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ORIGINAL ARTICLE

# The effects of temporary agency work contract transitions on well-being

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**Abstract**
*Purpose* Theoretical and empirical research has provided mixed arguments and evidence for the effects of temporary agency work on workers' well-being. This study aims to go one critical step further by comparing the workplace and general well-being of workers who continue to have this employment status with others who obtain a direct contract and others who remain unemployed.
*Methods* Temporary agency workers longitudinal data ($n = 289$) was used, and three groups were compared: (1) maintaining a temporary agency contract ($n = 187$), (2) obtaining a direct contract ($n = 57$), and (3) remaining unemployed ($n = 45$).
*Results* Covariance analyses adjusted for background variables showed that those who obtained a direct contract experienced a decrease in job insecurity but experienced an increase in job demands, while those who continued to have a temporary agency contract maintained these job conditions. However, in terms of workplace well-being, the temporary agency contract was not found to be more detrimental than a direct contract, but in terms of life satisfaction, unemployment was found to be more detrimental than other transitions.
*Conclusions* A temporary agency contract does not have an inevitable negative effect on workers' well-being.

**Keywords** Temporary agency work · Longitudinal study · Work engagement · Burnout · Life satisfaction

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## Introduction

Temporary agency work is a category of temporary employment arrangements that is characterized by limited duration but has the specificity of a triangular employment relationship that includes the worker, the agency—the contracting company—and the client—the company where the worker develops his/her daily professional activity (Kalleberg 2000). In 2013, 40.2 million people around the world gained access to the labor market through temporary agency work, which means an increase of around 9.6 % from 2012. In Europe, the total number of individuals has increased from 7.9 to 8.7 million people, and in Portugal, the context of this study, the number of TAW doubled between 1996 and 2012—from .6 to 1.7 %. It is presently equal to the average penetration rate globally registered in Europe of 1.7 % (CIETT 2015).

The advantages for companies are recognized as temporary agency work allows the client company not only to save a variety of employment costs, but also to attain "numerical" flexibility through the ability to adjust the number of workers (Cappelli and Keller 2013). The effects for workers are more problematic. On the negative side, temporary agency workers have been considered more peripheral with less attractive job content and lower job security, which have negative effects on their well-being (Aronsson et al. 2002; Hudson 2007). On the positive side, temporary agency work has been viewed as a way of getting out of unemployment, which has unequivocal adverse effects on individuals' well-being (Wanberg 2012), or as benefit for workers who use their temporary job as a stepping stone into permanent employment (De Jong and Schalk 2010; Nätti 1993).

More specifically, in Portugal, sometimes client organizations use TAW to deal with the variety of requests for the provision of goods and services. It is during periods of higher consumer demand that the company is forced to increase its workforce with TAW. For example, this is a possible response to peaks caused by the introduction of a new product, or in response to a seasonal increase of clients' requests and needs. These TAW are involved in the core production/service process, and their performance is important in order to sustain both product quality and organizational reputation (Lautsch 2002). However, TAW are sometimes used as a cost reduction strategy to perform peripheral tasks with lower investment in HR practices when compared with directly contracted workers (Lautsch 2002). Moreover, the Euro economic crisis of recent years in Portugal, as in other Mediterranean countries (i.e., Greece, Italy, and Spain) has given rise to high levels of unemployment, and therefore, temporary agency work should be an opportunity for the unemployed to re-enter the labor market (CIETT 2015). However, this economic and financial crisis was also perceived as a threat by TAW, since during that period most organizational recruitment activities were suspended and the desired prospect of TAW of obtaining a direct or permanent contract became far less likely (Lopes and Chambel 2014).

Therefore, more research is still needