

'Employee expectations' is a broad variable, grouping expectations especially with regard to mobility into permanent employment (contract expectations)<sup>17</sup>. Since actual transition is an objective measure, this aspect is highlighted in the facts and figures. Regardless of international and individual differences, the expectation of being offered a permanent contract is relatively high.

A Swedish study, in-depth interviewing 17 contingent workers (Trygghetsrådet, 1996), found that whereas the majority of temporary workers wants to be permanent, only 33% expects this to become reality within two years. Most optimistic were younger, well-educated workers living in a larger city. 25% believed to become unemployed and 30% thinks they will remain in temporary employment.

The Belgian research of Forrier et al. (2002) found that the estimations of agency workers are higher than those of fixed term contract workers: respectively 48.8% and 25.4% perceive the chance to find permanent work to be (very) high. Associated individual variables are age (those aged below 25 or above 45 estimate their chances lower), organizational position (white collar workers report higher chances) and contract duration (the longer the duration, the higher the perceived chances). This matches reality, since actual transition within one year rises with age (being particularly high among those aged 25 to 30) and contract duration. Surprisingly, no effects were found related to educational level, even though this turns out to be a crucial variable when studying actual transition.

Steijn (1999) showed that most Dutch temporary workers expect a permanent contract in the near future, resulting from perceiving their current job as a stepping-stone (Slinkman, 1999). This reflects reality, since most sign a permanent contract, especially those aged between 25-34 (OECD, 2002).

#### **Summary 2.3. The employment contract and employee prospects.**

This section mapped employee's expectations on different levels. The common denominator was that these expectations partially reflect reality. Massive evidence was found to illustrate the higher levels of job insecurity among temporary workers as compared to permanent workers. However, the heterogeneity of the temporary workforce, with regard to the specific contract type, the preference of contract and the PC, possibly modifies this basic relationship. (Claes et al., 2002; Guest, Mackenzie Davey & Patch, 2003; Vander Steene, De Witte, Forrier, Sels & Van Hootegeem, 2001).

The perceived possibility of finding another job leads to a dual tentative conclusion: permanent employees perceive internal mobility chances to be higher when compared to temporary workers, who in turn score higher on external mobility chances. Reality shows that organisations indeed give priority to permanent workers in order to fill up vacancies within organisations. For temporary workers, actual job changes outside the current organisations are higher, possibly influencing perceived employability and not learning us about the quality of the new jobs or the motives to change jobs. These last are not necessarily employability-oriented.

The perception that one will get a permanent contract are relatively high among temporary workers. Even though not many studies are available, we tend to conclude that the same variables important for actual mobility patterns – age, tenure, educational level – are predictive, even though expectations do not necessarily match reality.



### 2.1.3.2. Employee well-being

#### a. Attitudes

##### (1) Job satisfaction

When talking about job satisfaction, a distinction is made between global and facet measures (e.g. Bruggemann, 1974; Bruggemann, Groskurth & Ulich, 1975). Taking the global measure, temporary in comparison to permanent employees are generally less satisfied: e.g. the OECD (2002) reports overall job satisfaction of temporary employees varying between 90.6% (Spain) of that of permanent workers to parity (Belgium)<sup>18</sup>. Benavides and Benach (1999) and Benach, Gimeno and Benavides (2002), using respectively data of the Second and Third European Survey on Working Conditions come to the same conclusion: overall, temporary employees, especially when employed on a part-time basis (Benavides, Benach, Diez-Roux & Roman, 2000), are less satisfied, with variation across countries: differences are quite large in Spain and Germany, whereas they are small if existent in Belgium, the Netherlands and the UK. Sweden is situated in between, with varying results across the two surveys. Even though there is a general trend, mixed results are found, further illustrated by country-specific research (annex 2.5.).

Job satisfaction is higher among those permanently employed in four out of eight reported studies (Benavides & Benach, 1999; Muffels & Steijn, 1998; Rödiger, Rigotti & Mohr, 2003; Zant, Alessie, Oostendorp & Pradhan, 2000). The research of Zant et al. (2000) provides strong evidence for this hypothesis, since results show a serious increase in satisfaction when transitioning from temporary to permanent employment, whereas going from a permanent to a temporary contract results in a significant decrease. Other researchers point to the heterogeneity of temporary workers: Vander Steene et al. (2001) and Guest et al. (2003) found fixed term workers reporting higher satisfaction compared to permanent employees, who in turn scored higher in comparison to agency workers. Only one study found the opposite general pattern, with agency workers scoring higher than permanent workers (Werthebach, Sodenkamp & Schmidt, 2000). The research of De Witte et al. (De Witte & Näswall, 2003), including Belgium, the Netherlands and Sweden, and the Belgian study of Claes et al. (2002) found no differences at all.

Different intervening variables were mentioned. A first is based on the voluntary-dimension (Krausz, Brandwein & Fox, 1995), with voluntaries scoring higher than both permanents and involuntaries. This finding is replicated when using the PSYCONES pilot data (Claes et al., 2002). Goudswaard et al. (2000) found the prospect of being offered a permanent contract of crucial importance: those having high expectations – i.e. those thinking they will be offered a permanent contract in the near future - are more satisfied compared to those without outlook and permanents. De Witte et al. (2003) found job insecurity to be more important than the formal employment contract, reporting even a positive relationship after regression analyses. Job insecurity also mediates: satisfaction levels of permanent but not of temporary employees significantly decreased when feeling insecure. This may be due to the fact that job insecurity is part of the PC for temporary workers. The UK study (Guest, Mackenzie Davey & Patch, 2003) explicitly integrated the state of the PC: no association was left after incorporating the state of the PC, which explained a very large amount of the variance in job satisfaction. The importance

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<sup>18</sup> taking only the PSYCONES countries in account

of the PC is also stressed in the study of Claes et al. (2002): a good PC in terms of content and perceived fulfillment is related to higher job satisfaction levels.

These general lower, but not always very pronounced job satisfaction levels, may be partly masked because different aspects, both extrinsic and intrinsic, are integrated. Findings reported by the OECD (2002) and country-specific research (annex 2.6.) on aspectual measures illustrate this.

The OECD (2002) reports on extrinsic work aspects, finding temporary workers much less satisfied with job security (relative satisfaction varying from 63.6% in Spain to 82.7% in Germany<sup>19</sup>) and less satisfied with pay. The Spanish research of García-Montalvo et al. (1997; forthcoming) closely relates to this finding: employees having permanent contracts tend to show higher intrinsic, extrinsic and social work satisfaction than temporaries. García-Montalvo and Peiró (2000a) found that younger workers are least satisfied with job stability, whereas this was the most valued aspect. Satisfaction with working conditions comes close to equity. In the Netherlands and Belgium, satisfaction is even higher among temporary workers. This is replicated by Duts (1994), possibly due to the fact that temporary workers choose unemployment as a reference frame.

Intrinsic work related aspects investigated in country-specific research (García-Montalvo & Peiró, 2000a; Vander Steene, De Witte et al., 2001) showed a disadvantage for temporary workers. Peeters, Van Der Beken and Coucke (2002), only questioning agency workers – which limits comparisons –, found that these workers are less satisfied with intrinsic as compared to extrinsic job related aspects. Overall, aspectual differences are more pronounced than global measures, as is illustrated in the research of Kaiser (2002), investigating both global job satisfaction and satisfaction with security and work hours.

## (2) Job involvement

Studies on job involvement are scarce, as is illustrated in annex 2.7., partly due to the fact that most research on involvement is oriented towards the organizational level (De Jong & Schalk, 2003). Moreover, research findings point to the absence of a clear-cut relationship: the only study pointing to differences solely associated with contract type is that of Isaksson et al. (2001) comparing two groups of precarious workers. Comparative analyses reveal higher levels of involvement among agency workers as compared to on-call temporaries, after controlling for important background variables. However, permanent workers were not included. The research of Goudswaard et al. (2000) included permanent workers, finding differences at the disadvantage of temporary workers with agency workers as exception. However, the effect did not hold after introducing background variables. In addition, the Spanish study of 1996 did not found significant differences (García-Montalvo, Palafox, Peiró & Prieto, 1997). The Spanish (García-Montalvo et al., 2003) and Swedish (Sverke, Hellgren & Gallagher, 2000) studies found differences, but only after adding specifications: in Spain, educational level (permanent workers with a university degree show the highest level) and in Sweden working hours (permanent part-time workers scored higher than contingent workers). Torcka (Torcka, 2000; Torcka & Van Riemsdijk, 2001) found no differences between permanent and temporary employment. Claes et al. (Claes et al., 2002) found no relationship at all.

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<sup>19</sup> Note that these two countries are opposites when it comes to national legislation on employee protection

As such, type of contract did not yield clear effects. Instead, other variables proved more important, documented by Bernhard (2001), finding work characteristics and type of profession more decisive. The interaction effect between contract type and demands showed fixed term workers reporting more job involvement under the condition of high demands, differentiating them from permanent and in-house temporary workers. Contract of preference was identified as an important variable in examining differences between groups by Isaksson et al. (2001), but not by Krausz, Brandwein and Fox (1995).

## b. Behavior

### (1) Sick leave

Studies not distinguishing subgroups of temporary workers show either no differences (Klein Hesselink, Koppens & Van Vuuren, 1998; Muffels & Steijn, 1998) or find temporary workers to be less absent: in the Second and Third European Survey on Working Conditions (Benach, Gimeno & Benavides, 2002) and in a study based on 5650 employees from ten Finish hospitals (Virtanen et al., 2001), an inverse correlation is found between precarious status and absenteeism. Possible explanations are the desire to get a permanent contract or a renewal (see annex 2.8).

Other studies clearly point to the heterogeneity of temporary workers: Vander Steene et al. (2001) found agency workers reporting more, but fixed term contract workers less absence due to sickness, in comparison to permanent workers. This difference is pronounced among white-collar workers<sup>20</sup>, but no differences at all are found among blue-collar workers. Goudswaard et al. (2000) distinguishes on the basis of prospects on a permanent contract, with those having no prospects reporting more days off.

### (2) Sick presence

There is only one study reporting on sick presence, measured by the number of days workers were present in spite of feeling sick (Klein Hesselink, Koppens & Van Vuuren, 1998). Questioning 1022 workers, results showed that self-supporting workers went to work more often in spite of feeling sick, slightly more than permanent part-time workers. Agency workers were the third group. By far, directly employed temporary workers had the least sickness presence days of all.

### (3) Accidents

The Second European Survey on Working Conditions (Benavides & Benach, 1999) found the risk of having an accident among temporary compared to permanent workers to be 2.5 times higher. This finding can be generalized across countries. E.g. Agulló (2001) found the number of accidents among the temporary workforce to be twice as high. However, this difference levels off with raised severity and it is especially prevalent for chemical-related accidents. According to the Spanish Social Economic Council (Consejo Económico Y Social, 1998), temporary workers account for 60% of work-related accidents. In Belgium, double as much accidents occurred among agency workers compared to the total dependent population, especially among blue-collar workers (2000; [www.p-i.be](http://www.p-i.be)). Age should be taken into account as a crucial variable. Boix and Orts (1997) and Zimmrman, Maqueda, Almodóvar and Orden. (1996) point to the same trend (annex 2.9.).

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<sup>20</sup> 68% of fixed term workers, 54% of permanent workers and 37% of TAW report no sick leave

Accidents with agency workers are a hot topic in Belgium, since in 2001 5 fatal accidents occurred, comparable with the situation in the Netherlands: the 'arbeidsinspectie' – the Dutch governmental organization controlling the conditions of employment – investigated accidents in the workplace with a lethal ending from 1997 to 2000 among agency workers (Martens, 2001). In 2000, 5 lethal accidents were noted, whereas in 1997, there were 10. In spite of this declining trend, the average percentage of accidents among agency workers remains quite high compared to the total working population.

Temporary workers not only have more accidents, they are also an important cause. Warning and Straten (2001) estimate the percentage of accidents with agency workers as a cause at 8.5%. This percentage is even higher with agency workers as a supplementary cause. This can be due to different factors, e.g. differences in risk behavior (Aronsson, 1999). Another critical piece of data is the implementation of safety rules education for agency workers: they are often not instructed by the user firms (Klein Hesselink, Koppens & Van Vuuren, 1998; Warning & Straten, 2001; Werthebach, Sodenkamp & Schmidt, 2000; Wieland, Gruene, Schmitz & Roth, 2001).

### c. Health

#### (1) Work-life interference

Combining work and family is mentioned as one of the reasons employees choose temporary contracts (e.g. Arvidsson, 1997; Bellaagh & Isaksson, 1999; De Witte et al., 2002a; Pekkari, 1999; Van Den Toren, Evers & Commissaris, 2002). However, the national reports do not report studies investigating differences related to contract status on this variable. Only the Dutch report cites one research, studying the impact of contract permanency upon private time: when asking workers if they have enough time for themselves, friends and family, no difference based on type of contract was found (Goudswaard, Kraan & Dhondt, 2000). The Belgian study on the pilot data (Claes et al., 2002) did not find significant differences either.

#### (2) Psychological well-being

Both the Second and Third European Survey on Working Conditions (Paoli & Merllié, 2002) found permanents more stressed and reporting more mental health problems than temporaries. In the Third survey (Benach, Gimeno & Benavides, 2002), these differences were significant for Belgium and the Netherlands whereas for Sweden, Germany, Spain and the UK, no significant differences were found.

The different national reviews reporting on general health (GHQ), stress or burn-out show a more complicated picture: some findings confirm permanent workers being disadvantaged (Pietrzyk & Bergmann, 2003; Solano, Hernández, Vizcaya & Reig, 2002; Wieland, 2001; Wikman, Andersson & Bastin, 1999), other studies did not find clear differences (Claes et al., 2002; Goudswaard, Kraan & Dhondt, 2000; Houtman, Schaufeli & Taris, 2000; Rödiger, Rigotti & Mohr, 2003; Vander Steene, De Witte et al., 2001; Werthebach, Sodenkamp & Schmidt, 2000). Only one study (Martens, Nijhuis, Van Boxtel & Knottnerus, 1995) found the opposite pattern, with temporary workers as the disadvantaged party (appendix 2.10.).

Wieland et al. (2001) point to the fact that there is a positive side of stress, when e.g. degrees of freedom make a task challenging, implying that job characteristics play a role as intervening variables. Krausz et al. (1995) investigated the role of volition in this relationship, but did not find differences.

### (3) Occupational self-efficacy

The few studies mentioned (appendix 2.11.) point to higher levels of self-efficacy among permanent workers (Pietrzyk & Bergmann, 2003; Werthebach, Sodenkamp & Schmidt, 2000; García-Montalvo et al., 2003). However, García-Montalvo et al. (1997) and the study based on the Belgian pilot data (Claes et al., 2002) did not find significant differences.

### (4) Psychosomatic complaints

According to the Second European Survey on Working Conditions (Benavides & Benach, 1999), temporary workers showed significant higher levels of fatigue, backache and muscular pains when compared to permanent workers. Even though work characteristics may play a role, employment status is said to have an autonomous effect. The results of the Third Survey (Benach, Gimeno & Benavides, 2002) are far less clear-cut, finding differences between part-time and full-time rather than differences based on contract permanency. Some national studies confirm this global result, finding temporary workers reporting more health complaints (Amable & Benach, 2002; Isaksson et al., 2003; Martens, Nijhuis, Van Boxtel & Knottnerus, 1995; Rodriguez, 2002). However, it is not clear whether the deterioration of health is due to employment status or to working conditions, stressing the need for controlled studies. Others, however, do not find this trend, but rather point to the opposite direction (Sverke, Hellgren & Gallagher, 2000; Virtanen, Vahtera, Kivimäki & Pentti, 2002; Virtanen et al., 2001; Werthebach, Sodenkamp & Schmidt, 2000). When sleep quality is concerned, results are even less univocal, finding no differences (Martens, Nijhuis, Van Boxtel & Knottnerus, 1995) differences at the disadvantage of temporary workers (Wikman, Andersson & Bastin, 1999) or pointing to the heterogeneity of temporary workers (Vander Steene, De Witte et al., 2001, annex 2.12.). Detailed analyses further illustrating this heterogeneity on somatic complaints are performed by Aronsson et al. (2002): stomach complaints were most prevalent among substitutes whereas back or neck pains were reported more by on-call workers. Both groups reported rather high levels on discomfort prior to work. Fatigue and listlessness were higher for substitutes and on-call workers as well as for project workers.

This heterogeneity does not only apply to characteristics of the employment contract (e.g. differences between TAW and fixed term contract workers), but is also related to employee prospects. E.g. Galais and Moser (2001) found differences related to the expectation of a permanent contract: those perceiving high chances, reported less somatic complaints than permanents who in turn were better off than those without or with limited prospects. A second intervening variable, job insecurity, was identified by Virtanen et al. (2002; 2001): when experiencing high levels of job insecurity, a poorer health state is reported. This relationship is stronger among those with a permanent contract. Isaksson and Bellaagh (2002) and Isaksson et al. (2001) confirmed the importance of job insecurity, but add perceptions of social support and workload as variables mediating the association between contract form and both mental and physical health. Preferences of contract, work place and occupation are other variables identified as possibly intervening. Aronsson and Göransson (1999) found the greatest

proportion of individuals suffering from headaches, fatigue and slight depression among permanent employees not in their preferred occupation. No differences were found among temporary workers in this respect. Working in an undesired position and occupation, enhances stomach complaints, discomfort prior to working and fatigue among permanent employees, whereas for contingent workers these differences only occurred for discomfort prior to working (Aronsson, Gustafsson & Dallner, 2000). Furthermore, Aronsson, Dallner and Lindh (2000) found higher levels of distress and impaired health among a sample of 778 individuals on short-term assignments, due to worries about their financial situation.

#### **Summary 2.4. The employment contract and employee well-being**

When looking at the one-to-one relationship between temporary workers and well-being, including attitudes, behaviour and both psychological and physical health, the variables can be divided into three groups. In the first group, temporary workers are generally found to be disadvantaged. This was the case for both global and facet measures of job satisfaction, accidents, and psychosomatic well-being. Secondly, temporary as compared to permanent workers score better when sick leave (i.e. temporary workers are less absent, due to sickness) and psychological well-being are considered. Finally, no clearcut differences were found with regard to job involvement and occupational self-efficacy.

Still, this picture is general, not only denying contradicting evidence and cross-national differences, but also not taking into account the heterogeneity of temporary workers as such (taking the specific contract into account), which modified results for job satisfaction, sick leave and psychosomatic complaints. As was illustrated in the relationship between the employment contract and psychosomatic complaints, the duration of the contract may mainly account for these effects, even though more research is warranted.

Finally, different intervening variables were identified. The PC played its role as a mediating variable for both job satisfaction and job insecurity. It might well be that the PC has an impact on other relationships as well, but until now, PC-research is not fully documented. Job insecurity was identified as intervening in the relationship between the employment contract and both job satisfaction and psychosomatic complaints. The PC was cautiously suggested to be a possible explaining mechanism for the influence of job insecurity on job satisfaction: job insecurity can be perceived as a violation of the PC, having a more severe effect on permanent as compared to temporary workers. The prospect of getting a permanent contract was found important because it affects the relationship between the employment contract and job satisfaction, sick leave and psychosomatic complaints. 'Preference of contract' was important in understanding the relationship with job satisfaction, job involvement and psychosomatic complaints. Within this last variable, also other preference measures turned out to be important. Job characteristics were helpful in explaining results with regard to three dependent variables: job satisfaction, job involvement and psychosomatic complaints. Another intervening variable with somewhat less documentation so far is social support. This list, even though not fully elaborated for all dependent variables under consideration, suggests that taking into account variables possibly influencing the relationship is of crucial importance when trying to understand contract related differences. Those should be integrated into the PSYCONES conceptual model.

### 2.1.3.3. Organizational outcomes

#### (1) Performance

Only the Dutch national report summarizes results on performance, thereby distinguishing between an individual and an organizational level. Van Breukelen and Allegro (Van Breukelen & Allegro, 2000) asked workers about their performance, resulting in almost equal scores between permanent and temporary workers. However, when questioning managers about the efforts of their subordinates, agency workers were considered as less competent and skilled, while at the same time temporary workers were estimated to contribute more to the performance of the department and were more fun to work with. Vander Steene et al. (2001) used a single item measure to assess perceived performance: permanent employees more than agency workers and those more than fixed term workers find that they work harder than most others in the organization.

According to the theoretical perspective of the 'flexible firm' (Atkinson, 1984), a strategy of numerical flexibility should positively contribute to the firm's success. Kleinknecht et al. (1997) and Zant et al. (Zant, Alessie, Oostendorp & Pradhan, 2000) found that temporary agency work has a positive effect on returns whereas directly employed temporary workers have a negative effect on profits.

#### (2) Organizational Citizenship Behavior (OCB)

OCB is a relatively new area of research resulting in only three studies described in the different national reports. Guest, Mackenzie Davey and Patch (2003) focused on volunteering behavior, finding a clear negative relationship with temporary work. However, when controlled for different individual and organizational factors, this negative link disappeared for all except TAW. A Dutch study (Koster, Sanders & Van Emmerik, 2002), using a sample of 262 PhD students, showed that OCB needs time to develop, implying that those employed on short-term contracts could feel less inclined to put extra effort into the organization, especially at the end of the contract. Coyle Shapiro and Kessler (2002) found temporary workers to be engaged in less citizenship behaviors. Looking at interaction effects, variations in obligations and inducements, as they are defined in the PC, have more influence on the OCB of temporary than of permanent employees. Yperen, Berg and Willering (Van Yperen, Van Den Berg & Willering, 1999) found evidence for relationships between participation in decision-making as well as for perceived organizational support and OCB, suggesting that both variables may positively influence the relationship between temporary employment and OCB.

#### (3) Intention to quit – turnover intention

Research in this area, relating type of contract to intention to quit, measures the 'desire to leave' rather than actual intentions: because of the limited time frame of temporary contracts, the exact time of departure is set in advance, possibly influencing the intention to leave before the contract expires (De Jong & Schalk, 2003; De Jonge & Geurts, 1997). Framed like this, it is generally found that temporary workers show higher turnover intentions than permanent workers (Guest & Conway, 2002a; Isaksson, 2001; Rödiger, Rigotti & Mohr, 2003; Vander Steene, De Witte et al., 2001). When studying the actual applying behavior, the relation becomes even more apparent: of those wanting another job, temporary workers are more actively engaged in applying behavior. Job security seems to be a strong obstacle for

actual behavior. The importance of job insecurity in this debate is also apparent in the different motives influencing the willingness to change: agency workers stress better conditions with regard to work conditions, pay, job content and job security; for fixed term workers job security is the main issue, whereas permanent workers focus on pay (Vander Steene, De Witte et al., 2001).

Goudswaard et al. (2000) replicated the finding of temporary workers being more inclined to leave, but when the variable 'perceived chance on a permanent contract' is incorporated, those with an outlook score lower than permanent employees. Related to this finding, Isaksson and Bellaagh (2002) found those not in their contract of choice being more inclined to and think more about quitting (annex 2.13)

#### (4) Organizational commitment

Temporaries are assumed to be less committed than permanents, because of short(er) contract duration (Rigotti & Mohr, 2003). This hypothesis is confirmed by Vander Steene et al. (2001), Rödiger et al. (2003), Krausz et al. (2001), Torka (Torka, 2000; Torka & Van Riemsdijk, 2001), Sverke et al. (2000) and Coyle-Shapiro et al. (2000). Felfe, Schmook and Six (under submission) broaden the commitment topic by adding commitment to the form of employment, especially relevant for flexible work arrangements. In line with Morrison and Robinson (1997), they assume that employees working under new forms of employment will show less commitment because of the breach of the social contract implying long-term employment in return for loyalty. The authors state that 'overall, the results indicated that commitment in new forms of employment decreases'. An unpublished study of Krausz and Bar-Yosef, using 144 employees of whom 53 core employees and 93 subcontractors, is in line with these results. This study was carried out at the early stage of an organizational change. The core employees showed higher commitment, but were less positive in their attitudes towards the ongoing change process, perhaps because they are less experienced in coping with change and flexibility.

However, not all research findings point to the same direction: Van Breukelen et al. (2000) and De Witte and Näswell (2003) found no significant differences. Other studies point to the heterogeneity within the group of temporary workers. E.g. in Guest and Conway (Guest & Conway, 2000b), agency workers show significantly less and fixed term workers slightly less commitment relative to permanent employees, after including relevant background variables. The difference within the group of temporary workers is even more highlighted in the study of Vander Steene et al. (2001): fixed term workers obtained higher but agency workers lower organizational commitment scores when compared to permanent workers, but only if organizational commitment got the specific meaning of 'internalization of company problems'. The finding that agency workers score lower when the emotional bound with the company is concerned, should not come as a surprise. In Belgium, this group generally has very short contracts and frequently changes employers, implying that it might not be very useful to develop a strong organizational bound.

Not only the specific contract form modifies the global result of temporaries feeling less committed. Also when the group of temporary workers is divided based on whether or not they have a prospect on a permanent contract, interesting results emerge: the study of Goudswaard et al. (2000) show that those having an outlook show higher commitment, even when compared to permanent workers. The small difference between permanent workers and those not having an outlook is a remarkable result. Results



from other studies (Koster, Sanders & Van Emmerik, 2002; Miedema & Klein Hesselink, 2000; Sanders, Nauta & Koster, 2002; Schalk, Freese, Bot & Heinen, 1998; Steijn, 2000; Torcka, 2000; Torcka & Van Riemsdijk, 2001) are supporting, also differing from the general assumption of temporary workers feeling less committed. Apparently, the urge to stay with the employer positively affects organizational commitment, in spite of the probable departure (Steijn, 2000). Within the group of permanent workers, job insecurity is an important variable: when adding the interaction term between job insecurity and type of contract in the study of Guest and Conway (2000b) differences appear within the group of permanently employed: those in an insecure situation are less committed (annex 2.14).

#### **Summary 2.5. The employment contract and organizational outcomes.**

Temporary workers generally are not the best choice from an organizational point of view: they score lower on organizational citizenship behavior and commitment and higher on turnover intention. The group of agency workers stands out, as becomes clear when looking at performance: even though no differences emerge on self-rated performance, managers think they are less skilled and competent.

Job security and the prospect of getting a permanent contract are important variables to take into account, as was illustrated for intention to quit and organizational commitment. More specifically, the prospect of getting a permanent contract results in more 'positive' scores, in that turnover intentions are significantly lower and organizational commitment is significantly higher for those group, even when compared to permanent workers. The PC was identified as important in its relationship with OCB and we expect, even though no direct studies were found, that also organizational support is of crucial importance. Moreover, we think that these and other variables may also play a role for the other dependent variables. More studies and especially more controlled studies are required.

#### **2.1.4. Additional issues**

Most additional issues mentioned in the national reports focus on a range of job characteristics (annex 2.15). On general, differences are found at the disadvantage of temporary workers. That is, they experience less transparency in their job (Pietrzyk & Bergmann, 2003), less role clarity (Sverke, Hellgren & Gallagher, 2000; Werthebach, Sodenkamp & Schmidt, 2000), less autonomy (Aronsson, Gustafsson & Dallner, 2002; Goudswaard, Kraan & Dhondt, 2000; Muffels & Steijn, 1998; OECD, 2002; Pietrzyk & Bergmann, 2003; Vander Steene, De Witte et al., 2001; Wikman, 2002) and less variety (Vander Steene, De Witte et al., 2001). Goudswaard and Andries (2002, p.1) state that 'The working conditions, in particular the physical constraints and the conditions of employment, of precarious workers are worse than those of permanent workers: more work in painful positions, more exposure to noise, more repetitive tasks and movements, less skill development, less access to training, less autonomy over their work and time and less access to participation.'

However, this cannot be generalized to all job characteristics: no differences were found for organizational support in the study of Vander Steene et al. (2001). Workload did not differ significantly (Goudswaard, Kraan & Dhondt, 2000; Van Breukelen & Allegro, 2000) or was higher for permanent workers (Pietrzyk & Bergmann, 2003). Moreover, not all temporary workers are the same: the study of Aronsson et al. (2002) points to differences between project workers and both substitutes and on-call

workers, with project workers experiencing higher levels of autonomy. Isaksson et al. (2001) found lower social support among those on short-term contracts as compared to agency workers. Unfortunately, permanent work is not included. As is illustrated by Vander Steene et al. (2001) on the topic of skill utilization, this might be important: fixed term contract workers score higher as compared to permanent workers who in turn differ significantly from agency workers. Finally, intervening variables should be taken into account. E.g. individuals not in their preferred workplace and/or occupation report less support from the supervisor in comparison to the norm group (Aronsson, Dallner & Lindh, 2000; Aronsson & Göransson, 1999).

Job characteristics are of crucial importance when studying contract-related relationships: ‘...as loan work is often associated with unskilled labor in risky branches, it is not clear whether the worse working conditions of temps derive from their employment status or from conditions which also affect permanent workers in the same branches and occupations and working time schemes’ (Garhammer, 2002, p.32). This is also illustrated in the research of Cohen, Haberfield and Ferber (1993), who found that one cannot generalize across occupations. In two occupational groups (N=1324) – bookkeepers and typists – there are hardly if any differences between agency and regular workers. For keypunch operators and clerks, agency workers are found to be somewhat inferior in returns on their human capital.

A second broad issue not explicitly mentioned in the conceptual framework has to do with training and courses. Again, temporary workers seem to be disadvantaged: they receive less training outside (De Feyter, Smulders & De Vroome, 2001; Delsen, 1998; Van Breukelen & Allegro, 2000; Zant, Alessie, Oostendorp & Pradhan, 2000) or during (Aronsson, 1999; Aronsson, Gustafsson & Dallner, 2002; Levin, 1998; Wikman, 2002; Wikman, Andersson & Bastin, 1999) paid working hours. However, again differences emerge depending on the specific type of contract: Wikman et al. (1999) found project workers scoring higher on personal development as compared to seasonal or on-call workers. Still, this is an important finding, the more so since Slinkman (1999) found that young agency workers put much value upon training, expecting to be involved in company training programs as if they were permanents. It seems like they might become easily disappointed with regard to this topic.

Other issues mentioned in the reports, concerned voice and critics: on-call workers and those having a replacement contract more often hold back critical points than permanent workers do (Aronsson, 1999; Aronsson & Gustafsson, 1999). A final issue has to do with union-relations: union consciousness and the willingness to participate with union actions is higher in fixed term workers as compared to both permanent and temporary agency workers (Vander Steene, De Witte et al., 2001). Two remarks have to be made in this respect: questioning a group of 1611 blue collar workers on their union attitudes (Goslinga et al., 2002), no difference related to contract type occurred. Also the actual union membership does not differ (Vander Steene, De Witte et al., 2001).

### **Summary 2.6. The employment contract and job characteristics.**

In the conceptual model, used in the pilot study, job characteristics were introduced as control variables. According to evidence cited in the different national reports, however, the conceptual model might benefit from including job characteristics as an intervening variable, as it is not clear to what extent the worse work conditions of temporaries derive from their employment status or equally affect permanent workers in the same sectors. Moreover, job characteristics were regularly identified as an important mediating variable in explaining mixed results and job characteristics themselves are partly explained by the prospect of getting a permanent contract. Generally, temporary workers are found at a disadvantage, even though this does not count for all characteristics and for all temporaries to the same extent.

## **2.2. The psychological contract in relation to....**

The PC is not fully integrated in contemporary research in all countries, being used more often by managers than by scientist (Rigotti & Mohr, 2003). However, the concept starts to be known in the scientific environment (e.g. on the 9<sup>th</sup> Dresdner Symposium of Work Psychology, March 2003; EAWOP congress, June 2003), especially so in The Netherlands and the UK.

Constructs closely related to the PC will be discussed in order to get information on the outcome variables: e.g. in the German and Dutch national reports, concepts as trust, moral values and the model of the gratification crisis or the Effort-Reward Imbalance Model of Siegrist (1996) are said to closely resemble the PC. Leadership theories focusing on the exchange relationship (e.g. Liden & Maslyn, 1998), social exchange theories (e.g. Blau, 1964; Kelly, 1991) and equity theory (Adams, 1965; Geurts, Schaufeli & Rutte, 1999) are other contributions with conceptual familiarity.

### **2.2.1. Employee prospects**

#### (1) Job insecurity

Van den Brande (2002a) investigates the relation between two features of the PC – time frame and scope - and job insecurity. She found a positive relationship between job security and time frame: when a feeling of job security exists, employee's expectations and their commitment to behave in a loyal way increase. With regard to the scope-dimension (personal treatment expected by the employee – personal investment the employer can expect), no significant relationships were found.

There is more research taking the violation-oriented approach. The study of De Witte and Van Hecke (2002) shows job insecurity to be significantly correlated with the violation of both transactional and relational contracts. The authors, suggesting that job security is fully part of the relational PC (employees commit themselves not to change jobs at will, in exchange they expect job security) hypothesize a relation between job security and the violation of the relational contract. After regression analysis, a significant relationship is found between job insecurity and the relational contract but not between job insecurity and the transactional PC. The Dutch research of Ten Brink et al. (2002),

questioning 762 employees of an agricultural organization, showed that perceived fulfillment of the PC makes employees feel secure. In the 1997 survey of Guest and Conway (1997), using a random sample of 10.000 UK employees, it was assumed in a regression analysis that the PC was more likely to affect job security than vice versa. Together with perceptions of the internal and external labor market, a positive state of the PC was strongly associated with higher job security. This finding was replicated in the study on the PSYCONES pilot data (Belgium), focusing the level of employees' trust towards their employer: those having a trust relationship with their employer and feeling treated fairly, are less insecure (Claes et al., 2002).

## (2) Employability

Anderson and Schalk (1998) situate the concept of employability within the so-called new PC. The organization is expected to offer facilities to raise the employability level of employees, while the employees are responsible for using these facilities. This implies an inherent bound between the content of the PC and the concept of employability. However, empirical research is lacking, but, according to De Jong & Schalk (2003), the attention paid to the changing PC is partly due to an increased need for employability: this is an evidence on it's own for the close bound between the PC and employability.

Van den Brande (2002a) takes a feature-oriented approach with hypotheses based on research of Gaspersz and Ott (1996). Drawing on her research, we tend to conclude that employability is moderately related with the PC: highly employable workers show less loyalty, personal investment and respect for authority. Other hypotheses did not yield significant effects.

There is some violation-oriented research investigating the relationship between the PC and employability: Ten Brink et al. (2002) found positive relationships between both possibilities of development and internal mobility and contributions of the organization.

## (3) Contract (employee) expectations

No studies were found relating the PC to contract/employee expectations.

### **Summary 2.7. The psychological contract and employee prospects.**

Anderson and Schalk (1998) found job insecurity and employability to be major topics when studying the changing PC. However, empirical data associated with the content-oriented approach are lacking. When it comes to the study of features of the PC, the research of Van den Brande is worth mentioning, finding a moderate relationship. Most research takes a violation-oriented approach: violation is negatively related with job security and employability. It can be expected that broadening violation to the state of the PC will yield similar effects, as was illustrated by the research of Guest and Conway (1997) on job insecurity.

## 2.2.2. Employee well-being

### a. Attitudes

#### (1) Job satisfaction

All studies focus on the state of the PC, mostly claiming that violation would lower and fulfillment will heighten job satisfaction (Schalk, Freese, Bot & Heinen, 1998). De Witte and Van Hecke (2002) hypothesized that a violation of the PC will negatively influence both global and facet measures of job satisfaction. Results mostly confirm this hypothesis: the violation of the transactional PC has a significant negative influence on facets of job satisfaction, whereas the violation of the relational type of PC has a significant negative influence on both global and facet measures of job satisfaction. These findings refer to an independent influence, since important background variables are controlled for. De Vos (2001) also finds a negative relation between the violation of the psychological contract and global job satisfaction (single item).

Chambel and Peiró (2003) in a qualitative study carried out in six companies going through a process of change, differentiated between companies based on whether or not a violation of the PC was perceived. Employees not perceiving violation showed significant higher levels of job satisfaction as compared to the employees who felt that PC promises were not respected.

The first research (De Witte & Van Hecke, 2002) also studied the role of the PC in its relation between job insecurity and job satisfaction. Taken the global measure of job satisfaction, the negative effect of job insecurity disappears after integrating both forms of the PC. The effect of job insecurity does not disappear however, when the facet measure of job satisfaction is taken into account, but the effect is strongly reduced. We thus can conclude that the PC partially mediates the relationship between job insecurity and the different facets of job satisfaction. There is no evidence supporting the moderating role of the psychological contract. Accordingly, Guest, Mackenzie Davey and Patch (2003) also identified the PC as a mediator rather than a moderator. In this study, a single item was used to measure job satisfaction. Fixed-term contract workers but not temporary or agency workers, showed more satisfaction when compared to permanent employees. The association disappeared however, when the state of the PC was added to the regression analyses. The PC explained a large amount of variance in job satisfaction. The state of the PC also proved to be important in the Belgian research of Claes et al. (2002): respondents experiencing a trust-relationship with their employer are more satisfied with their job. Moreover, both the content of the PC (narrowness) and the perceived delivery of the deal are helpful in explaining job satisfaction levels, above and next to personal characteristics and the employment contract. The number of employee promises is more decisive for job satisfaction levels when compared to the number of employer promises.

Other issues mentioned in the national reports resemble violation. With a sample of 11.636 workers, De Jonge et al. (2000) used the Effort-Reward Imbalance Model of Siegrist (1996). As expected, the discrepancy between effort and reward leads to job dissatisfaction, resembling the possible effect of breach upon job satisfaction. Trust is positively correlated with job satisfaction (Petermann, Neubauer & Gruenheid, 1992, for an overview). In a cross-sectional field study of 295 German employees, Schmitt and Dörfel (1999) find a negative correlation between job satisfaction and procedural injustice. Since a breach of the PC can be perceived as procedural injustice, we can assume that the emerging outcomes are highly comparable. Sensitivity to perceived justice can be seen, in terms of the PC, as an individual trait influencing the perception of obligations and expectations.

## (2) Job involvement

The Dutch report provides a theoretical framework integrating job involvement and the PC. According to Schalk, Freese and Van Den Bosch (1995), job involvement is primarily related to the implicit PC: more explicit PC content-items have less influence. Consequently, employees like their job because of implicit work features, such as the kind of work, development possibilities, social aspects and organizational policies. Furthermore, García-Montalvo et al. (2003) found job involvement positively related to PC fulfillment. This was also found by Claes et al. (2002). This last study also mentioned the narrowness of the PC as important in explaining employee differences on job involvement. It should be noted that job involvement is related to the number of employee's (not employer's) promises

### b. Behavior

Buunk and Schaufeli (2001) state that a lack of reciprocity in the employment relationship has consequences for sick leave. Accordingly, Van Dierendonck et al. (1998, N=149) taking absence duration as measure, found inequity between employee and organization of significant importance.

### c. Health

#### (1) Work-life interference

Ten Brink et al. (2002) linked five categories of expectations (content of work and autonomy, work atmosphere, developmental possibilities, internal mobility, clarity of the job) to this outcome variable. Results showed significant positive relationships between the organizational contributions and work/life interference, confirming that a fulfilled PC positively relates to work-life balance. Claes et al. (2002) found the state of the PC, defined as the extent to which employees trust their employer, related to this variable: those experiencing high trust levels, perceived less negative interference between work and life. Furthermore, a good PC in terms of narrowness and perceived delivery of the deal acted as an additional mechanism in explaining employees' scores on this variable.

#### (2) Psychological well-being

According to the stress-strain-coping model of Lazarus and Folkman (1984), perceived inequity in the employment relationship is a stressor (Geurts, Schaufeli & Rutte, 1999), with highly negative effects on stress, burnout and general psychological well-being (Buunk & Schaufeli, 2001; Schalk, Freese, Bot & Heinen, 1998). However, psychological health effects are underexposed in PC research. Besides the

PSYCONES study on the Belgian pilot data (Claes et al., 2002), only two Swedish studies and one UK study integrated psychological well-being measures as dependent variables in PC studies.

Both Swedish studies (Isaksson et al., 2003; Isaksson, Josephson & Vingård, 2003) collected data from the health care sector facing the aftermath of several years of restructuring. The first study found employers and not employee's obligations critical for employee well-being, which is in line with the pilot study of this project (Claes et al., 2002). The second identified the PC as mediator: the indicator of perceived breach was strongly related to both psychological and physical health. Broadening well-being to a measure of life satisfaction, the study of Guest and Conway (2002a), replicated over several years, consistently shows an association between the state of the PC and life satisfaction, including subjective assessments of health and work-life balance, with a suggestion of causality. This is again replicated in the study of Claes et al. (2002), which found 'trust' and 'perceived delivery of the deal', of importance for employee well-being.

Besides these two studies, other employee-organization relationship theories can be used to gain insight. Emotional exhaustion as an operationalization of well-being was used in a study among 98 nurses (Van Yperen, 1995). The exchange relationship acted as a framework to explain the occurrence of burnout syndromes. Results showed a very strong relationship between the two concepts, also supported by Van Dierendonck et al. (1998). De Jonge, Bosma, Peter and Siegrist (2000) used the same dependent variable but the resemblance with the state of the PC stems from the use of the Effort-Reward Imbalance Model: having high efforts in combination with low rewards is associated with emotional exhaustion and with impaired physical health. This resembles the gratification crisis as described by Siegrist (1996): having high inputs in terms of work performance in combination with low outcomes (e.g. reward, gratification), a chronic distress experience may rise, also affecting health. Finally, Houkes (Houkes, 2002; Houkes, Janssen, De Jonge & Nijhuis, 2001) investigated the effects of unmet career expectations upon emotional exhaustion, using a sample of 245 bank employees and 362 teachers. No significant relationship was found.

### (3) Self-efficacy

Only the study of Claes et al. (2002) reports on the relationship between the PC and self-efficacy. When taking a content-oriented approach, it was found that the number of promises, regardless whether they stemmed from employee or employer, was positively associated with self-efficacy. Moreover, the perception of the delivery of the deal added significantly to the explained variance, next to and above personal characteristics and type of employment contract.

### (4) Psychosomatic complaints

According to De Jonge et al. (2000), there is a clear negative relationship between effort-reward discrepancy and psychosomatic health, with employees perceiving high efforts but low rewards having higher risks on complaints in comparison to equally rewarded peers. The risk is not as high however, as was the case for emotional exhaustion (4.4 versus 15.4 times). Similarly, Siegrist (1996) shows how in several studies the discrepancies between demands and gratifications can be seen as precursors of

cardiovascular diseases. Organizational justice is another variable closely related to the PC: Schmitt & Dörfel (1999) found a negative correlation between psychosomatic complaints and this variable.

### **Summary 2.8. The psychological contract and employee well-being.**

Most studies focus on the state of the PC, often limited to ‘the perceived delivery of the deal’. Looking at the one-to-one relationships, violation/breach or fulfilment act like expected, in that they respectively lower or heighten job satisfaction, job involvement, work-life balance and well-being. Constructs closely resembling the state of the PC, as e.g. the effort-reward model and trust, point to the same general trend. Equally important is that the role of the PC as a mediator is confirmed in several studies.

When talking about ‘violation’, it is often unclear if the authors explicitly make a distinction between violation and breach. We decided to use ‘violation’ when this concept was used by the authors. However, for the PSYCONES study, it is important to keep the distinction in mind, as we will measure both violation (emotional reaction) and breach (cognitive awareness).

Studies relating the content of the PC to different measures of employee well-being are rare. The study based on the pilot data of PSYCONES however, suggests that this is an important research gap, as the content of the PC, in terms of narrowness, number of employee promises and number of employer promises, adds significantly in explaining employee outcomes.

### **2.2.3. Organizational outcomes**

#### **(1) Performance**

On a theoretical level, different authors (Freese, Heinen & Schalk, 1999; Lester, Turnley, Bloodgood & Bolino, 2002) hypothesize that fulfillment of employee expectations can be associated with a high level of productivity. However, empirical data are lacking. When agreeing that HRM practices are connected to the PC (Freese & Schalk, 1996; Guest & Conway, 2002a; Rousseau, 1995; Schalk & Freese, 1998; see also Tsui, Pearce, Porter & Tripoli, 1997), we can obtain information in an indirect way, since HRM practices have clear consequences on individual, operational and organizational performance (Ahmad & Schroeder, 2003; Boselie & Van Der Wiele, 2001; Molleman & Broekhuis, 2000; Paauwe & Boselie, 2000). We cautiously conclude that there may be a link between the PC and performance, dependent on the fulfillment of the PC by the employer by use of HR practices.

#### **(2) OCB**

Most studies point to a negative relationship between PC breach and OCB and to a positive relationship between PC fulfillment and OCB (e.g. Coyle-Shapiro & Kessler, 2000; Guest & Conway, 2002a; Turnley & Feldman, 2000). Guest, Mackenzie Davey and Patch (2003) found no association between volunteering behavior as a component of OCB and the state of the PC. Note however, that reducing OCB to volunteering behavior is a severe test.



With regard to the PC as an intervening variable, Coyle Shapiro and Kessler (2002) found that temporary workers, generally engaging in fewer citizenship behaviors, increase their level of OCB when perceiving a larger number of organizational inducements, probably reflecting a more explicit exchange relationship among temporary as compared to permanent workers. This finding, implying that those on flexible employment contracts may be more responsive to higher numbers of inducements is interesting, especially when considering the European context where legislation has been introduced to guarantee an equal treatment of all employees (Guest & Clinton, 2003).

When looking at moral value assessment, there is some overlap with the concept of the PC: the positive relationships between facets of moral values and OCB-dimensions as found by Spiess (2000), may serve as a guide line in constructing hypotheses relating dimensions of the PC to OCB-measures.

### (3) Intention to quit

In Dutch research studying the PC, intention to quit is one of the most frequently used variables. In a study of Huiskamp and Schalk (2002), questioning 1331 employees, significant relationships were found between PC fulfillment and turnover intention. Moreover, the number of obligations of both the employee and the employer lowered the intention to quit. In this study, the PC had more impact on the intention to stay or to leave the organization than objective factors such as age, education and sector, highlighting the importance of the PC. The general results are in line with other Dutch research findings (Freese & Schalk, 1996; Geurts, Schaufeli & Rutte, 1999; Schalk, Freese & Van Den Bosch, 1995; Schalk, Heinen & Freese, 2001; Van Dierendonck, Schaufeli & Buunk, 1998; Van Yperen, 1995; Van Yperen, Hagedoorn & Geurts, 1996) and with the Spanish study of Chambel and Peiró (2003). These last authors found that the propensity to leave the company going through a change process was higher when the PC was violated.

A second question deals with the relative importance of different obligations. Schouten (2002) examined the PC of 299 employees and replicates the finding of a strong relationship between PC fulfillment and low intention to quit. Content of work, social aspects and organizational policies were the most influential obligations contributing to this relationship. Development possibilities and rewards, representing more extrinsic obligations, played a significant role, even though less influential.

### (4) Organizational commitment

Taking the feature-oriented approach, Van den Brande (2002a) found all PC dimensions positively related to organizational commitment. The state of the PC is also highly related to the studied variable (De Vos, 2001; Guest, Mackenzie Davey & Patch, 2003).

These general findings are confirmed when looking at Dutch studies, no matter whether content or state/violation is concerned and no matter whether affective, normative, continuance or global organizational commitment is the focus. This is illustrated in table 7. Additionally, the study of Freese and Schalk (1996) showed that identification turned out to be positively related to the state of the PC. Schalk et al. (1995) confirm this, adding that identification might mediate attitudes and behaviors.

**Table 7. The psychological contract and organizational commitment in Dutch research.**

Authors	N	PC component	Commitment component	Relationship
Schalk et al. (2001)	121	Contract fulfillment	Affective	Yes +
Huiskamp & Schalk (2002)	1331	Employer obligations	Affective	Yes ++
		Employee obligations	Affective	Yes ++
		Obligation fulfillment	Affective	Yes ++
Schalk et al. (1995)	338	Explicit	Organizational	Yes +
		Implicit	Organizational	Yes ++
Ten Brink et al. (2002)	762	Work content	Affective	Yes ++
		Work atmosphere	Affective	Yes ++
		Developmental poss.	Affective	Yes ++
		Internal mobility	Affective	Yes +
		Work clarity	Affective	Yes ++
		Rewards	Affective	Yes ++
		Contract fulfillment	Affective	Yes ++
Ten Brink et al. (1999)	527	Contract fulfillment	Affective	Yes ++
		Contract fulfillment	Normative	Yes ++
Schouten (2002)	299	Work content	Affective	Yes ++
		Developmental poss.	Affective	Yes ++
		Social aspects	Affective	Yes ++
		Organizational policy	Affective	Yes ++
		Rewards	Affective	Yes ++
		Work content	Continuance	Yes ++
		Developmental poss.	Continuance	Yes ++
		Social aspects	Continuance	Yes ++
Rewards	Continuance	Yes ++		
Freese & Schalk (1996)	338	Contract fulfillment	Organizational	Yes ++
Freese et al. (1999)	119	Transactional contract	Affective	No
De Bot (1996)	108	Transactional contract	Affective	Yes +

+ <.05; ++ <.01

### **Summary 2.9. The psychological contract and organizational outcomes.**

Most studies investigate these relationships by operationalizing the state of the PC: positive associations are found for OCB, whereas negative relations are found for turnover intentions. Organizational commitment as a dependent variable is studied most frequently, especially when Dutch research is concerned: all research directions are represented, with a broad range of operationalizations of organizational commitment and with strong evidence for the relationship between the PC and organizational commitment.

#### **2.2.4. Additional issues**

There is some research concerning the antecedents of the PC, more specifically, concerning the impact of work values, exchange ideology (= the dispositional orientation with regard to the relation between what the individual receives from the organization and what he gives in return, presented on a continuum) and concerning equity sensitivity (De Vos, Buyens & Schalk, 2001). Both exchange ideology and equity sensitivity turned out to be unrelated to the PC. For work values, the authors hypothesize, in accordance with London (1983), that individual characteristics associated with career motivation (work values) will influence the employee's perception, in that work values will influence which promissory beliefs will become salient and consequently influence the PC. E.g. when stressing 'advancement', the individual will have a high perception of promise-based employer obligations related to the provision of interesting work, personal support and opportunities for career development. Moreover, the individual will also have a high perception of general employee-obligations. The results

suggest that work values relating to advancement and group orientation have an impact on promissory beliefs. Those relating to autonomy and economic rewards were not associated with the PC. Moreover, De Vos, Buyens and Schalk (2002) found that newcomers will pay more attention to the information concerning employer's obligations informative for the fulfillment of highly valued work values.

Van den Brande (2002a) also matched individual difference variables – the career anchors as defined by Schein (1985) - to the PC, assuming that they will influence the expectations and perceptions of employees. E.g. the career anchors leadership and security were positively related to employee's expectations on a long-term relationship and to his feeling of loyalty. Autonomy, however, was negatively related. The author concludes that the individual factors, defined by different career anchors, have a strong relationship with the PC: more specifically, the career anchors leadership, autonomy, security and service turned out to be important in understanding individual contract differences.

These studies (De Vos, Buyens & Schalk, 2001; Van Den Brande, 2002a) point to the fact, as mentioned earlier by Freese and Schalk (1996), that employees work for different reasons and they value certain aspects of their career differently, leading them to develop different expectations and a different PC.

An individual factor not yet discussed is the career phase. Employees starting their career are less loyal than those in their mid or late career. The starters have also lower expectations with regard to long-term involvement. Late career employees are characterized by an open attitude (Van Den Brande, 2002a). This seems especially relevant for the PSYCONES research, with a strong focus on comparing temporary versus permanent workers. As will become clear throughout chapter 3, temporary workers are generally younger, starting their career.

Van den Brande (2002a) investigates even more variables in their relationship to the PC. Organizational factors were found to have a profound impact on the PC, especially participative policy is important, not only resulting in higher loyalty, but also in a more open and flexible attitude and more personal investment of the employee. On the other hand, being able to participate leads to higher employee expectations concerning personal treatment. The educational efforts, the performance evaluation and the career policy of the organization do not have that serious effects, even though it must be acknowledged that their impact may be masked by the participation policy of the organization. Finally, a job offering possibilities of varied work is associated with more personal investment and a more flexible attitude. Autonomy does not have any influence.

### **2.3. Summary: Psychological literature**

Even though a permanent contract is the norm in all PSYCONES countries with figures above 80% and with Spain as an outlier (see chapter 3), the increase in work flexibility is obvious and also notable in the championing of its positive effects by both politicians and employers. With flexible contracts, the responsibility of employment is shifted from the employer to the individual, implying that social protection is one of the main issues. The large differences across countries must be taken into account when interpreting research results, as will be further illustrated in this report. When focusing on the employment contract, it seems that most relationships as they are described in the conceptual model,

are studied to some extent and even though most studies concern one-to-one relationships, evidence was found for intervening effects of employee prospects, choice, the PC and job characteristics.

An important remark reflected in almost all paragraphs concerning the employment contract is that the variability between temporaries is high, partly due to differences in contract duration and motives for doing temporary work. This might explain the mixed results found when studying the relationship with the PC and the dependent variables and might put some results into perspective: e.g. for the organizational variables, we stated that temporary workers are generally disadvantaged. However, when examining the relationship in depth, this was mainly due to the group of TAW.

Because of the different ways the PC can be analyzed, the linkages of this variable to the outcomes differ. However, as is clear from the overview, the core aspect of the PC when investigating the relationship with the variables in our model, seem to be breach or fulfillment, also stated by Conway and Briner (Conway & Briner, 2002, p.282): ‘...but the key construct within PC theory in terms of its relationship with outcomes is PC fulfillment/breach. PC fulfillment has been found to be positively associated with job satisfaction, organizational commitment, OCB and performance. Contract fulfillment associates negatively with the intention to quit (Guzzo, Noonan & Elron, 1994; Robinson, 1996; Robinson & Morrison, 1995; 2000; Robinson & Rousseau, 1994; Turnley & Feldman, 1999; 2000).’ This equally implies there are many research gaps left: not only the different research directions but also outcome variables as e.g. well-being are underexposed in PC-research. This is illustrated by the fact that constructs as trust and moral values and exchange theories were introduced, in order to gain insight into possible effects of – mostly – contract breach / fulfillment or broader, of the state of the PC.

### 3. Facts and figures of the PSYCONES countries

This part of the report will be a rather narrative review, not focusing on exact numbers and figures, but rather pointing to important and general trends. That way, by not concentrating on percentages and the like, the problem of international comparisons, caused by - among other things - differences in legislation and definitions, are by-passed. In doing so, different European reports were used, among which the OECD-report<sup>21</sup> (OECD, 2002) and the report on the Third European Survey on Working Conditions of Goudswaard and Andries (Goudswaard & Andries, 2002) are the most important. Note that all sources used are surveys, based on national samples and not on population figures, limiting the reliability of the data. This highlights the importance of not interpreting the percentages in an absolute way.

As mentioned before, those reports use different definitions of non-permanent employment, which in itself illustrates the problem pointed to above on a different - i.e. research - area: Goudswaard and Andries (2002) do not give a specific definition but limit temporary employment to fixed term employment and TAW. They thus distinguish between two groups of temporary work: direct employment versus employment by an agency, thereby covering most work internationally considered as temporary. The OECD (2002) operates temporary work in line with the Eurostat definition, in which temporary work is considered as dependent employment of limited duration. Moreover, both sources use different reference groups: the OECD report focuses on total dependent employment, Goudswaard and Andries (2002) put temporary work in the perspective of total employment. This implies that a self-employed person is part of the sample used in the report of Goudswaard and Andries (2002), whereas this is not the case in the OECD (2002) facts and figures. Concretely put: when it comes to temporary workers, it can be expected that the percentages provided by the OECD (2002) are slightly higher.

We first discuss the role of temporary employment in relation to total employment and the evolution of temporary employment. Those two paragraphs should enable the formation of a global picture on temporary employment, thereby highlighting international differences. We continue our narrative review by discussing the current use of temporary contracts, first by relating temporary employment to the individual control variables as defined in figure 2, (subgroups according to e.g. age, gender, and educational level), then by relating temporary employment to two organizational control variables, sector and organizational size. Whenever possible, we start with a global European perspective, followed by more country-specific information on the incidence of temporary employment. Each section finally pays attention to temporary workers as a group: the distribution of temporary workers across the groups as defined by several variables is presented. As a special case, TAW is considered, thereby drawing on the work of Storrie (2002a), who also used data from the Third European Survey on Working Conditions. These boxes are merely illustrative for this specific type of employment. TAW is also included in the total sample.

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<sup>21</sup> Eurostat and European Union Labour Force Survey are the data sources used in the OECD report. The only exception for the PSYCONES countries is Sweden, using data of the Swedish Labour Force Survey.

### 3.1. Role of temporary work in total employment

Different reports (e.g. Benach, Gimeno & Benavides, 2002; Goudswaard & Andries, 2002; OECD, 2002; Paoli & Merllié, 2002) estimate the share of temporary relative to total employment on 11 to 14% and relative to paid (i.e. dependent) employment on 13% to 15%. This general agreement is quite surprising, given the different definitions on temporary employment used. At the same time, it is a strong indication that there is no European trend towards an overall contractual flexible workforce. Permanent employment is the norm in the European Union as a whole and its member states in particular. However, some countries deviate more from that norm than others, as can be seen in table 8. It is interesting to note that these figures are extremely different when it comes to jobs occupied for less than one year: here, non-permanent employment accounts for 49% of all dependent employment and for 43% of total employment (Letourneux, 1997).

**Table 8. Percentage of non-permanent contracts among employees (Source: Third European Survey on Working Conditions, Goudswaard and Andries, 2002).**

	Second European Survey on Working Conditions 1996 <sup>22</sup>	Third European Survey on Working Conditions 2000	Eurostat labour force Survey 1999 <sup>23</sup>
Austria	9	7	7.8
Belgium	14	9	13.7
Denmark	14	8	11.3
Finland	17	17	21.2
France	23	14	14.8
Germany	9	9	13.4
Greece	18	14	14.7
Ireland	14	13	9.9
Italy	9	10	11.8
Luxembourg	10	6	4.4
Netherlands	17	13	15.4
Portugal	17	17	20.4
Spain	38	29	34.9
Sweden	13	11	16.6
UK	10	12	7.5
<b>EU</b>	<b>15</b>	<b>13</b>	<b>14.2</b>

As can be seen in the data on the year 2000, Spain shows the highest percentages of temporary work, more than doubling the European average. On the other end of the continuum we find Luxembourg, where the share of temporary employment is less than half of the European one, closely followed by Austria, Denmark, Belgium and Germany. The national legislation certainly has to be taken into account when interpreting these national differences: the combination of a strict employment protection legislation for permanent workers in combination with a liberal approach towards temporary employment, as it is the case in for example Spain, reflects a totally different approach of the labor market in comparison to countries in which national legislation provides little protection for all workers, as it is the case in the UK (Bronstein, 1991; Goudswaard & Andries, 2002; OECD, 2002). This is articulated clearly by Booth, Dolado & Frank (2002): “ The positive correlation [between the percentage of temporary contracts and the strictness of employment protection legislation for regular employment] can be interpreted as a clear sign that temporary contracts act as a way of providing employment flexibility in those countries with severe employment protection legislation.”

<sup>22</sup> Temporary work = employment of limited duration and TAW relative to total employment

<sup>23</sup> Temporary work = dependent employment of limited duration

When looking at the PSYCONES-countries, there are three groups (figure 6): Belgium and Germany have a rather low share, the Netherlands, the UK and Sweden come close to or equal the 13% of the EU. Spain as an exception exceeds the average: almost one out of three jobs have a temporary character.

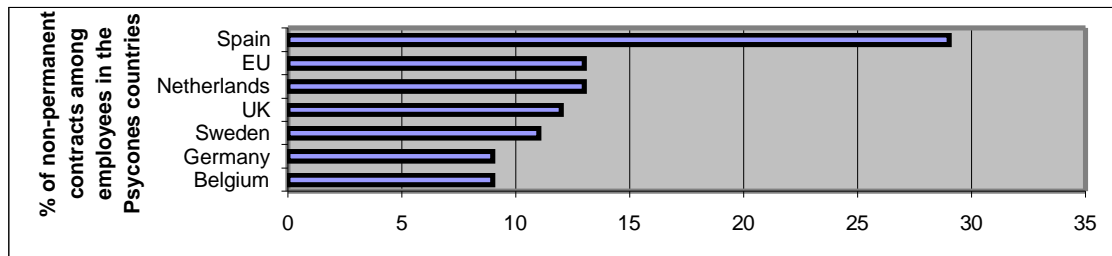


Figure 6. Percentage of non-permanent contracts among employees in the PSYCONES countries. (Source: Third European Survey on Working Conditions 2000, Goudswaard & Andries, 2002).

#### The case of temporary agency workers (Storrie, 2002).

Even though there are difficulties in reporting statistics on TAW, related to the lack of a clear definition and the relatively new form of employment, there is a general applied definition (not applicable to all EU member states): *'the temporary agency worker is employed by the temporary work agency and is then, via a commercial contract, hired out to perform work assignments at the user firm'*. The CIETT (2000, in Storrie, 2002a) estimates the daily average number of agency workers in 1998 at 2.2 million in the EU, with 6 million persons employed by an agency on a yearly basis. Estimates for 1999 vary between 1.8 and 2.1 million agency workers (according to how TAW is defined in the UK) on a daily basis, which is 1.2% to 1.4% of total employment (Storrie, 2002a). We report the UK data best meeting the definition of TAW (Storrie, 2002a).

Table 9 illustrates that France has the largest temporary agency workforce in absolute numbers, accounting for 30% of the EU total. The Netherlands and to a lesser extent Germany and the UK are other important contributors. The Netherlands are the most intensive user, notable when compared to other PSYCONES-countries, which do not even employ half of the Dutch share. The Dutch policy uses TAW to fight unemployment and to stimulate the entry of women, making TAW relatively safe and uncontroversial (Bergström, 2003). Some of the national reports report diverging numbers: e.g., the German estimates in 1999 range from 243.000 (Storrie, 2002a) over 286.394 (Interessensverband Deutscher Zeitarbeitsunternehmen, <http://www.ig-zeitarbeit.de>) to 673.148 (BZA, Federal Association of Temporary Work).

**Table 9. TAW in the EU, 1999 (Source: CIETT, 2000, in Storrie, 2002).**

	Agency workers	Percentage of total employment
Austria	24.277	0.7%
Belgium	62.661	1.6%
Denmark	18.639	0.7%
Finland	15.000	0.6%
France	623.000	2.7%
Germany	243.000	0.7%
Greece	0	0.0%
Ireland	9.000	0.6%
Italy	31.000	0.2%
Luxembourg	6.065	3.5%
Netherlands	305.000	4.0%
Portugal	45.000	1.0%
Spain	109.000	0.8%
Sweden	32.000	0.8%
UK	254.000	0.9%
<b>EU</b>	<b>1.777.642</b>	<b>1.2%</b>

### 3.2. Evolution in the use of various forms of flexible contracts

It is even more difficult to report exact figures on the evolution of temporary work, because legislative regulations tend to evolve, thereby influencing the share of temporary workers. We will describe the evolution in general terms, starting in 1985. Between 1985 and 1995, there is a trend towards more contractual flexibility in the industrialized countries. This trend is rather strong in e.g. France, Italy, the Netherlands, Sweden and Spain. Taking the Netherlands as an example, the share of temporary employment rose from 8.1% in 1988 to 12.3% in 1998 (CBS), mostly due to the government recognizing the need for a flexible workforce (Schippers & Steijn, 1999). However, the trend is not universal. In some countries, the share of temporary employment tended to decrease (e.g. Greece, Luxembourg) (OECD, 2002), which means that both trends (increasing industrialization and the use of flexible contracts) do not translate into similarity (Rigotti & Mohr, 2003). Figures based on 1991 Eurostat-data point to the same direction (Bronstein, 1991). Moreover, the expansion of temporary work is due to different forms of temporary work: in several countries, the rise of TAW is the driving force, in others, e.g. Sweden, on-call contracts are an important growth factor (OECD, 2002).

In the last five years (1995-2000) there is no remarkable shift in the share of contractual flexibility, as can be seen in table 8. Data point to a rather slight decrease on a European level (15% in 1995 to 13% in 2000, Benavides & Benach, 1999; Goudswaard & Andries, 2002). This decrease is not due to only one specific type of contract, as shown in the European Survey data of Paoli and Merllié (2002): the share of fixed term contracts decreased from 11% in 1995 to 10% in 2000, TAW from 3% to 2% and training contracts remained at a 2% level. However, there are again differences on an international level: the recent decrease (from 1998 on) in the number of temporary contracts in the Netherlands<sup>24</sup> is mainly due to the decline of on-call workers. The number of temporary agency workers only slightly decreased, whereas the number of fixed term contracts even slightly increased (CBS). Moreover, the decrease in the share of temporary employment can be found for both men and women and across all age groups (Goudswaard & Andries, 2002). However, this trend is not equally clear in the different EU

<sup>24</sup> This Dutch trend can mainly be attributed to the introduction of the Flexibility and Security Act in 1998, after which temporary jobs can more easily be converted into permanent jobs. Moreover, the tight labour market of recent years slowed down flexibility because more permanent contracts are offered (Fouarge & Kerkhofs, 2000; Huiskamp, 2003).



countries. Austria, Belgium, Denmark, Greece, Ireland, Luxembourg, the Netherlands and Sweden follow the European trend. There is a rather sharp decrease in France and Spain. Italy and the UK show a small increase, whereas Germany and Portugal show no change (Goudswaard & Andries, 2002). Note however, that when the time frame is broadened and when specific contract types are focused, the picture for Germany changes: in April 2001, over 2.7 million dependent employees said to have a fixed term contract; 13% more as compared to 1991 (Breiholz, Duschek & Nöthen, 2002). In the UK, the increase can be largely attributed to changes in employers' policies and practices (Casey, Metcalf & Millward, 1997). Moreover, in the UK there are huge differences in evolution (1992-1996) according to the specific employment contract: agency workers showed an increase of 148 %, contract workers 39%, casual workers 21 per cent and no changes in seasonal workers.

Concluding with the Eurostat data (cited in Eironline, 2002), comparing patterns in 1983 and 2000, there is a large variation in growth of fixed-term contracts, ranging from 9.1% to 13.4%. In 2000, the highest proportion was to be found in Spain (32.1%). At the lower end, the UK (6.7%) is situated.

The OECD-report (2002) provides some interesting figures on the decomposition of total growth during the 1990s into the components attributable to temporary and permanent jobs (Table 10).

**Table 10. Contributions of temporary and permanent jobs to total employment growth, 1990-2000 (Source: OECD, 2002).**

	Cumulative growth of total employment	Percentage-point contribution of temporary employment	Percentage-point contribution of permanent employment
Austria	1.1	2.0	-0.9
Belgium	17.7	5.3	12.4
Denmark	4.8	-0.1	5.0
Finland	7.1	4.4	2.7
France	9.9	5.9	3.9
Germany	-2.1	2.4	-4.5
Greece	18.5	-1.0	19.5
Ireland	47.4	-1.6	48.9
Italy	-1.2	4.8	-6.0
Luxembourg	17.2	0.6	16.6
Netherlands	25.1	9.9	15.2
Portugal	8.0	-2.8	10.8
Spain	24.7	10.2	14.4
Sweden	6.6	1.7	5.0
UK	6.5	1.9	4.6

Generally, permanent employment contributes more to the total employment growth than does non-permanent employment. This is illustrated by the case of Denmark, where permanent employment has been growing mediated by a policy called 'flexicurity', aiming at high flexibility while simultaneously promoting social protection (Walwei, 2003). This is comparable with the Dutch situation as documented before: after introducing the Flexibility and Security Act (1998), temporary jobs are easily converted into permanent jobs. Moreover, due to the recently tight labor market, more permanent jobs are offered (Fouarge & Kerkhofs, 2000; Huiskamp, 2003). Germany is a peculiar exception, since there is no growth but instead a decline in overall employment and temporary employment increases at the expense of permanent employment.

Another important finding is that permanent jobs make up a majority of the newcomers jobs in 2000 (>50%). This was not the case in 1996 (Goudswaard & Andries, 2002). It thus seems that the evolution towards increasingly more temporary jobs has stabilized somewhere in the 1990's.

As a side remark: note that there seems to be a relationship between unemployment and the use of flexible contracts, as was concluded by Storrie (Holmlund & Storrie, 2002; Storrie, 2002a). This relationship is not the same across countries. E.g. in Sweden, temporary employment increased sharply in the 1990s, following a sharp increase in unemployment (Booth, Dolado & Frank, 2002). However, unemployment rates decreased during the last years of the 1990s, while at the same time the increase of atypical employment leveled off. This may suggest that the increase in contracts of limited duration is not a long-term trend. The Dutch labor market policy is considered to be very successful in recent years, resulting in a low unemployment and a high participation percentage. This success is closely linked to the Wassenaar Agreement (1982), aiming at the decrease of the unemployment rate, by moderating wage increases and by creating room for flexibility, resulting in a massive job growth, mainly by encouraging the use of part time and temporary jobs (Pot, Koene & Pauwe, 2001; Remery, Van Doorne-Huiskes & Schippers, 2002; Van Hoof & Van Ruysseveldt, 1999). Also legislation plays a role when studying temporary work. Germany is a severely legislated country regarding the protection of workers' rights (Schömann & Schömann, 2001). The rather fast and remarkable increase in agency workers is closely related to this severe legislation, as is stated by Booth et al. (2002, p.5): '...temporary <agency> contracts act as a way of providing employment flexibility in those countries with severe employment protection legislation for permanent jobs.' In Spain, the time spent in unemployment is decreasing from 1993 on, because of a decrease in the number of people receiving social compensations for being unemployed, mainly among those aged below 25. The legal reform that excludes those working on apprenticeships in combination with a rise of younger workers with contracts every time shorter, is stated as the main reason.

**The case of temporary agency workers (Storrie, 2002a):**

TAW has a long history, going back to the 18<sup>th</sup> century (Bronstein, 1991; Storrie, 2002a). The first offices came into existence at the turn of the previous century in the US and the UK. By the late 1950's TAW was already well established in the Netherlands and the UK, soon followed by Belgium and Germany (Bronstein, 1991).

**Belgium:** The sector employed over 25.000 persons in 1988 and continued to grow over the years. In 1999 the number more than doubled in comparison to 1992 (Storrie, 2002a). Even more spectacular is the growth of number of hours worked under agency contracts between 1983 and 1987: there was a rise from 13 million to 30 million, in only four years (Bronstein, 1991).

**Germany:** TAW as a percentage of dependent employment doubled in the period 1992-1999 (Storrie, 2002a). However, TAW accounts for less than 1% of total dependent employment in 1999.

**The Netherlands:** Bronstein (1991) states that the number of workers almost quadrupled between 1982 and 1988. According to the Dutch Labour Force Survey (Storrie, 2002a), the sector has grown considerably in the period 1992 – 1999, doubling the figure of 1992. However, there seems to be a slight decline the last year (table 11).

**Table 11. Average number of agency workers in the Netherlands (1992-1999) (Storrie, 2002).**

	1992	1993	1994	1995	1996	1997	1998	1999
Number	102.000	98.000	114.000	149.000	187.000	207.000	223.000	210.000
% of all employment	1.73	1.65	1.93	2.46	3.02	3.23	3.37	3.09

**Spain:** The CIETT-report (2000, in Storrie, 2002a) estimates the number of agency workers in 1999 on 109.000. The estimation in 1995 was 19.000, which points to the rapid (five fold) multiplication of TAW since the mid-1990s. However, there was a decrease during the first months of 2000, due to a more strict legislation concerning pay.

**Sweden:** The sector was legislated only in the beginning of the 1990-s. In 1999, there were 32.000 agency workers, by the end of 2000, these figure increased to 42.000, illustrating the current rapid growth of the sector. However, in recent years, this increase slowed down. Figures for 2001-2002 suggest a declining trend (Isaksson, personal communication).

**UK:** Agency work is a rather unclear concept, hindering an estimation. The CIETT (2000) puts the number at 976.0000 in 1999 and at 1.128.993 at the end of 2000. However, the estimations vary considerably: the labour force study, which is in line with the common definition of TAW since it excludes e.g. the self-employed, puts the number on 254.000. According to this last survey, the number of agency workers tripled since 1992.

### 3.3. Current use of various forms of flexible contracts

We continue by using the same structure: the current use of flexible contracts is first documented on a European level, comparing permanent and non-permanent workers. This results in tables with row percentages, enabling an interpretation concerning which categories of temporary workers are over- or under-represented. The report of Goudswaard and Andries (2002) serves as a guideline. Using the OECD-report (2002), the same figures are given per country. Note however, that only the percentages of temporary workers are presented, the complement can be easily computed. Finally, following the same report, we focus on the temporary workforce (temporary employment = 100%). That way, the distribution of temporary employment by individual and job characteristics is mapped. This general structure is followed when it comes to the following variables: sector, age, gender, occupation, educational attainment and organizational size. When talking about pay and fringe benefits, the discussion is on a more global level, since numbers are difficult to find and to interpret. Job tenure and work systems will be discussed comparing permanent and non-permanent workers. The previous labor force status only applies to non-permanent workers. We will concentrate from now on solely on the PSYCONES countries.

### 3.3.1. Individual variables

#### (1) Age

Table 12 provides data of the Third European Survey on Working Conditions. It is immediately clear that most temporary jobs are allocated to younger workers. The strong and sharp decline after the age of 24 is remarkable and is followed by a less sharp decrease in the other age groups. Note however, that the oldest age group (age 65 and above) tends to show higher percentages again. People born during the baby boom of the post war period (1960's) occupy mostly stable jobs (Letourneux, 1997).

**Table 12. Percentage of permanent and non-permanent contracts by age (total employment) (Source: Third European Survey on Working Conditions; Goudswaard & Andries, 2002).**

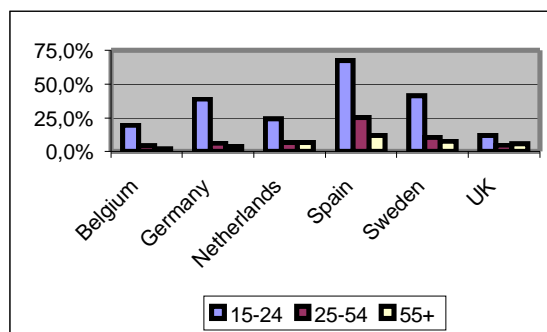
	Permanent	Non permanent
15-24 years	68	32
25-34 years	86	14
35-44 years	91	9
45-54 years	94	6
55-64 years	93	7
65 +	81	19
<b>EU</b>	<b>87</b>	<b>13</b>

This trend is also overtly apparent when looking at the different countries (table 13; figure 7). The OECD (2002) applies three broad age categories. The youngest group has in proportion to the total employment the largest share of temporary workers in all countries, ranging from 12.0% in the UK to 67.4% in Spain. De Grip, Hoenberg and Willems (1997), using 1991 Eurostat data, confirm this general tendency towards more temporary workers amongst the young. On a European level, 27.5% of those aged between 14 and 24 holds temporary contracts, ranging from 9.7% for the UK, over 30.6% for Germany to 60.7% for Spain. De Grip et al. (1997) also point to the positive relationship between a high unemployment rate and temporary work among young people. They conclude that temporary contracts do not mitigate unemployment but merely reflect the weak position of those workers in labor segments with excess supply. This is illustrated by the Spanish labor market situation: studying the careers of youth aged 16 to 30 during five years in a representative sample of the Valencian Region (García-Montalvo, Palafox, Peiró & Prieto, 2000a), it was found that they worked only a fifth of this time with average contract duration of 4 to 6 months. An even stronger point in this regard is the fact that many among the Spanish youth work without an official contract, although this is less probable among those with a higher educational level (25% university; 40% primary education)

**Table 13. Incidence of temporary employment by age (%).**

Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).

	15-24	25-54	55+
Belgium	19.7	4.5	2.1
Germany	38.9	6.1	3.8
Netherlands	24.3	6.9	6.7
Spain	67.4	25.2	11.8
Sweden	41.3	10.5	7.5
UK	12.0	4.9	5.8



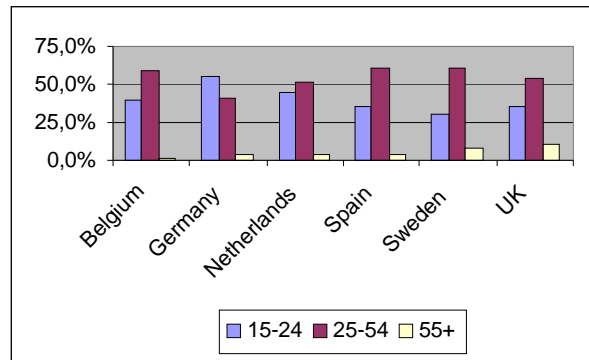
**Figure 7. Incidence of temporary employment by age (%).  
Share of temporary workers in each group.**

Even though the youngest age group is a small category in comparison to the middle group, it entails a lot of temporary workers, ranging from 25.6% in Greece to 59.2% in Austria on a European level. When the PSYCONES countries are considered, Germany stands out as the only country employing a majority of temporary workers between 15 and 24 years (table 14; figure 8) .

**Table 14. Distribution of temporary employment by age (%).**

**Share of temporary workers in each group (OECD, 2002).**

	15-24	25-54	55+
Belgium	38.9	59.2	1.9
Germany	55.6	41.0	3.4
Netherlands	45.2	50.8	4.0
Spain	35.6	60.4	3.9
Sweden	30.9	60.8	8.3
UK	35.4	53.8	10.8



**Figure 8. Distribution of temporary employment by age (%). Share of temporary workers in each group (OECD, 2002).**

**The case of temporary agency workers (Storrie, 2002).**

Bronstein (1991) states that the stereotype of temporary agency workers varies from one country to another. However, those workers are generally young (Bronstein, 1991; Storrie, 2002a). In the Netherlands for example, 54% of the agency workers is aged below 25, averaging 27 years. The only exception is Sweden, employing only 10% agency workers below the age of 25. Here, those aged 25-35 years are over-represented. It seems logical, given the narrow age bracket, that there is a high turnover in the sector (Bronstein, 1991). Agency workers however are becoming older in the Netherlands and in Germany. In contrast, they are getting younger in Spain (Storrie, 2002a). Table 15 gives the age distribution, based on CIETT (2000) data complemented with national reports.

**Table 15. Age distribution of temporary agency workers (%) (Source: CIETT, 2000, in Storrie, 2002).**

	<25	25-35	35-45	45-55	55-65	65+	Average
Belgium	44	33	18	5	1	0	30
Germany	37	37	17	7	2	0	32
Netherlands	54	27	12	5	2	0	27
Spain	51	34	11	4	1	1	27
Sweden	10	75	10	5	0	0	31
UK	40	30	14	10	4	1	32

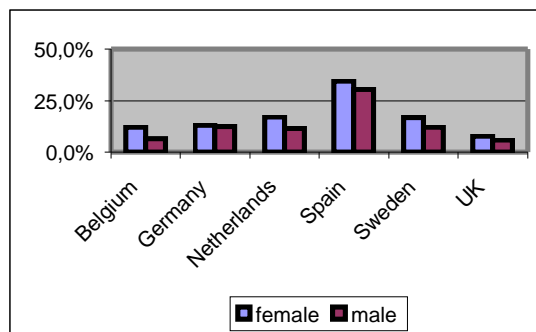
(2) Gender

According to the data used by Goudswaard & Andries (2002) women occupy more non-permanent positions than men (respectively 15% and 11%). Data of the OECD (2002) confirm this conclusion. The data presented in table 16 and figure 9 compare the share of temporary female and male workers in total dependent employment. The over-representation of women in total dependent employment is very clear in the case of Belgium, where the amount of men is almost half the amount of women.

**Table 16. Incidence of temporary employment by gender (%).**

Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).

	Female	Male
Belgium	12.1	6.6
Germany	13.1	12.5
Netherlands	17.2	11.5
Spain	34.6	30.6
Sweden	16.9	12.3
UK	7.7	5.9



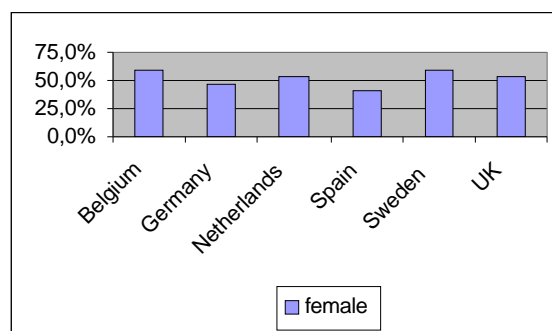
**Figure 9. Incidence of temporary employment by gender (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

When only temporary workers are considered (table 17; figure 10), the over-representation of women still exists in 9 out of 15 EU-countries. Gender differences are large in only a few countries as e.g. Belgium and Sweden. Spain is an example of the opposite trend, with 41.8% of all temporary workers being female. Note that the rate of women having or looking for a job has strongly increased in recent years, from 28% to 39%, whereas the activity rate of men decreased from 78% to 63%. Still, a high unemployment gap exists, mounting up to 24%. The Eurostat data of 1991 (De Grip, Hoevenberg & Willems, 1997) points to the same direction: temporary employment generally does not occur with a much higher frequency among female workers.

**Table 17. Distribution of temporary workers**

by gender (%). Share of temporary workers in each group (OECD, 2002).

	Female
Belgium	58.5
Germany	46.2
Netherlands	53.4
Spain	41.8
Sweden	58.5
UK	53.8



**Figure 10. Distribution of temporary workers by gender (%). Share of temporary workers in each group (OECD, 2002).**

### **The case of temporary agency workers (Storrie, 2002a):**

Temporary agency workers used to be women, performing non-manual and ‘women’s work’. However, there has been a shift towards the placement of male agency workers in industry, resulting in an under-representation of women, with the striking exception of Sweden (Bronstein, 1991; Storrie, 2002a). In comparison to total employment, women are strongly under-represented in Germany and the UK, and slightly under-represented in Belgium. Sweden has a rather strong over-representation, the Netherlands and Spain also tend towards over-representation (table 18).

**Table 18. Estimates of share of women in agency work and in total employment (%) (Storrie, 2002).**

	% women in TAW	% women in total employment	Excess of women in agency work
Belgium	40	42	-2
Germany	22	44	-22
Netherlands	49	43	6
Spain	43	36	7
Sweden	60	48	12
UK	30	45	-15

### (3) Occupation

The percentage of non-permanent contracts by occupation (total employees; table 19) shows that there is a clear and - given the data on temporary employment across sectors (see chapter 3.3.2.) - not surprising trend towards more temporary contracts within agriculture and fishery professions (20%) and elementary professions (18%). The highest percentage of temporary employment is to be found in the armed forces (23%). Managers do not often occupy temporary positions (5%).

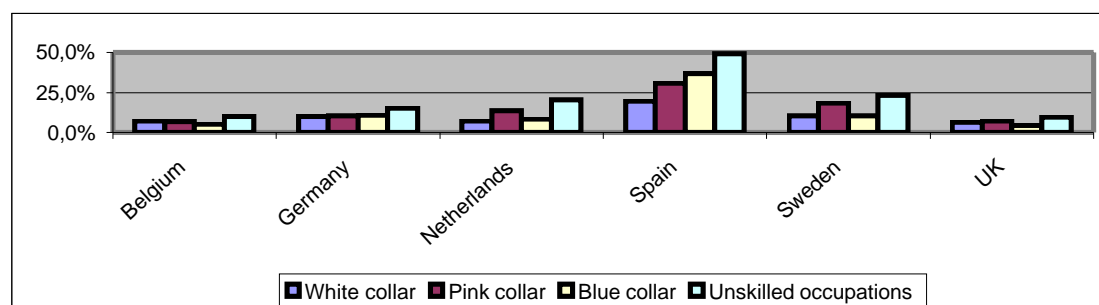
**Table 19. Percentage of permanent and non-permanent contracts by occupation (total employment) (Source: Third European Survey on Working Conditions; Goudswaard & Andries, 2002).**

	Permanent	Non permanent
Managers	95	5
Professionals	87	13
Technicians	88	12
Clerks	88	12
Service/sales	85	15
Agriculture/ fishing	80	20
Craft/ trade workers	89	11
Operators	90	10
Elementary professions	82	18
Armed forces	77	23
<b>EU</b>	<b>87</b>	<b>13</b>

The OECD-report (2002) provides a classification with four groups. Looking at the incidence of temporary employment by occupation (share in total employment; table 20; figure 11), the European picture above is confirmed, in that unskilled occupations, comparable with elementary professions, and to a lesser extent, pink collar jobs (low skilled administrative workers) are strongly represented.

**Table 20. Incidence of temporary employment by occupation (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

	White collar	Pink collar	Blue collar	Unskilled occupation
Belgium	7.1	7.0	5.3	10.0
Germany	10.0	10.3	10.9	15.1
Netherlands	7.2	13.8	8.5	20.5
Spain	19.7	30.9	36.6	49.1
Sweden	10.3	18.3	10.3	23.1
UK	6.5	7.3	4.6	9.5



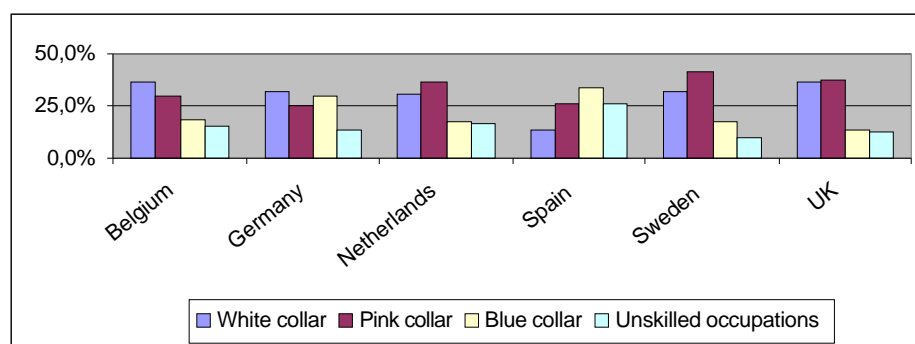


**Figure 11. Incidence of temporary employment by occupation (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

Looking at the distribution of the temporary workforce (table 21; figure 12), most PSYCONES countries show high percentages of white and pink-collar workers, not by incident female-oriented job categories. Those two categories account for over 70% in Sweden and the UK and for over 60% in Belgium and the Netherlands. Germany on the contrary shows a more balanced distribution, even though the white- and pink-collar still are over-represented. The only real exception is Spain, employing only 37% on a white- or pink-collar occupation. Blue-collar workers are strongly represented, as are the unskilled occupations. As a side remark, Italy, another Southern country, also strongly deviates from the general trend: this country shows an extremely balanced distribution: each category approximates 25%.

**Table 21. Distribution of temporary employment by occupation (%). Share of temporary workers in each group (OECD, 2002).**

	White collar	Pink collar	Blue collar	Unskilled occupation
Belgium	36.4	29.8	18.1	15.7
Germany	32.1	24.7	29.4	13.9
Netherlands	30.3	36.5	17.0	16.2
Spain	13.6	26.1	34.0	26.3
Sweden	31.4	41.3	17.5	9.7
UK	36.7	37.4	13.5	12.3



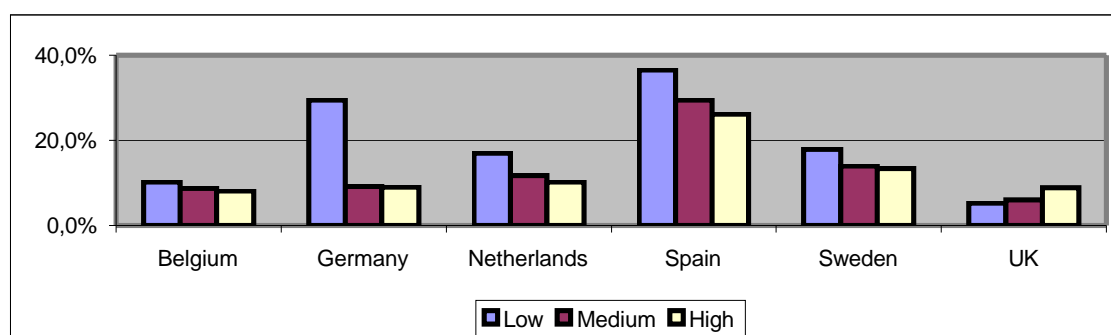
**Figure 12. Distribution of temporary employment by occupation (%). Share of temporary workers in each group (OECD, 2002).**

#### (4) Educational level

We did not find any data in the papers reporting on the Third European Survey on Working Conditions. There is some information in the report provided by the OECD (2002). We present a EU-picture by a detailed country-specific elaboration of all EU-members. When compared with the EU-average, an indication of the relation between education and temporary employment can be deduced (table 22; figure 13).

**Table 22. Incidence of temporary employment by educational attainment (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

	Low	Medium	High
Austria	21.9	4.2	5.7
Belgium	10.3	8.7	8.1
Denmark	18.9	8.5	5.9
Finland	17.9	20.5	13.9
France	16.3	15.2	13.0
Germany	29.5	9.2	9.1
Greece	17.7	12.1	9.4
Ireland	11.5	8.4	8.1
Italy	10.2	9.6	11.3
Luxembourg	3.2	3.7	2.9
Netherlands	17.1	11.7	10.2
Portugal	19.4	24.0	20.6
Spain	36.6	29.5	26.2
Sweden	17.9	14.0	13.4
UK	5.3	6.0	8.9
<b>EU</b>	<b>15</b>		



**Figure 13. Incidence of temporary employment by educational attainment (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

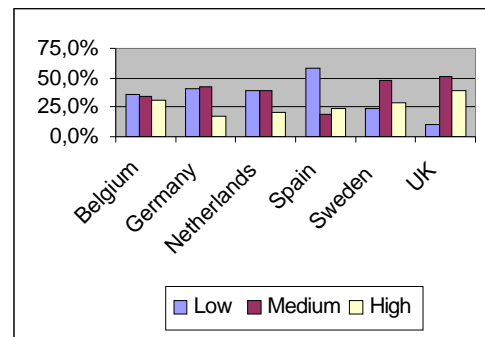
In 10 out of 15 countries, the incidence of temporary employment is highest in the low educated group. Germany acts as example: 29.5% of the low educated are temporary workers, the other categories do not attain a 10%-level. Even though Spain has high percentages in all groups, the over-representation of temporary workers in the low educated group is clear. When studying the youngest workers, permanent contracts are mainly a privilege for those having a university degree (García-Montalvo, Palafox, Peiró & Prieto, 2000b). There are some exceptions, however, to this general rule. In Finland, the percentage of the middle group is slightly higher than that of the low educated group. However, the incidence in the high-educated group is by far the lowest. In Italy, Luxembourg and Portugal, the percentages for the different groups are nearly the same: for Italy the three categories approximate 10%, for Luxembourg 3% and for Portugal 21%. The UK plays a peculiar role in that the general rule is reversed. The highly educated group (8.9%) shows the highest percentages across the categories, followed by the middle group (6.0%). When the total EU average is taken as the norm, we conclude the same: in the low educated group, 10 out of 15 countries exceed the norm, this is the case for only three countries with regard to the middle group and for only 2 countries in the high educated group.

Table 23 and figure 14 show the distribution by education, focusing on the PSYCONES-countries.

**Table 23. Distribution of temporary employment by educational attainment (%).**

Share of temporary workers in each group (OECD, 2002).

	Low	Medium	High
Belgium	35.5	34.3	30.2
Germany	41.1	42.1	16.8
Netherlands	40.0	40.0	20.0
Spain	57.9	17.9	24.2
Sweden	23.8	47.6	28.6
UK	10.0	51.4	38.6



**Figure 14. Distribution of temporary employment by educational attainment (%). Share of temporary workers in each group (OECD, 2002).**

These data reveal that temporary workers can be found in all categories across all countries. This is evidently so in the case of Belgium, where there is a balanced distribution. In Germany and the Netherlands, the low- and medium-educated groups are equally represented; the highly educated group is represented to a much lesser extent. In Spain, the majority of temporary workers is to be found in the low educated group. In Sweden, the middle group is by far the biggest, involving almost half of the workers; the two other categories are equal in size, each involving one temporary worker out of four. The UK as an exception shows a low percentage of low educated temporary workers.

#### (5) Pay

There are competing theories (OECD, 2002), suggesting that pay in temporary jobs may be either better (e.g. hypothesis of compensating differentials: the pay compensates for less advantageous job or work conditions) or worse (e.g. theories of dual labor markets suggest that those at the marginal segment of the labor market, including temporary workers, are paid less) than in permanent jobs. However, there are not much data available comparing pay indices.

In reality, pay levels are closely associated with national policies. Some European countries want to treat permanent and non-permanent workers (performing the same job) as equals when it comes to wage levels, in line with Directive EG99/70 of the European Union, translated in the 'Equal Treatment of Temporary and Permanent Workers Act' in the Netherlands. A specific example is the minimum wage legislation, covering both temporary and permanent workers. It has to be said, however, that not all collective agreements on pay automatically cover all labor segments and not all countries (e.g. UK) have laws explicitly stating that temporary workers should be paid the same wages as their permanent equivalents (Bronstein, 1991; OECD, 2002).. Table 24 offers an inventory of the national policies of the PSYCONES countries (OECD, 2002).

**Table 24. National policies concerning legislation on temporary work.**

	Minimum wage	Collective agreements applying automatically	Equal opportunity	Equal pay
Belgium	Yes, for employment > 1 month	Yes	Yes	Yes
Germany	Yes	No	Yes	No
The Netherlands	Yes	Yes	Yes	Yes
Spain	Yes	Yes	Yes	Yes
Sweden	Not applicable	Yes	Yes	Yes
UK	Yes	No	Yes	No

From this table, it can be expected that pay levels should be more or less the same for temporary workers in all countries, except for the UK, where legislation is not that restrictive. The UK study of Booth et al. (2000 in OECD, 2002) points to that direction: this study found a significant wage gap, mounting up to 16% for men at the disadvantage of temporary workers. Moreover, there is some evidence that having held a temporary job on some point of the career significantly influences the wage penalty of men. Dekker (2001) confirms this conclusion. This last author finds evidence for wage gaps in the Netherlands and Germany (for the Netherlands see also: Kleinknecht, Oostendorp & Pradhan, 1997; Remery, Van Stigt, Van Doorne-Huiskes & Schippers, 1999; Van Breukelen & Allegro, 2000; Zant, Alessie, Oostendorp & Pradhan, 2000). Their estimations of the wage gap vary from 10% to 20%. In Belgium (Sels, De Witte, Forrier, Vander Steene & Van Hootegem, 2002) and Sweden (Gustafsson, Kenjoh & Wetzels, 2001; Levin, 1998) this negative wage gap is confirmed. It thus seems that legislation does not always predicts the empirical question concerning whether or not temporary and permanent workers receive the same wages. The OECD-report (2002) illustrates this by information on the gross hourly wage distribution (table 25). Unfortunately, Sweden is not mentioned in the report.

**Table 25. Relative wages of temporary workers, 1997. Distribution of hourly gross wages (in ECU) for full time workers by permanent/temporary status (OECD, 2002).**

Country	Status	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile	Mean	Wage gap <sup>25</sup>
Belgium	permanent	8.6	10.8	14.0	11.9	0.79
	Temporary	7.1	8.9	11.2	9.4	
Germany	Permanent	9.1	11.5	14.9	12.5	0.83
	Temporary	7.1	8.9	11.7	10.4	
Netherlands	Permanent	10.5	12.9	16.4	14.6	0.63
	Temporary	7.0	8.7	11.0	9.1	
Spain	Permanent	4.9	6.9	10.6	8.4	0.53
	Temporary	3.1	4.1	5.2	4.4	
UK	Permanent	6.9	9.6	13.4	11.1	0.74
	Temporary	5.5	7.0	9.5	8.2	

Making abstraction from the actual country differences, temporary workers earn less than permanent workers. However, bringing individual and job characteristics into account may lower the wage gap substantially. The OECD report (2002) responds to this lacuna by using multivariate regression techniques, resulting in a more accurate estimation of the independent effect of temporary work. The conclusion is that the wage penalty is reduced but not eliminated: the gap still exists in all countries and for both men and women, except for Belgian women. These findings indeed suggest that temporary work in itself is associated with lower wages, significant both from an economic (the wage gap ranges up to 27% in the Netherlands) and a statistical perspective, even though the analyses should be carefully and prudently interpreted since not all relevant variables were taken into account.

<sup>25</sup> The wage gap is computed as the ratio of the mean wage of temporary workers to the mean wage of permanent workers.

Other pay dimensions confirm the conclusion that temporary workers are disadvantaged. Goudswaard and Andries (2002) found that employees with a non-permanent contract (19%) have less basic fixed salaries when compared to permanent employment (10.8%), pointing to the fact that temporary employment offers less financial security. The differences are statistically significant.

**The case of temporary agency workers (Storrie, 2002a).**

Even though several member states have legislated on 'equal wages for equal work', employers may try to by-pass collective agreements. Moreover, pay is often related to seniority. On the other hand, Storrie (2002a) states, based on questionnaires filled out by employers, that cost-cutting is not the major incentive for using TAW, in fact, it was only of minor consideration. Based on national reports, Storrie doubts this statement, bringing evidence in front suggesting that cost-cutting is an important motive:

In **Belgium**, pay is the major complaint among agency workers. These complaints not only involve wages that are too low, but also non-payment for public holidays and in the case of illness.

In **Germany**, there is clear evidence of low pay, with cases in which payment is 30% lower in comparison to that of the user firm's permanent staff. However, serious efforts are made to improve the situation.

In the **Netherlands**, collective agreements mostly regulate the pay level, implying that the wages in the user firm and those applied by the agency do not necessarily match. Moreover, the 'Equal Treatment of Temporary and Permanent Workers Act' does not apply to TAW.

In **Spain**, low wages were an incentive in the past. Now the wages of agency workers are more closely linked to those in the user firm, which resulted in wage increases up to 20%. The law was implemented in 1999, the first months of 2000 showed a decline in TAW.

In **Sweden**, there are collective agreements on equal pay for all blue collar workers since 2000. Unions strive to broaden this to white collar workers as well. For the moment however, there still is a large sector variation regarding salaries: some agency workers have more, others equal and still others lower wages when compared to permanent workers (Isaksson, personal communication). Note also that agency workers have a guaranteed salary, meaning that they get 80 to 90% of their salary when they are not on an assignment (Bernhard & Isaksson, 2003).

In the **UK**, wages are seen as 'the biggest area of complaint': the weekly income of full-time agency workers in 1999 was 68% of the average weekly income of all workers.

Despite this suggestive findings, low wages for TAW are not correlated perfectly with cost-cutting, since a fee has to be paid to the agency.

(6) Fringe benefits

Access to fringe benefits is a topic closely related to pay. A distinction has to be made between countries where these benefits are generally applied based on legislation and those in which access is granted on a more or less random basis (e.g. company-specific policies). This distinction, although

theoretically clear, is not that evident in reality: some temporary workers are included, others are not. Specifically, the access to fringe benefits is sometimes related to a minimum duration of employment or to minimum contribution periods. Moreover, the administrative complexity may put limits on access. The OECD report (2002) gives some facts with regard to fringe benefits, but quantifiable data are not that easily found:

- q Paid holidays are a right in all PSYCONES countries, not distinguishing between temporary and permanent workers. An exception is the UK: the minimum employment duration is set at 13 weeks.
- q Paid sick leave is a right in all PSYCONES countries, except for Belgium and the UK. In Belgium, the contribution period is set at 3 months. Earnings should be above a certain threshold in the UK. The contribution period of three months is no longer in force due to recently introduced legislation.
- q Employment insurance is provided in all countries, but this is coupled to long contribution periods and in the UK also to minimum earning thresholds.
- q The PSYCONES countries made access to pension plans open for all workers. In the UK however, this is conditional since a minimum earning threshold is put into practice.
- q Maternity leave is a right in all countries. The UK is again the exception, since there is a contribution period of 26 weeks and earnings should be above a specified threshold.

#### (7) Tenure

The OECD (2002) offers statistics on job tenure of temporary and permanent workers. The duration of contracts is of crucial relevance since shorter jobs not only offer less security, but also access to fringe benefits is more difficult to realize: although the access to fringe benefits should be theoretically the same for all employees, the very short duration of temporary contracts may in fact put those workers at a disadvantage, due to for example laws concerning the minimum contribution periods. Table 26 gives the percentage distribution of each PSYCONES country per group (i.e. permanent or temporary).

**Table 26. Job tenure of temporary and permanent workers, 2000. Percentage distribution of on-going job tenures for each type of work arrangement (OECD, 2002).**

	Temporary workers					Permanent workers				
	< 1 year	1-2 years	2-3 years	3-5 years	> 5 years	< 1 year	1-2 years	2-3 years	3-5 years	> 5 years
Belgium	56.5	19.1	3.6	9.1	11.7	10.7	8.9	3.4	10.6	66.4
Germany	50.2	25.2	3.1	14.4	7.1	10.5	8.6	3.3	10.9	66.7
Netherlands	72.5	13.1	3.0	6.3	5.1	14.0	10.5	4.1	13.3	58.1
Spain	62.9	18.6	4.4	7.8	6.3	5.6	7.5	3.5	11.7	71.8
Sweden	56.3	17.3	3.0	10.5	12.9	9.9	8.8	2.0	9.9	69.4
UK	57.0	15.2	2.8	10.7	14.3	17.5	12.5	3.2	15.0	51.8

In all countries, the majority of temporary workers have been in their current job for less than one year, for permanent workers, these percentages are far lower, ranging from 5.6% in Spain to 17.5% in the UK. In contrast, the majority of permanent workers has been in their current job for more than five years, for temporary workers, this ranges from 5.1% in the Netherlands to 14.3% in the UK. However, one may not conclude that temporary work is by definition precarious work, since these data do not take into account the conversion of temporary work into permanent work. Moreover, temporary contracts are often renewed. However, the data above suggest that renewals do not prevent temporary

jobs from being much shorter than permanent jobs, even though it must be admitted that in three out of six countries under discussion, over 10% of temporary workers hold jobs for over five years. Evidence cited in the OECD report (2002) suggests that more educated workers and those employed in the public sector tend to have an above-average contract duration, while the youngest workers or the previous unemployed ones tend to have a below-average tenure. Moreover, it can be expected that contracts for agency workers are somewhat shorter. We did not find specific data on that, except for Germany (Lechner, Pfeiffer, Spengler & Almus, 2000): in general 11.4% of the contracts contracted and terminated by an agency were for a period of less than one week, 44.8% of the contracts had a duration of up to three months.

#### (8) Working hours

The overwhelming majority (62%) of all European employees are working under a full-time permanent contract. One out of four (23%) works on a part-time (defined as working 10 to 35 hours) permanent basis. Only a small minority works part-time (5%) or full-time (9%) with a non-permanent contract (Goudswaard & Andries, 2002). Table 27 illustrates that the incidence of part-time employment for temporary workers is above the EU average. More women than men hold temporary part-time jobs (7% of all women and only 2% of all men). Letourneux (1997) comes to the same conclusion.

**Table 27. Employment status and part-time work in the EU in 2000 (total dependent employment) (%) (Goudswaard & Andries, 2002).**

	Permanent	Non permanent
Full-time (>35 hpw)	89	11
Part-time (10 – 35 hpw)	82	18
<b>EU</b>	<b>87</b>	<b>13</b>

We did not find figures about the incidence of part-time work across countries. However, the OECD (2002) gives an indication, defining part-time workers as those employed less than 30 hours a week. Their conclusion is that temporary workers are more likely to work part-time than are permanent workers, sometimes much more likely, as is the case in the Netherlands, where more than one out of two temporary workers works part-time. However, it is not correct to state that those two forms of atypical work can be used almost in exchange. E.g. in Germany, the data point to an opposite trend. As a side comment: over 40% of temporary part-time workers are not satisfied with their working hours: they want to work more hours. For permanent part-time workers, this percentage is much lower (20.7%), suggesting that temporary workers are often involuntarily part-time employed.

Another aspect of work system relates to working time flexibility. Goudswaard & Andries (2002) found temporary workers (24.8%-26.3%) working more during weekends in comparison to permanent workers (21%). There is no significant difference in the number of nights worked. Neither are there differences when it comes to shift work (table 28).

**Table 28. Percentage of permanent and non-permanent contracts by working time flexibility (total employment) (Source: Third European Survey on Working Conditions; Goudswaard & Andries, 2002).**

	% working weekends	% working non standard hours	% working in shifts	% lack of control over working time
Permanent full time	21.3	17.9	19.6	49.4
Permanent part time	21.4	15.6	18.0	53.5
Non permanent full time	24.8	20.6	24.6	52.1
Non permanent part time	26.3	16.0	18.3	59.8

The OECD (2002) provides country-specific figures (table 29) concerning the incidence of temporary employment by number of jobs and unsocial hours. When it comes to the existence of a second job, we can divide the countries into two groups. In Belgium, Germany and Spain, the incidence of temporary workers holding a second job is lower than those who do not hold a second job. For the Netherlands, Sweden and the UK, the opposite pattern is found. In the Netherlands and the UK, the incidence of temporary workers holding a second job is almost double the incidence of workers with a single job.

The incidence of temporary workers doing shift work on a regular base is rather low compared to those who never do shift work in Belgium and Spain. The category “sometimes” is small, pointing to the fact that shift work is either done regularly or never. The Netherlands are sharing this characteristic. Germany also employs less temporary workers on regular shift work, but here the mid category is the largest. This is also and to a larger degree the case for Sweden. Here and in the UK, the incidence of temporary workers doing shift work exceeds the incidence of those not doing so.

Working during weekends is common for temporary workers: the incidence of those working during weekends exceeds the percentage of those not doing so in Belgium, the Netherlands, Spain and Sweden. Except for Sweden, the in-between category of sometimes is less frequent chosen: weekend work is done on a regular more than on an occasional basis.

**Table 29. Incidence of temporary employment by number of jobs and unsocial hours, 2000 (%). Share of indicated group holding a temporary job (OECD, 2002).**

	Second job		Shift work			Saturday work			Sunday work		
	No	Yes	Usual	Some-times	Never	Usual	Some-times	Never	Usual	Some-times	Never
Belgium	9.0	7.8	7.4		9.1	10.0	7.7	9.5	10.5	7.8	9.3
Germany	12.7	10.2	8.6	12.5	12.0	10.1	9.6	12.6	10.7	11.3	11.7
Netherlands	13.3	23.0	17.4	13.3	14.1	17.8	10.3	13.9	14.9	12.4	14.5
Spain	32.2	30.0	25.8	22.5	33.6	35.6	29.3	32.1	33.5	25.4	33.2
Sweden	14.3	17.3	15.9	30.9	13.6	18.3	17.3	12.5	17.8	17.3	12.9
UK	6.5	11.7	14.5	5.5	6.9	5.7	4.7	8.9	7.0	4.5	7.6
<b>EU</b>	<b>10.9</b>	<b>12.5</b>	<b>11.1</b>	<b>13.3</b>	<b>12.2</b>	<b>13.5</b>	<b>10.4</b>	<b>12.0</b>	<b>13.8</b>	<b>10.7</b>	<b>11.9</b>

Table 30 (OECD, 2002) compares percentage of workers reporting undesirable working conditions.

**Table 30. Working conditions of permanent and non-permanent workers. % of workers reporting undesirable working conditions (OECD, 2002).**

	Working antisocial hours		Limited working time flexibility	
	Permanent	Temporary	Permanent	Temporary
Belgium	19.9	16.8	60.8	70.5
Germany	17.5	20.4	74.4	72.0
Netherlands	19.7	18.6	58.6	74.0
Spain	21.0	18.8	71.5	81.6
Sweden	17.5	18.0	60.2	79.5
UK	23.1	30.9	54.0	68.9
<b>EU</b>	<b>18.8</b>	<b>20.9</b>	<b>62.7</b>	<b>74.1</b>



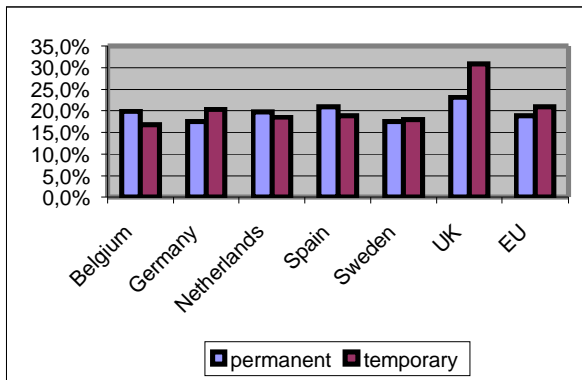


Figure 15 'Working antisocial hours'.

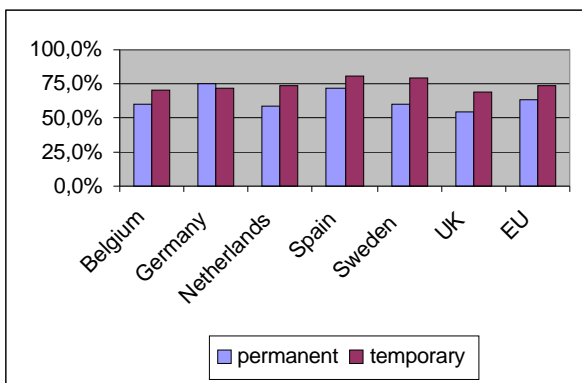


Figure 16. 'Limited working time flexibility'.

When looking at the percentage of employees having to work antisocial hours (figure 15), there is at a European level a small over-representation of temporary workers. At a (PSYCONES) country-level, this is most obvious in the UK and to a lesser extent in Germany and Sweden. Belgium, the Netherlands and Spain show an opposite trend, illustrating that temporary work in itself is not precarious. The figure on limited working time flexibility (figure 16) is clearer: temporary workers report more than permanent workers that they have limited flexibility. The only exception is Germany.

(9) Previous labor force status

As can be seen in table 31, the majority of temporary workers were employed one year previously, ranging from 57.6% in Sweden to 72.7% in the UK. From the remaining, most were still engaged in full-time education, illustrating the age-related findings. The only exception is Spain: approximately one out of four was unemployed the previous year. German data (Garhammer, 2002) on TAW put these numbers into perspective, stating that about 50% of agency workers were unemployed before they started working for the agency, 10% were unemployed for over a year.

**Table 31. Previous labor force status of temporary workers. Labor force status in 1999 of workers holding temporary jobs in 2000 (OECD, 2002).**

	Employment	Unemployment	Fulfilling domestic tasks	Full-time education	Other status
Belgium	64.8	14.1	1.5	15.7	3.6
Germany	64.9	10.2	1.8	17.5	5.3
Netherlands	69.4	5.9		14.5	10.1
Spain	63.6	24.5	1.9	7.7	2.2
Sweden	57.6	14.7	1.6	22.8	2.8
UK	72.7	6.1	4.0	14.0	2.3

The importance of the previous labor market status becomes eminently clear in the research of Remery et al. (2002), who found this to be a crucial factor in predicting whether people will be employed in temporary or permanent labor relations. When the previous job was temporary or when they were previously unemployed, the chance of receiving a temporary contract increases. In Spain, having a large number of temporary contracts is not an exception, with the number of contracts playing an important role on e.g. pay: the average salary of youth having their first temporary contract is approximately 420 euros, lower than the 600 euros they got in doing their last job, for those who had up to 6 jobs in a five-year period (García-Montalvo, Palafox, Peiró & Prieto, 2000a).

(10) Transition from temporary jobs to...

Even though Dekker (2001), studying transition patterns across countries, thinks of temporary jobs as 'a phase they are going through', there seem to be differences within the temporary workforce. Actual mobility patterns are heavily dependent on individual characteristics, with age as a main criterion (the tendency for those aged 25-34 to have above-average chances on a permanent job is particularly strong in Germany, the Netherlands and the UK: this age group has 15-20% more chances) next to gender (men are more likely to find a permanent job), education, and the like: overall, mobility into permanent jobs is highest for medium to highly educated persons, aged 25-34, who have not been previously unemployed and are employed in a medium or large-sided private firm (OECD, 2002). Data show an increasing number of employees changing temporary for permanent jobs as time spent on a job increases. The fact that chances on a permanent contract decline when getting older, is demonstrated in different studies (Muffels & Steijn, 1998; Remery, Van Doorne-Huiskes & Schippers, 2002; Zant, Alessie, Oostendorp & Pradhan, 2000). Galais and Moser (2001) report a positive relationship between social competence, networking and the likelihood to be offered a permanent contract after six months of employment. Typically, worker and job characteristics associated with a lower mobility, have also a higher risk of becoming unemployed. There are country differences (OECD, 2002), e.g. mobility from a temporary into a permanent job is least common in Belgium and Spain, where remaining trapped in temporary jobs is common. However, García-Montalvo et al. (2003), using a representative sample of the Valencia Region and performing multivariate analyses, found that after controlling for relevant variables (gender, education, academic performance, sector and size of the company) work experience and previous number of jobs significantly increase the probability of getting a job with a permanent contract. Mobility into unemployment is high in Germany (24%), with workers cycling between temporary jobs and unemployment.

Detailed country-specific information is hard to find. We report data mentioned in the national reports of the Netherlands and Sweden. Even though around 40% of Dutch temporary workers continue to be temporarily employed after two years (Steijn, 1999), the majority of all flexible contracts are converted into permanent contracts. The amount of ‘regular’ workers shifting into a flexible contract is very low (Muffels, Dekker & Stancanelli, 1999; Remery, Van Stigt, Van Doorne-Huiskes & Schippers, 1999). The percentage of temporary workers shifting to permanent employment should go up in the near future, due to the introduction of the ‘Equal treatment of Temporary and Permanent workers Act’ in November 2002: employers are obliged to report new (permanent) jobs in advance. Temporary jobs in the Netherlands are clearly what they ought to be, temporary. Nevertheless, we should point to the fact that the number of temporary workers finding a better job is rather low (Muffels & Steijn, 1998).

In Sweden, data from the Labour Market Survey covering the periods 1993-1996 and 1998-2000 (Wikman, 2002) showed that around 30% of all temporary employees in the first period, and 40% in the second switched to a permanent contract. Those on probation and substitute contracts were more likely to transition into permanent employment than on-call workers and more men than women found a permanent contract. Furthermore, middle aged and highly educated employees had higher chances. This was in line with research findings of Håkansson (2001). Korpi and Levin (2001) found that temporary work reduces the days of subsequent unemployment. However, the risk on unemployment is higher among temporary than permanent workers (Levin, 1998).

### 3.3.2. Organizational variables

#### (1) sector

The Third European Survey 2000 (Goudswaard & Andries, 2002) provides information on a global European level, enabling comparisons of the relative importance of temporary work within and between sectors. As can be seen in table 32, the catering and the agricultural sector are the most prominent users of temporary employment, with percentages approximating 20%. Not accidentally, work in those sectors is very seasonal (Letourneux, 1997). According to the Spanish Instituto Nacional de Estadística (INE, 2003), non-permanent contracts are also frequently found among those doing domestic work, with percentages approximating 50%. The finance sector (7%) is the smallest user, followed by manufacturing (9%). The construction, real estate and social sectors fluctuate between 14% en 16%, which is close to the European average.

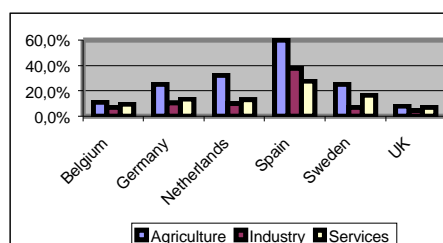
**Table 32. Percentage of permanent and non-permanent contracts by sector (total employment) (Source: Third European Survey on Working Conditions; Goudswaard & Andries, 2002).**

	Permanent	Non Permanent
Agricultural	82	18
Manufacture	91	9
Public utilities	90	10
Construction	86	14
Sale	88	12
Hotel / Restaurant	80	20
Transport	91	9
Finance	93	7
Real estate	85	15
Public services	89	11
Social Sector	84	16
<b>EU</b>	<b>87</b>	<b>13</b>

There is, however, considerable difference across countries. The OECD report (2002) illustrates this by pointing to the share of temporary employment in total dependent employment for the indicated group. The sectors are not defined as specifically as was the case in the former mentioned report.

**Table 33. Incidence of temporary employment by sector (%).**

Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).			
	Agriculture	Industry	Services
Belgium	11.2	7.2	9.7
Germany	25.4	10.8	13.5
Netherlands	32.1	10.2	13.2
Spain	60.0	37.7	27.7
Sweden	25.3	7.4	16.9
UK	8.2	4.7	7.4



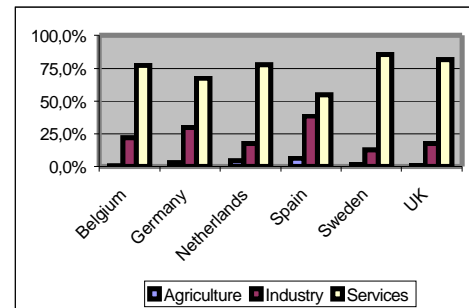
**Figure 17. Incidence of temporary employment by sector (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

Table 33 and figure 17 clearly illustrate the importance of temporary employment in the agricultural sector, even though there are considerable differences across countries. The highest concentration of agricultural temporary workers is found in Spain (see also INE, 2003): the majority of those employed in the agricultural sector occupy a temporary position. In the Netherlands, one out of three contracts in the agricultural sector is temporary. There is quite a large group of countries approximating 25% temporary employment in agriculture, with Germany and Sweden as examples. Belgium scores considerably lower. At the bottom of the continuum is the UK, with less than 10% temporary workers in agriculture. In the industry, the variation is certainly smaller. Again, Spain has the highest share of temporary employment: more than one out of three. The mid group is formed by the Netherlands. All other countries report numbers below 10%. Spanish (27.7%) and Swedish (16.9%) temporary workers are also frequently found in the service sector. Germany and the Netherlands show percentages well above 10%. One can conclude by stating that the agricultural sector is, relatively considered, an important player on the temporary work market. However, this does not mean that most temporary workers are employed in agriculture, since this sector is not that big in absolute numbers.

The OECD report (2002) responds to that problem by providing figures concerning the share of temporary workers in each sector and per country. The advantage in comparison to the former figures is that the picture is completed on an absolute country and sector level. E.g. where it is indeed true that the agricultural sector uses a lot of temporary contracts, the absolute number, in comparison to other sectors is relatively low, because (among other things) there has been a shift from agriculture to industry and from industry to services.

**Table 34. Distribution of temporary employment by sector (%).**  
**Share of temporary workers in each group (OECD, 2002).**

	Agriculture	Industry	Services
Belgium	0.7	22.1	77.2
Germany	3.0	29.8	67.2
Netherlands	4.4	17.8	77.8
Spain	6.5	38.7	54.8
Sweden	1.8	12.6	85.6
UK	1.1	17.4	81.5



**Figure 18. Distribution of temporary employment by sector (%).** Share of temporary workers in each group (OECD, 2002).

Spain is the most remarkable outlier within the group of PSYCONES countries and within the European Union as a whole, even though Spain and Italy are comparable on some features. Spain and Italy have a relatively high share of temporary workers in agriculture (respectively 6.5 and 10.0%) as compared to the below 5% of the other countries. Moreover, the majority of temporary workers are employed in services, a number which is far higher in other PSYCONES-countries, ranging from 67.2 to 85.6%. The same accounts for the service sector. In other words, the division of temporary work in Spain is more balanced as compared to the other PSYCONES countries.

Taking into account the sectors that are (going to be) sampled in the research of PSYCONES, a comparison between private and public sector is important. However, it is rather difficult to find country-specific data on this issue, the more so since civil servants occupy a special position in several countries (for more information: chapter 1), thereby complication comparisons. In the UK, temporary workers made up about 10% of the public sector work and around 5.7% of the private sector.

## (2) Organizational size

Non-permanent contracts are more frequent in the smallest organizations (table 35). This is also confirmed by data of the Second European Survey on Working Conditions 1996 (Letourneux, 1997).

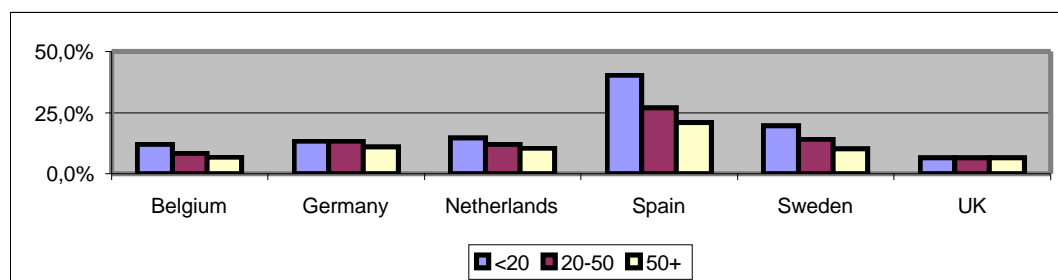
**Table 35. Employment status and size of the organization (%) (Goudswaard & Andries (2002).**

	permanent	Non-permanent
2-9	84.4	15.6
10-49	87.8	12.2
50-99	89.1	10.9
100-499	89.9	10.1
>500	90.9	9.1
EU	87	13

When looking at the incidence of temporary employment by organizational size (table 36; figure 19), this European picture is confirmed in all PSYCONES countries. Spain is the most obvious example: 40.3% of all workers employed in small organizations have a temporary contract, for the other organizations this percentage decreases to approximately one out of fourth. There is one exception: the incidence of temporary employment across organizations of different size, tends to be the same in the UK.

**Table 36. Incidence of temporary employment by organizational size (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

	<20 persons	20-50 persons	50+
Belgium	12.2	8.4	6.9
Germany	13.4	13.4	11.1
Netherlands	14.8	12.2	10.5
Spain	40.3	26.9	21.1
Sweden	19.8	14.3	10.2
UK	6.6	6.7	6.6

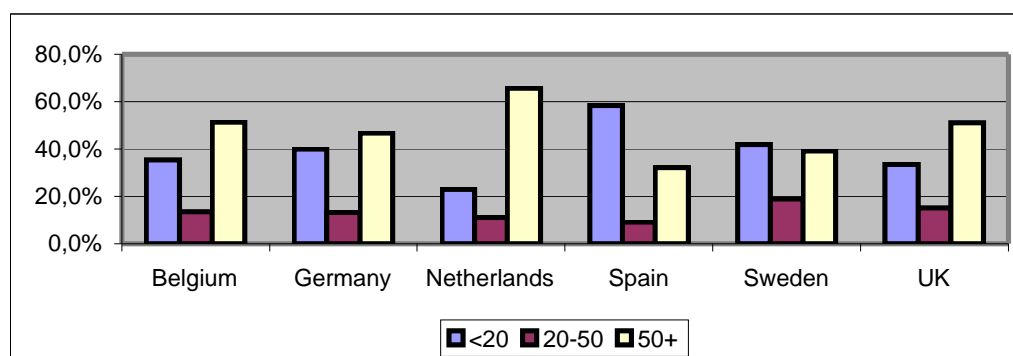


**Figure 19. Incidence of temporary employment by organizational size (%). Share of temporary employment in total dependent employment for the indicated group (OECD, 2002).**

The distribution of temporary workers across categories shows a remarkable general feature (table 37; figure 20): there are a lot of temporary workers in the smallest and the biggest companies. Another trend, applying to Belgium, the Netherlands and the UK, is that the majority of temporary workers is to be found in the biggest companies. In Germany, the biggest companies employ most but not the majority of the temporary work force. In Sweden and Spain, the smallest companies still hold the edge.

**Table 37. Distribution of temporary employment by organizational size (%). Share of temporary workers in each groups (OECD, 2002).**

	<20 persons	20-50 persons	50+
Belgium	35.3	13.5	51.3
Germany	40.1	13.2	46.7
Netherlands	23.1	11.2	65.7
Spain	58.4	9.3	32.3
Sweden	42.0	18.9	39.2
UK	33.6	15.3	51.1



**Figure 20. Distribution of temporary employment by organizational size (%). Share of temporary workers in each group (OECD, 2002).**

### **3.4. Summary: facts and figures of the PSYCONES countries**

The trend towards more flexibility expressed in an increasing number of temporary contracts was especially notable from the 1980s till the mid 1990s. From then on, the increase of temporary contracts leveled off in most countries. The composition of the temporary workforce with regard to the specific type of contract also changed (e.g. TAW increased in all countries). Permanent contracts still hold the edge, with figures exceeding 80% and with Spain as an outlier. Accordingly, temporary employment relative to total employment accounts for 11% to 14% in Europe. Within PSYCONES, the participating countries show a balanced picture: The Netherlands, the UK and Sweden equal the European average, Germany and Belgium stay well below, whereas Spain doubles the average. This might be due to legislation and policies. Note that permanent contracts are part of the standard employment form: permanent full-time contracts are clearly most often used. Even though part-time employment occurs relatively often amongst those temporarily employed, the two concepts cannot be used in exchange.

In describing the prototype of temporary workers, age acts as a main criterion: most temporary jobs are allocated to younger workers whereas those born during the baby boom occupy the most stable jobs. A second criterion is educational level, with the share of temporary workers generally decreasing with educational level. An exception is the UK, with a large percentage of temporary workers among the highly educated. Closely related is the distribution with regard to occupation: temporary workers are mainly found among blue- and pink-collar workers. Gender as a criterion is important in only a few countries: in Belgium and Sweden, women are clearly over-represented. However, differences are small in the other countries and even show the opposite pattern in Spain. The previous labor market status is also an important characteristic, even though national differences are larger: most temporaries were employed one year previously. The majority of the others were still in education. The only exception is Spain, where a large amount of temporary people was unemployed the previous year. Those characteristics are equally important when examining the actual mobility patterns of temporary workers: younger and highly educated workers have more chances on a permanent contract. These chances also increase with contract duration. Previous unemployment on the other hand acts as a barrier for transitioning into permanent employment. However, most temporary workers finally find a permanent contract, except in Belgium and Spain, where remaining trapped in temporary employment is not exceptional, and in Germany, where one out of four temporaries shifts into unemployment.

Even though most national policies aim at the equal treatment of workers regardless of contract type, a wage gap at the disadvantage of temporary workers exists, even when controlled for individual and job characteristics. In contrast, fringe benefits are generally the same for all workers, except in the UK and to a lesser extent in Belgium, where specifications regarding e.g. minimum contributions periods are added and not taken into account that the short contract duration may limit access.

Not surprisingly, seasonal sectors (e.g. catering, agriculture) are the most intensive users of temporary workers. However, when taking into account the absolute numbers and not the relative distribution within the sector, temporary work within services outweighs both industry and agriculture, due to a profound shift, first from agriculture to industry, then from industry towards services. The same reasoning goes for organizational size: small organizations are the most prominent users, but looking at absolute numbers, most temporary workers can be found in the biggest organizations.

## **4. Conclusions**

This report aims at identifying important research gaps and at evaluating the extent to which the conceptual model as used in the pilot study (figure 1 and 2) is in line with former research findings. In this final chapter, this aim is made explicit by the formulation of some recommendations and changes, resulting in the proposal of a new literature-based conceptual model. The original model wanted to evaluate the effects of contract permanency (formal contract, agency versus direct hire, volition) on employee well-being, with the psychological contract as an intervening variable and taking into account both individual and organizational control variables. This discussion will examine the different blocks of the model: the independent variable, the dependent, the control and the intervening variables.

### **4.1. The independent variable: contract permanency**

In line with the OECD (2002), we consider contract permanency to be a contract characteristic, i.e. contract permanency is defined by objective conditions inherent in the employment contract. Accordingly, the classification of different contracts types into distinct categories – a major challenge when cross-national research is concerned – should be based on objective and verifiable criteria.

A first refinement divides all possible contracts into two major groups: the contract with the organization in which one is currently employed can be either temporary or permanent. The stress put on the organizational perspective has an important implication when the formal employer and the user organization are not the same: e.g. subcontractors may have a permanent contract with their formal employer, even though they have a temporary assignment with the user firm. In some countries, agency workers are in the same situation. As such, they are not temporary workers in the restricted sense of the OECD definition. However, the PSYCONES project did not want to exclude these specific types of workers, as they become increasingly important (see chapter 3.1 and 3.2) and as they offer excellent opportunities to investigate differences both within the temporary workforce and across countries. However, we did not consider agency work to be a separate sector. Agency workers will rather be included encountering them in the organizational sample (see also, Isaksson et al., 2003). Contract permanency thus is related to the organization in which the job is performed.

Within the group identified as permanent, two categories exist. The first is generally referred to as the standard employment contract: employees having an open-ended contract with their employer. Dismissal is possible when sound reasons are proven and after respecting a period of notice. A second group of permanent workers is composed of civil servants for whom life-long employment is guaranteed. This group is well represented in Belgium, Germany and Spain and to a lesser extent in the UK and Sweden. As those employees enjoy the highest level of job security possible, this group may act as a ‘control group’ in the research.



Within the group of temporary employees, two additional criteria are put forward: those formally employed by another organization (agency workers, subcontractors) are to be distinguished from those directly employed by the organization in which one is currently employed. Furthermore, contract duration is identified as an important criterion, outweighing the dimension 'period of notice' used in the pilot conceptual model. Contract duration was found to be more decisive when it comes to interpreting differences within the group of temporary workers. First of all, it offers more variety when compared to 'period of notice', both across and within countries. E.g. in Spain, the duration of the contract differs considerably, whereas the period of notice is practically the same across contracts, even when compared to permanent contracts. Secondly, in most countries, the duration of the contract and not its period of notice is related to social security. E.g. in Sweden, employees on fixed term contracts have the same rights as those permanently employed in a situation of redundancy. Thirdly, throughout the literature review, contract duration was found to have an impact on different dependent variables. E.g. when discussing the relationship between temporary employment and organizational commitment, Rigotti and Mohr (2003) stated that 'temporaries are assumed to be less committed than permanents, because of the shorter duration of their employment contract'. This implies that not only the contract type as such but also the duration of the contract plays a role. A second example concerns the relationship of contract duration and the PC: questioning employers about their expectations towards employees, it was found that the duration of the contract influences the scope of the expectations. Employers expressed similar expectations towards permanent employees and employees on fixed-term contracts of longer duration, whereas the scope for short-term contracts was significantly narrower (Knocke, Drejhammar, Gönas & Isaksson, 2003). However, contract duration as such is not detailed enough to influence all dependent variables to the same extent. When it comes to employee prospects, for example, time left on the current contract might turn out to be more important. In order to rule out alternative explanations, it was decided to include 'time left on the current contract' as an additional variable.

Volition and the related variables choice and motives acted as independent variables in the original model. However, since they reflect attitudes, they are not part of the objective classification. That is why they cannot be considered as part of the main independent variable 'contract permanency'. Moreover, throughout the literature review, evidence suggested that preference of contract (volition) is important in explaining mixed results reported in studies relating the employment contract and different variables (e.g. job insecurity: Claes et al., 2002; job involvement: Isaksson, Aronsson, Bellaagh & Göransson, 2001; psychosomatic complaints: Isaksson & Bellagh, 2002; job satisfaction: Krausz, Brandwein & Fox, 1995). Motives for working temporarily are far less studied, but as 'motives' are considered to be an elaboration of volition, we expect this variable to have the same intervening role. Swedish studies stressed the importance of work/occupation of choice next to contract of choice (e.g. Aronsson & Göransson, 1999), thereby suggesting that it might be interesting to examine the trade-off between both.

#### **Summary 4.1. The independent variable: contract permanency.**

The PSYCONES classification of different types of employment contracts is in line with the OECD definition (2002) of temporary employment in that it is based on objective criteria inherent in the employment contract. The first dimension distinguishes between employees who have either a permanent or a temporary contract with the organization in which one is currently employed. Within the group of temporary workers, two additional dimensions are put forward: direct employment versus direct hire and contract duration. In order to rule out alternative explanations, time left on the current contract is included.

It might be better suited to consider choice (contract, occupation) and motives for doing temporary work, previously part of the block 'independent variables', as intervening variables, as there is supporting evidence in literature, although mainly concerning contract of choice.

#### **4.2. The dependent variables**

The dependent variables used in the pilot study of PSYCONES were grouped into three categories: employee prospects (job insecurity, employability, contract expectations), employee well-being (attitudes, behavior and health) and organizational outcomes (performance, OCB, turnover intention and organizational commitment). This was explicitly integrated in the general aim of the PSYCONES project, in that organizational advantages in terms of performance and commitment, taking the perspective of the employee, are explicitly mentioned. Summarizing, the effects of contract permanency on both employee and organizational well-being are studied.

The effects of contract permanency on the different variables are generally well documented, even though not all results are unequivocal. There is evidence illustrating that temporary workers experience more job insecurity, show higher turnover intentions and lower organizational commitment, engage in fewer organizational citizenship behaviors and are more often involved in accidents. However, they are less frequent absent due to sickness and they generally report a higher level of psychological well-being. No relationships were found for occupational self-efficacy. As a remark: accidents are very difficult to question in a survey focused on employee perceptions. That is why it was decided not to include this variable in the questionnaire of the main study.

However, the preceding paragraph presents a very general picture, masking the complex reality. Several studies point to the importance of taking into account the heterogeneity of temporary workers. For almost all dependent variables, differences related to the specific contract type were documented (e.g. the difference between fixed term employees and agency workers). Moreover, several intervening variables were identified: contract of choice is already documented before. Job insecurity was another variable frequently mentioned as playing an intervening role: job insecurity intervenes in the relationship between contract permanency on the one hand and job satisfaction (De Witte & Näswall, 2003), somatic complaints (Isaksson & Bellagh, 2002; Virtanen, Vahtera, Kivimäki & Pentti, 2002; Virtanen et al., 2001) and organizational commitment (Guest & Conway, 2000b) on the other hand. Employee prospects, defined as the prospect of being offered a permanent contract, was important in explaining results with regard to job satisfaction (Goudswaard, Kraan & Dhondt, 2000), sick leave (Goudswaard, Kraan & Dhondt, 2000), somatic complaints (Galais & Moser, 2001), turnover intentions (Goudswaard, Kraan & Dhondt, 2000) and organizational commitment (e.g. Goudswaard, Kraan & Dhondt, 2000; Schalk, Freese, Bot & Heinen, 1998; Steijn, 2000).

Two dependent variables stand out in that there are few studies reporting on their relationship with contract permanency. Performance was studied in only one study in the Netherlands (Van Breukelen & Allegro, 2000). When relying on self-rated performance, no differences were found between permanent and temporary workers. However, when taking an employer-perspective, agency workers were considered as less competent and skilled, while at the same time temporary workers were estimated to contribute more to the performance of the department and were more fun to work with. This isolated finding suggests that it might be important to ask employers about performance differences between permanent and temporaries. As the PSYCONES project explicitly aims at integrating the employer perspective, this remark should be kept in mind.

Employability - the possibility to find another job - is only documented for the Netherlands, with some supporting evidence from Belgium. Temporary employees score higher when external mobility (the chance to find employment outside the current organization) is concerned, whereas permanents have an advantage when internal mobility is concerned. This dual finding possibly reflects the reality of HRM-policies: internal mobility is a privilege for permanent workers, not linked to external numerical flexibility.

#### **Summary 4.2. The dependent variables.**

The PSYCONES project investigates the effect of contract permanency on both individual and organizational well-being. All but two of the dependent variables are well-documented, even though our understanding of the effects may benefit from taking into account the heterogeneity related to the specific type of contract. Moreover, the research is mostly oriented towards one-to-one relationships: a more systematic investigation of possibly intervening variables is needed. Next to volition, also job insecurity and employee/contract expectations (prospect of being offered a permanent contract) were identified as important. This implies a new model with employee prospects as intervening variables.

There are few studies on the relationships between the employment contract and both performance and employability, even though they are important to include. Performance as a dependent variable is important in that there is only one study, pointing to a research gap. Moreover, this study showed differences between permanents and temporaries when employers but not when employees were questioned, implying that it might be interesting to include the variable when questioning employers. Employability is important to include if only because this concept is of crucial importance when investigating the new employment relationship (Roehling et al., 1998). Dutch studies on this topic suggested that differences between permanent and temporary employees partly stem from the organizational HR practices. As such, HR practices might be equally important to include in the main study.

#### **4.3. The control variables**

In order to guarantee the comparability, samples of permanent and temporary workers must be very alike. Otherwise, rigid strategies to control for individual characteristics must be developed. A range of control variables was introduced in the PSYCONES conceptual model in order to rule out alternative explanations for differences related to employment status.

The individual control variables can be split into two groups. The first group includes 'objective' measures, with age, gender and education as prototypical examples. Some of these variables are important, not only when studying the relationship between the employment contract and the dependent variables but also in their relationship with the PC. E.g., employees starting their career are less loyal than those in their mid or late career. The starters have also lower expectations with regard to the long-term involvement (Van Den Brande, 2002a). This seems especially relevant for the PSYCONES research, with a strong focus on comparing temporary versus permanent workers. Temporary workers are generally younger, being on the onset of their career. The list of individual 'objective' factors in the conceptual model certainly is not exhaustive, but was presented for the purpose of this report, more specifically, to structure the contents of chapter 3. In the PSYCONES research, other variables (e.g. family status, supervision, union membership) are added.

A second group of individual control variables includes job involvement and job characteristics, as they are not merely objective facts. Former research findings did not find a clear relationship between employment status and job involvement. Other variables, as for example contract of choice proved to be more important. However, longitudinal studies on this relationship are scarce if existent, thereby complicating the debate on causality. The exact place of this variable in the model should be part of thorough discussions among researchers. In contrast, the literature review suggests that permanent and temporary workers differ on their perceptions of job characteristics. This relationship is well documented for role ambiguity (e.g. Sverke, Hellgren & Gallagher, 2000), workload (e.g. Garcia-Montalvo et al, 2003) and autonomy (e.g. Goudswaard & Andries, 2002). Job characteristics thus are of crucial importance when studying contract-related relationships, but until now, it is not fully clear whether the generally worse working conditions of temporary employees stem from their employment status or from conditions which affect permanent workers in comparable sectors to the same extent (Garhammer, 2002, p.32). However, throughout the literature review, job characteristics were regularly found to play an intervening role, e.g. in the relationship between contract type on the one hand and job satisfaction, job involvement (Bernhard, 2001), psychological well-being (Wieland, Gruene, Schmitz & Roth, 2001) and psychosomatic complaints (Isaksson, Aronsson, Bellaagh & Göransson, 2001) on the other hand.

Next to the individual control variables, two organizational variables were discussed in the facts and figures part of this report: organizational size and sector. Other organizational variables will be included in the PSYCONES research, fitting the broader aim of the project. In the main study, incorporating experiences from the pilot, data collected from employers, sector-relevant differences and indicators of societal dimensions will be the input for a multilevel analysis. As we found huge differences, documented in chapter 1.1. and chapter 3, a challenging research question examines the differential way country-specific issues as e.g. legislation affect employee attitudes and behavior (see also: Isaksson et al., 2003).

#### **Summary 4.3. The control variables.**

In order to rule out alternative explanations for differences between permanent and temporary workers, a well-considered range of control variables is introduced. The list provided in the model is definitely not exhaustive, but the main individual control variables are included. Age was identified as the main criterium and represents a prototypical example of objective individual control variables. Job involvement and job characteristics are rather subjective, in that they reflect the attitudes or perceptions of the respondents. However, the exact place of both these variables should be discussed thoroughly, as there are arguments to consider job involvement as a dependent variable and to consider job characteristics as an intervening variable in the conceptual model. Organizational variables will be fully part of the project, not only acting as control variables but also used in multi-level analyses in order to detect country-specific issues altering the basic relationship.

#### **4.4. Intervening variable(s)**

In the conceptual model, the PC acts as the main intervening variable. When looking at the effects of type of employment on the content of the PC, there is some evidence that the PC of temporary workers is narrower and more transactional (Millward & Hopkins, 1998). Taking a violation-oriented approach, no clear results were found, probably due to the fact that the heterogeneity of temporary workers is not taken into account, even though its importance is clearly documented for the relationship between the employment contract and most of the dependent variables mentioned.

When studying the PC in its relationship with the dependent variables of the conceptual model, the state of the PC is most often operationalized, often limited to the ‘perceived delivery of the deal’: breach is negatively related with job security, employability, job satisfaction, job involvement, work-life balance, well-being and OCB whereas it is positively related to turnover intentions. For those variables, it can be expected that broadening violation to the state of the PC (including trust and fairness) will yield similar effects, as is illustrated in the research of Guest and Conway (1997) on job insecurity. Constructs closely resembling the state of the PC, as e.g. the effort-reward model and trust, point to the same general trend. However, this should be studied more thoroughly: the PSYCONES research offers possibilities to make an onset on this topic. Moreover, research should not only be oriented towards the state of the PC, also the content of the PC should be studied. Results based on the PSYCONES pilot data (Claes et al., 2002) suggest that this is an important research gap as the content of the PC, in terms of narrowness, number of employee and employer promises, adds significantly in explaining employee outcomes. Until now, organizational commitment is the only dependent variable for which all research directions related to the PC are represented, even though mostly in Dutch research. These studies result in strong evidence for the existence of a relationship. A final remark, derived from the literature review, has to do with the distinction between ‘breach’ and ‘violation’. Those concepts are often used in exchange in articles, even though most research focuses on breach. In the PSYCONES research, the concepts will be considered as different aspects of the PC: breach of the PC refers to the cognitive awareness of the PC being broken, whereas violation includes the emotional responses towards breach.

There is some evidence of the intervening role of the PC. The PSYCONES article on the Belgian pilot data (Claes et al., 2002) found evidence for the intervening role of the PC with regard to job satisfaction. Both the content and the perceived fulfillment intervened in the relationship between the employment contract and job satisfaction. For job insecurity, additional evidence was found by Guest et al. (2003), Claes et al. (2002) and by De Witte and Van Hecke (2002) and both focusing on the state of the PC. However, until now, the role of these variables in their interrelation is not fully clarified.

Van den Brande (2002a) investigated organizational factors in their relationship with the PC. They turned out to have a profound impact on the PC. Especially participative policy is important, not only resulting in higher loyalty, in a more open and flexible attitude and more personal investment of the employee, but also increasing the number of employee expectations. The impact of educational efforts, performance evaluation and career policy of the organization is sometimes masked by the participation policy of the organization. These issues resemble the HR policy of the organization and as such, it might be important to include this as well. However, as for now, the exact place of these HR practices is not fully clarified. Different authors agree that HRM practices are connected to the PC (Freese & Schalk, 1996; Guest & Conway, 2002a; Rousseau, 1995; Schalk & Freese, 1998; Tsui, Pearce, Porter & Tripoli, 1997), stressing the resemblance of both concepts. Framed this way, HR practices should be situated at the same level as the PC, i.e. HR practices are considered to intervene in the relationship between type of employment contract and the dependent variables. Organizational support was also identified as an organizational variable intervening the basic relationship (Van Yperen, Van Den Berg & Willering, 1999).

We will not include the process of psychological contracting in the conceptual model because of the generally limited time frame of contract duration of our most important focus group, temporary workers. This problem might be solved by focusing on the ‘anticipatory PC’ as defined by Meganck et al. (2003). However, as this preliminary PC only measures expectations and considering that the PC is broader, this solution does not fit our project aim.

**Summary 4.4. The intervening variable(s).**

With regard to the PC, we identified some research gaps. First of all, when examining the relationship between the employment contract and the PC, most research is oriented towards the breach of the PC, not taking into account the heterogeneity of temporary workers.

The PC in its relationship to the dependent variables is well-documented for organisational commitment only. Only the violation/breach of the PC is studied with regard to most other variables. More systematic research relating the state (including e.g. trust) and the content of the PC is needed. Moreover, we should aim at clearly distinguishing breach and violation.

The PC was identified as intervening in the relationship between the employment contract and job satisfaction. For job insecurity, the relation is far less clear. As empirical research on the PC is not that elaborated, we should also try to investigate its role with regard to the other outcome variables. Two additional variables, often said to be closely related to the PC are identified as intervening variables: HR practices and organizational support.

#### 4.5. A literature based conceptual model

Figure 21 displays a model, closely related to the conceptual model of the pilot study, but taking into account the evidence found when reviewing the literature: important research gaps were shown and should be considered in future analyses, without however changing the main aim of the PSYCONES project, i.e. the investigation of the role of the PC in its relationship between the employment contract and the outcomes. Rather, the changes should be investigated supplementary to this main aim. This model, in combination with the analyses on the pilot data (Isaksson et al., 2003) and taking into account measurement-based considerations, can act as the framework for the PSYCONES research.

Summarising: the main aim of PSYCONES is to investigate the relationship between contract permanency and employee well-being, health and organisational outcomes. The PC is expected to intervene in this relationship. However, the same role is attributed to four other groups of variables: employee prospects, choice and motives, job characteristics and organisational characteristics. Several control variables were identified to rule out alternative explanations. Finally, it is important to take into account differences stemming from organisational policies/practices and from sectors and societies.

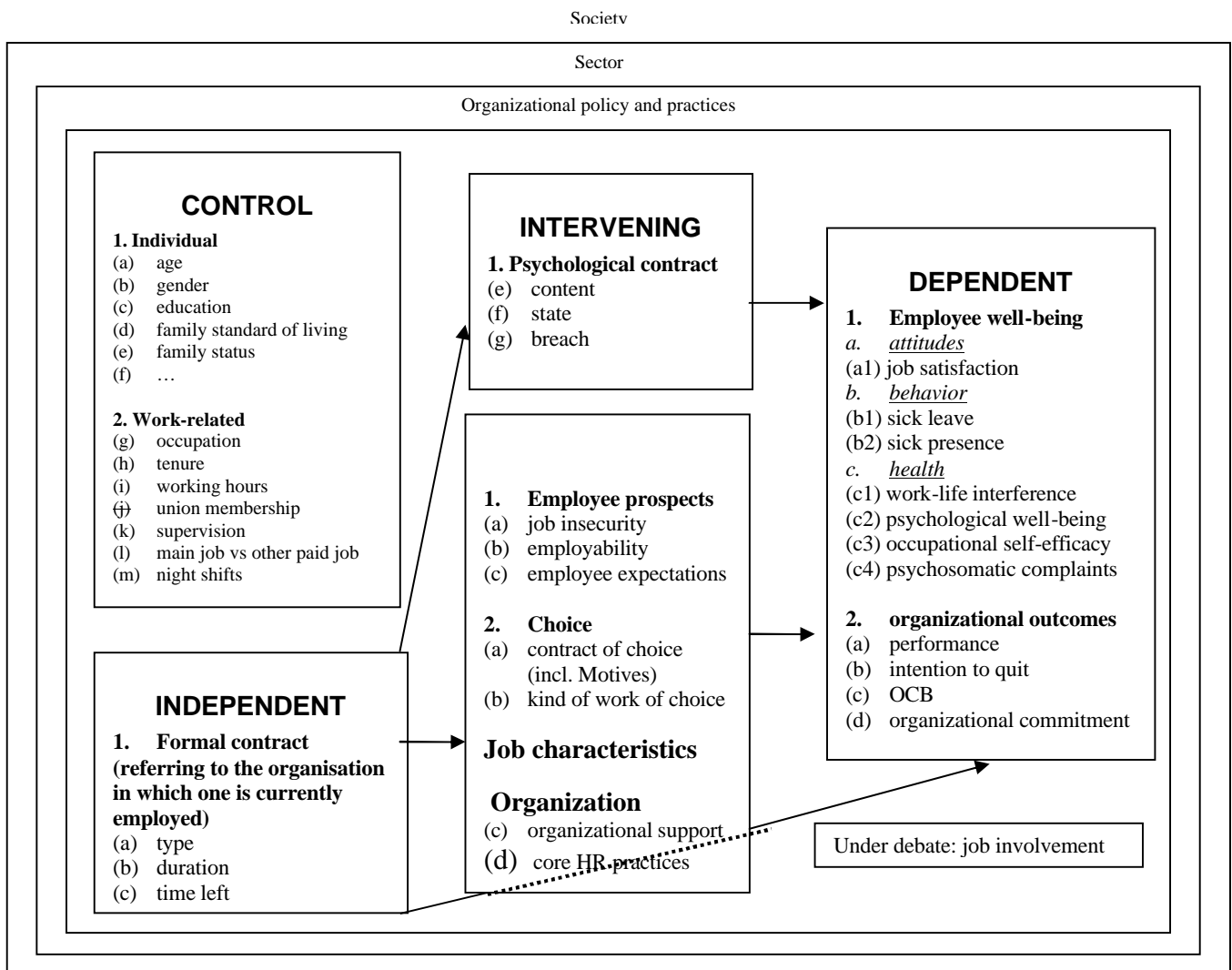


Figure 21. A literature-based conceptual model.



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## **Annex 1. Definitions of the psychological contract (Van den Brande, 2001).**

### **Argyris (1960, p.96)**

Since the foremen realize the employees in this system will tend to produce optimally under passive leadership, and since the employees agree, a relationship may be hypothesised to evolve between the employees and the foremen which might be called 'the psychological work contract'. The employee will maintain high production, low grievances, etc., if the foremen guarantee and respect the norms of the employee informal culture.

### **Levinson, Price, Mandl & Solley (1962)**

The psychological contract or unwritten contract is a product of mutual expectations, which are largely implicit and unspoken and which frequently antedate the relationship of person and company (Levinson et al., 1962, p.22)

The psychological contract is a series of mutual expectations of which the parties to the relationship may not themselves be dimly aware but which nonetheless govern the relationship to each other (Levinson et al., 1962, p.21).

The psychological contract is a set of beliefs about what each party is entitled to receive and obligated to give, in exchange for another party's contributions (Levinson et al., 1962).

### **Schein (1965; 1971; 1980)**

The notion of a psychological contract implies that the individual has a variety of expectations of the organization and that the organization has a variety of expectations of him (Schein, 1965, p.11).

A psychological contract is a matching of what the individual will give with what the organisation expects to receive, and what the organization will give relative to what the individual expects to receive (Schein, 1971).

A psychological contract defines what the employee will give in the way of effort and contribution in exchange for challenging or rewarding work, acceptable working conditions, organizational rewards in the form of pay and benefits and an organizational future in the form of a promise of promotion or other forms of career advancement.

The notion of a psychological contract implies that there is an unwritten set of expectations operating at all times between every member of an organisation and the various managers and others in that organisation.

### **Kotter (1973)**

The psychological contract is an implicit contract between an individual and his organization which specifies what each expects to give and receive from each other in their relationship.



**Dunahee and Wangler (1974)**

There is a contract of sorts that binds every employee and the employer together. Like the union contract, it becomes very specific and detailed over a period of time. However, unlike the union contract it is not written. Rather, it is a psychological agreement between two parties, and it is a much broader concept than the traditional use of the word 'contract' in industrial relations. This contract is concerned with the organization's expectations of the individual employee and the employee's attempt to meet those expectations. It also includes expectations of the employee and the employer's continuing willingness to satisfy his needs.

**Portwood & Miller (1976)**

The psychological contract is defined as an implicit agreement, negotiated between the employee and the employing firm, and it is recognition of mutual obligations to be fulfilled by both parties in the course of their association.

**Rousseau (1989; Rousseau, 1990; 1998), Rousseau & Tijoriwala (1998).**

The psychological contract is an individual's belief regarding the terms and conditions of a reciprocal exchange agreement between the focal person and another party (Rousseau, 1989).

The psychological contract is the employee's perception of the reciprocal obligations existing with their employer; as such, the employee has beliefs regarding the organization's obligations to them as well as their own obligations to the organization (Rousseau, 1989).

A psychological contract is comprised of an individual's perceptions about reciprocal promises between that individual and the organization, and of what each party is entitled to receive as a function of those promises (Rousseau, 1989).

Psychological contracts are an individual's beliefs regarding reciprocal obligations. Beliefs become contractual when the individual believes that he or she owes the employer certain contributions in return for certain inducements. We argue that when individual employees believe they are obligated to behave or perform in a certain way and also believe that the employer has certain obligations toward them, these individuals hold a psychological contract (Rousseau, 1990).

A psychological contract exists at the individual level, in the form of a person's beliefs regarding the terms of his or her exchange relationship with another. The individual beliefs comprising the contract involve sets of reciprocal obligations – not expectations alone – to which both the individual and the other party are believed to have committed themselves. Although obligations are a form of expectation, not all expectations held by a person need to be promissory or entail a belief in mutuality or reciprocity. By definition, a psychological contract must be based upon a belief that a reciprocal exchange exists which is mutually understood (Rousseau, 1998).

A psychological contract is an individual's belief in mutual obligations between that person and another party such as an employer (either a firm or another person). This belief is predicated on the perception that a promise has been made and a consideration offered in exchange for it, binding the parties to some set of reciprocal obligations (Rousseau & Tijouriwala, 1998).

**Manning (1992)**

The achieved state when there has been a matching of what the individual will give with what the organisation expects to receive, and what the organisation will give relative to what the individual expects to receive.

**Schalk (1995)**

Expectations of employees concerning what the organisation offers or will offer.

**Herriot & Pemberton (1995); Herriot, Manning & Kid (1996)**

The perceptions of both parties to the employment relationship, organization and individual, of the obligation implied in the relationship. Psychological contracting is the process whereby these perceptions are arrived (Herriot & Pemberton, 1995).

The psychological contract consists of the perceived obligations of the two parties to the employment relationship, the employee and the organization (Herriot, Manning & Kidd, 1996).

**McLean Parks, Kidder & Gallagher (1998)**

The idiosyncratic set of reciprocal expectations held by employees concerning their obligations (i.e. what they will do for the employer) and their entitlements (i.e. what they expect to receive in return).

## Annex 2. Summary of the different studies with respect to the employment contract<sup>26,27</sup>

### Annex 2. 1. The relationship between the employment contract and choice/motives

Country	Authors	Sample	Variable	Main findings
Belgium	WAV Steunpunt (2002)	NIS (2001)	% Involuntary among employees	6.4% Women (8.5%) > men (4.7%)
	De Witte et al. (2001)	Nft=380 Ntaw=271 Nperm=193	% Involuntary among temporary workforce	70%
			Motives	Absence of permanent work (81%) Exploration of possibilities (40%) Combination work-other (7%)
			Types of temporary workers linked to motives	Necessity (48.8%) Make a virtue of necessity (38.2%) Currently better (13%)
	Duts (1994)	Ntaw=159	Types of temporary workers	Searcher for permanent jobs (51.9%) Part year workers (20%) Professionals (14.1%) Rest (31.4%)
Hancke (2001)	UPEDI (TAW)	Motives	Find a permanent contract (51.9%) Extra earnings (15.4%) Variation (7.2%) Other (20.3%)	
Germany	Wieland et al. (2001) Wierlemann (1995)	N=363	Motives for doing TAW	Avoiding unemployment Interesting task Securing employment situation Changing work places Establishing fixed term employment
Israel	Ziloni (2000)		Reasons for working through agency	Failure to find another form of employment (42%); Studying (27%)
The Neth.	Muffels et al. (1999)		Contract of choice	
	Steijn (1999)	OSA	Additional studies Russo et al. (1997); Gustafsson et al. (2001); Ginkel et al. (2002); Miedema et al. (2000)	The majority of temporary workers would prefer a permanent contract
	Remery et al. (2002)			
	Goudswaard et al. (2000)	SZW	Satisfaction with contract	Temporary < permanent
	Klein Hesselink et al. (1998)	N=1022	Additional studies Sanders et al. (2002)	
Van der Toren et al. (2002)	Ntemp=234	Motives	Not able to find a permanent job (24%) Other reason (17%) Limited availability to labor market (15%) Freedom (15%) Combine work and life (13%) Earn additional income (12%) Gain experience (4%)	
Spain	García-Montalvo et al. (2000b)	N1=1964 N2=548	Preferences to work for a private company or to be an estate employee	Most of youth prefer to be an Estate employee.
Sweden	Pekkari (1999)	Questionnaire study with agency workers (second hand citation)	Motives	1/3 unable to find a permanent job Involuntary: age, education, previous labor force status Voluntary: age, education, students-household
			Additional studies Arvidsson (1997) Bellaagh & Isaksson (1999)	
UK	Tremlett and Collins (1999)	Ntemp=607	Contract of choice	25% prefers a temporary contract
			Main motives for those preferring a permanent contract	Not wanting the commitment that goes with permanent employment (21%) Loss of freedom to do the work they wanted to do (19%) Being too old (18%) Lack of interest in permanent employment (18%)

<sup>26</sup> For abbreviations, see annex 3.

<sup>27</sup> The study on the Belgian PSYCONES pilot data is not included in this review.

## Annex 2. 2. The relationship between the employment contract and the PC.

Country	Authors	Sample	Area	Main research findings
Belgium	Van den Brande (2002a)	N = 1106	Feature	No relationship found
	Vander Steene et al. (2001)	Nft = 380 Ntaw = 271 Nperm = 193	Violation	There might be a relationship, but it is not univocal.
The Neth.	De Bot (1996)	Ntotal=107 Ntemp=21	Content	Temporary and permanent employees do not differ with regard to type of contract
	Dorenbosch (2000)	Ntemp=52 Nperm=49	Content	Temporary employees perceive to have more obligations in comparison to permanent employees Temporary employees have a more relational contract as compared to permanent employees
	Dorenbosch (2000)	Ntemp=52 Nperm=49	Fulfillment	Temporary employees perceive higher fulfillment in comparison to permanent employees
Spain	García-Montalvo, Peiró & Soro(forthcoming)	Longitudinal N=2506	Fulfillment	Temporary < permanent
Sweden	Knocke, Drehajhammar, Gonäs & Isaksson (2003)	28 interviews with recruiting/personnel managers in four different sectors	Content	Employers have more expectations towards permanent employees in comparison to those working on short term contracts
			Employer's expectations towards employees	The duration of the contract influences the scope of expectations: there are similar expectations for permanent contracts and fixed term contracts of longer duration.
	Isaksson (2001)	Interviews with agency workers	Content	Agency workers have a narrower PC when compared to employees in the user firm.
	Isaksson, Bernhard & Gustafsson (2003)	N=634 (hospital)	Employee's expectations towards employers	Fixed term / hourly basis < permanent
			Employee's obligations	Fixed term = hourly basis= permanent
Trust	Fixed term/hourly basis > permanent			
UK	Millward & Hopkins (1998)		Content	Temporary workers are likely to perceive their contract as more transactional in comparison to permanent workers.
	Coyle Shapiro & Kessler (2002)	UK local government employees	Number of employee obligations and inducements	Temporary < permanent
	Guest, Mackenzie Davey & Patch (2003)		State	Fixed term/agency > permanent > temporary
	Guest & Conway (1998; 2001)	N=2000 Longitudinal	State	Fixed term > permanent > temporary

### Annex 2. 3. The relationship between the employment contract and job insecurity.

Country	Authors	Sample
Belgium	De Witte, Näswall, Chirumbolo, Goslinga, Hellgren & Sverke (2002b)	N=1120
Germany	Rödiger, Rigotti & Mohr (Rödiger, Rigotti & Mohr, 2003)	N <sub>taw</sub> =65 N <sub>retail</sub> =65 N <sub>healthcare</sub> =71 N=1022
The Netherlands	Klein Hesselink, Koppens et al. (1998)	N <sub>selfsupporting</sub> =72; N <sub>perm(part-time)</sub> =498; N <sub>perm(full-time)</sub> =352; N <sub>temp</sub> =42; N <sub>taw</sub> =58
	Goudswaard et al. (2000)	N=11351
	Van Breukelen & Allegro (2000)	
	De Witte, Näswall, Chirumbolo, Goslinga, Hellgren & Sverke (2002b)	N=799
Sweden	Näswall, De Witte, Chirumbolo, Goslinga, Hellgren & Sverke (2002)	Health care N=1356
	De Witte, Näswall, Chirumbolo, Goslinga, Hellgren & Sverke (2002b)	Health care N=711 N <sub>perm(full-time)</sub> =358; N <sub>perm(part-time)</sub> =230; N <sub>temp</sub> =123 N=2000
UK	Guest & Conway (2000b; 2001)	Longitudinal

Note 1:

All studies in the table above have the same main finding, that is, temporary workers experience higher levels of job insecurity as compared to permanent workers. Results modifying this view are described in the paper.

Note 2:

Most studies focus on relative differences, comparing permanent and temporary workers, which does not necessarily imply that the level of job insecurity among temporaries is beneath tolerable levels. A Belgian research (Peeters, Van Der Beken & Coucke, 2002), investigating the effect of TAW on job-related variables, responds to this remark: 61% of 1503 agency workers perceived the level of job security to be insufficient. Employers agree (60% of 650), pointing to the negative effects of job insecurity.

### Annex 2. 4. The relationship between the employment contract and employability.

Authors	Sample	Variables used	Findings
Forrier, Sels, Van Hootegeem, De Witte & Vander Steene (2001)	N <sub>perm</sub> = 179 N <sub>temp</sub> = 521	Perceived capacity to change jobs	Fixed term contracts > permanent
Dekker & Dorenbos (1997)	OSA	External mobility	Temporary > permanent
Muffels & Steijn (1998)			
Zant et al. (2000)			
Schippers et al. (2001) Remery, et al. (2002)			
De Feyter et al. (2001)	N=2501		
Slinkman (1999)	N <sub>taw</sub> =540		
Tijdens (2000)	N=308	Internal mobility	Temporary < permanent
Goudswaard et al. (2000)	SZW		

Note: All studies stem from the Netherlands, except for the first one, which is from Belgium.

## Annex 2. 5. The relationship between the employment contract and global job satisfaction.

Country	Authors	Sample	Main findings
Belgium	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	Fixed term > permanent > TAW
	De Witte & Näswall.(2003)	N=1120	Temporary = permanent
Germany	Rödiger, Rigotti & Mohr (2003)	Ntaw=65 Nretail=65 Nhealthcare=71	Temporary < permanent
	Werthebach, Sodenkamp & Schmidt (2000)	Ntaw=48 Nperm=85	TAW > permanent
Israel	Krausz, Brandwein & Fox (1995)	Ntaw=90 Nperm=134	Voluntary temporary > permanent > involuntary temporary
Neth.	Zant et al. (2000) Muffels et al. (1998)	OSA	Temporary < permanent
	Goudswaard et al. (2000)	Other studies Miedema & Klein Hesselink (2000) Kaiser (2002) Sanders et al (2002)	Temporary without outlook < (temporary with outlook = permanent)
	De Witte & Näswall.(2003)	N=1120	Temporary = permanent
Spain	Benavides, Benach, Diez-Roux & Roman (2000)	Second European Survey on Working Conditions	Temporary < permanent
Sweden	De Witte & Näswall.(2003)	N=1120	Temporary = permanent
UK	Guest et al. (2003)		Fixed term > permanent > (temporary/agency)

## Annex 2. 6. The relationship between the employment contract and aspectual job satisfaction.

Country	Authors	Sample	Variable	Main findings
Belgium	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	Extrinsic Intrinsic	Permanent = temporary Temporary < permanent
	Duts (1994)	Ntaw=159	Extrinsic	TAW > permanent
Israel	Krausz, Brandwein & Fox (1995)	Ntaw=90 Nperm=134		Voluntary temporary > permanent > involuntary temporary
	García-Montalvo & Peiró, (2000a)			Youth is satisfied least with contract stability
Spain	García- Montalvo et al. (forthcoming)		Extrinsic Intrinsic Social	Temporary < permanent Temporary = permanent

## Annex 2. 7. The relationship between the employment contract and job involvement.

Country	Authors	Sample	Main findings
Israel	Krausz, Brandwein & Fox (1995)	Ntaw=90 Nperm=134	Voluntary TAW = Involuntary TAW = permanent
Netherlands	Torka (2000) Torka & Van Riemsdijk (2001)	N=30	Typical = atypical
	García-Montalvo (2003)	Longitudinal study N=2506	Permanent contract workers with a university degree have the highest level of job involvement
Spain	García-Montalvo et al. (1997)	N=1920	Permanent = temporary
Sweden	Sverke, Hellgren & Gallagher (2000)	Health care N=711	Permanent part-time > contingent
	Isaksson, Aronsson, Belaagh & Göransson (2001)	Nagency workers=257 Noncall=778	Contract preference is more predictive for the level of job involvement than actual contract type Agency workers > on-call

## Annex 2. 8. The relationship between the employment contract and sick leave.

Country	Authors	Sample	Main findings
Belgium	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	TAW > permanent > fixed term Occupations: no difference for blue collar workers
The Netherlands	Klein Hesselink et al. (1998)	N=1022 Nselfsupporting=72 Nperm(full-time)=498 Nperm(part-time)=352 Ntemp=42 Ntaw=58	Temporary = < permanent Additional study: Jonge & Geurts (1997)
	Muffels & Steijn (1998)	OSA	
	Goudswaard et al. (2000)	SZW N=11,351	Temporary with outlook < temporary without outlook
Sweden	Virtanen, Kivimäki, Elovainio, Vahtera & Cooper (2001)	Hospitals N=5650	Permanent > contingent

## Annex 2. 9. The relationship between the employment contract and accidents.

Country	Authors	Sample	Variable	Main findings
The Netherlands	Warning & Straten (2001)	N=88	TAW causing accidents Additional study Klein Hesselink et al. (1998)	Main cause:8.5% Supplementary cause:11.3%
	Martens (2001)		Lethal ending	Declining trend of accidents among TAW, even though the overall number of accidents increase
Spain	Boix & Orts (1997)	Statistics of Work Accidents (Ministerio de Trabajo y Asuntos Sociales)	Incidents	Temporary > permanent (gender: male > female) (the differences becomes smaller with the level of severity) (tenure)
	Zimmerman, Maqueda, Almodovar & de la Orden (1996)	Spanish Survey of Work Conditions	Incidents	Temporary > permanent
	Agullo (2001)		Number of accidents	In 1996, the number of accidents among temporary workers is double that of permanent workers.
	Social and Economic Council (Consejo Económico Y Social, 1998)		Number of accidents	In 1998, temporary workers accounted for 60% of work-related accidents.
Sweden	Kvick (1998)	Descriptive study Fixed term employed painters	Self-reported accidents	9% reported accidents during the time they were employed on a contingent contract
	Aronsson (1999)	Swedish Labour Market Survey N=1.564	Risk behavior	On-call > other contingent workers

**Annex 2. 10. The relationship between the employment contract and psychological well-being.**

Country	Authors	Sample	Variable	Main results
Belgium	Martens et al. (1995)	N=480	Well-being	Temporary < permanent
	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	GHQ	Temporary = permanent
Israel	Krausz, Brandwein & Fox (1995)	Ntaw=90 Nperm=134	Stress	Voluntary TAW = Involuntary TAW = permanent
Germany	Pietrzyk & Bergmann (2003)	Ntaw=62 Nperm=36	GHQ	TAW < permanent
	Rödiger, Rigotti & Mohr (2003)	Ntaw=65 Nretail=65 Nhealthcare=71	GHQ	TAW = permanent
	Werthebach, Sodenkamp & Schmidt (2000)	Ntaw=48 Nperm=85	GHQ	TAW = permanent
	Wieland, Gruene, Schitz & Roth (2001)	N = 363	Mental strain Synba-Ga	Call centre agents, teleworkers > TAW > normal industrial workers and administrative staff
The Netherlands	Goudswaard et al. (2000)	SZW N=11.351	Psychological (emotional) exhaustion	Temporary = permanent Additional study: Houtman et al. (2000)
Spain	Solano, Hernandez, Vizcaya & Reig (2002)	Nurses N=83	MBI Burnout	Temporary < permanent
Sweden	Wikman, Andersson & Bastin (1999)	Representative sample from several years	Work related psychological distress	Temporary < permanent
UK	Guest & Conway (2002a)	N=2000 Longitudinal	Life satisfaction	Temporary < permanent

**Annex 2. 11. The relationship between the employment contract and occupational self-efficacy.**

Country	Authors	Sample	Variable	Main findings
Germany	Pietrzyk & Bergmann (2003)	Ntaw = 62 Nperm=36	Personal competence	TAW < permanent
	Werthebach, Sodenkamp & Schmidt (2000)	Ntaw=48 Nperm=85	Confidence in professional competence	TAW < permanent
Spain	García-Montalvo et al. (2003)	N=2506		Permanent employees having a university degree have the highest levels
	García-Montalvo et al. (1997)	N=1920		Temporary = permanent



### Annex 2. 12. The relationship between the employment contract and psychosomatic well-being.

Country	Authors	Sample	Variable	Main findings
Belgium	Martens et al. (1995)	N=480	Somatic complaints	Temporary > permanent
				Temporary = permanent
	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	Sleep quality	TAW > permanent > fixed term
Germany	Werthebach, Sodenkamp & Schmidt (2000)	Ntaw = 48 Nperm=85	Somatic complaints	TAW < permanent
	Rodriguez (2002)	N=10.104	Somatic complaints	Fixed term > permanent
Spain	Amable & Benach (2002)		Health problems	Temporary > permanent
Sweden	Isaksson, Bernhard & Gustafsson (2003)	Nperm Nft Nhourly	Self reported health	Temporary < permanent
	Sverke, Hellgren & Gallagher (2000)	N=711 Health care	Somatic complaints	Contingent < permanent
	Wikman, Andersson & Bastin (1999)	Representative sample from several years	Sleep disturbances	Temporary < permanent
	Virtanen, Vahtera, Kivimaki, Pentti & Ferrie (2002; 2001)	Nperm=5681 Nfixed term=2194 Nsubstitute=682	Chronicle diseases	Contingent <=permanent

### Annex 2. 13. The relationship between the employment contract and turnover intention.

Country	Authors	Sample	Main findings
Belgium	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	Temporary > permanent
Germany	Rödiger, Rigotti & Mohr (2003)	Ntaw=65 Nretail=65 Nhealthcare=71	TAW > permanent
The Netherlands	Goudswaard et al. (2000)	SZW N=11.351	Temp with outlook < permanent < temp without outlook
Sweden	Isaksson (2001)	Interviews with agency workers	TAW > permanent
UK	Guest & Conway (2002a)	N=2000 Longitudinal	Temporary > permanent

## Annex 2. 14. The relationship between the employment contract and organizational commitment.

Country	Authors	Sample	Variable	Main findings
Belgium			General	Temporary < permanent
	Vander Steene et al. (2001)	Nft=380 Ntaw=271 Nperm=193	Emotional bound with company	TAW < fixed term < permanent
			Internalisation of company problems	Fixed term > permanent > TAW
Germany	Rödiger, Rigotti & Mohr (2003)	Ntaw=65 Nretail=65 Nhealthcare=71		TAW < permanent
Israel	Krausz, Bizman & Braslavsky (2001)	Ntaw=90 Nperm=134		TAW < permanent
The Netherlands	Goudswaard et al. (2000)	SZW N=11.351	Additional studies Schalk, Freese, Bot et al. (1998) Miedema & Klein Hesselink (2000) Steijn (2000) Sanders et al. (2002) Koster et al. (2002)	Temporary with outlook > permanent > temporary without outlook
	Van Breukelen & Allegro (2000)		Departmental commitment	Temporary = permanent
	Torka (2000)		Departmental commitment	Temporary < permanent
	Torka & Van Riemsdijk (2001)			
	De Witte & Näswall (2003)	N=1120		
Sweden	Sverke et al. (2000)	N=1120		Temporary < permanent
UK	Coyle-Shapiro & Kessler (2000)			Temporary < permanent
	Guest, Mackenzie Davey & Patch (2003)		Background factors included	Temporary = permanent TAW < fixed term < permanent

## Annex 2. 15. The relationship between the employment contract and job characteristics.

<b>Role ambiguity</b>				
Germany	Pietrzyk & Bergmann (2003)	N <sub>taw</sub> =62 N <sub>perm</sub> =32	Transparency	TAW < permanent
	Werthebach, Sodenkamp & Schmidt (2000)	NTAW=48 N <sub>perm</sub> =85	Role clarity	TAW < permanent
Spain	García-Montalvo et al. (2003)		Role conflict	Temporary < permanent
			Role ambiguity	Temporary < permanent
Sweden	Sverke et al. (2000)	N=711	Role ambiguity	Contingent > permanent
<b>Work load</b>				
Belgium	Vander Steene et al. (2001)	N <sub>ft</sub> =380 N <sub>taw</sub> =271 N <sub>perm</sub> =193		Permanent > temporary
Germany	Pietrzyk & Bergmann (2003)	N <sub>taw</sub> =62 N <sub>perm</sub> =32	Intensity of the task	TAW < permanent
The Netherlands	Breukelen & Allegro (2000)			Temporary = permanent
	Goudswaard (2000)			Temporary > permanent
Spain	García-Montalvo et al. (2003)	N=2506		
<b>Autonomy</b>				
Belgium	Vander Steene et al. (2001)	N <sub>ft</sub> =380 N <sub>taw</sub> =271 N <sub>perm</sub> =193		Temporary < permanent
Germany	Pietrzyk & Bergmann (2003)	N <sub>taw</sub> =62 N <sub>perm</sub> =32	Degrees of freedom	TAW < permanent
	Rödiger, Rigotti & Mohr (2003)	N <sub>taw</sub> =65 N <sub>retail</sub> =65 N <sub>healthcare</sub> =71		TAW < permanent
The Netherlands	Goudswaard et al. (2000)			Temporary < permanent
Sweden	Muffels & Steijn (1998)			
	Aronsson et al. (2002) Wikman (2002)	Swedish Labour market Survey	Control Influence	Project temporary workers > permanent > substitutes > on-call
European	Goudswaard & Andries (2002)	European Survey on Living and Working Conditions	Job control Time control	Temporary < permanent
<b>Skill utilization</b>				
Belgium	Vander Steene et al. (2001)	N <sub>ft</sub> =380 N <sub>taw</sub> =271 N <sub>perm</sub> =193		Fixed term > permanent > TAW
Germany	Pietrzyk & Bergmann (2003)	N <sub>taw</sub> =62 N <sub>perm</sub> =32	Personal competency	TAW < permanent
	Werthebach, Sodenkamp & Schmidt (2000)	N <sub>taw</sub> =48 N <sub>perm</sub> =85	Professional competency	TAW < permanent
<b>Responsibility</b>				
Belgium	Vander Steene et al. (2001)	N <sub>ft</sub> =380 N <sub>taw</sub> =271 N <sub>perm</sub> =193		(permanent = fixed term) > TAW
<b>Variation</b>				
Belgium	Vander Steene et al. (2001)	N <sub>ft</sub> =380 N <sub>taw</sub> =271 N <sub>perm</sub> =193		Temporary = permanent
Germany	Pietrzyk & Bergmann (2003)	N <sub>taw</sub> =62 N <sub>perm</sub> =32	Variety of demands	TAW < permanent

**Annex 2. 16. The relationship between the employment contract and organizational/social support.**

Country	Authors	Sample	Variable	Main findings
Belgium	Vander Steene et al. (2001)	Nft=380	Appreciation of chef	Permanent = temporary
		Ntaw=271 Nperm=193	Appreciation of colleagues	Permanent = temporary
The Netherlands	Flap & Völker (2001)	N=276	Social activities at work	Permanent > temporary
Sweden			Social support	
	Wikman et al. (1999)	Representative sample from several years	Additional studies Aronsson et al. (2002) Saloniemi, Virtanen & Koivisto (2002)	Permanent = temporary
	Isaksson et al. (2001)	Interviews with TAW'ers; N=21	Social support	TAW > short-term employees
UK	Coyle Shapiro & Kessler (2002)		Organisational support	Temporary < permanent

### Annex 3. Abbreviations used.

Abbreviation	Meaning
Nft	Number of fixed contract workers in the study
Ntemp	Number of temporary workers in the study
Nperm	Number of permanent workers in the study
Ntaw	Number of temporary agency workers in the study
NIS	Nationaal Instituut Statistiek (België); National Institute for Statistics (Belgium)
OSA	The OSA-persons panel is a representative sample of the potential labour supply in the Netherlands. Every two years since 1986 on, approximately 4500 respondents are questioned about their position on the labour market.
PC	Psychological Contract
SZW	The SZW-employers panel questions both employers and employees about various work-related topics. The number of companies participating in 1998 was 1.256, 11.351 employees were questioned.
TAW	Temporary Agency Work

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This project aims to examine how the changing nature of employment relations in general and different forms of employment contract in particular affect the job security, well-being and health of workers in Europe. The broad aim of the project is to explore the relationship between forms of employment contract, the psychological contract and employee health and well-being.

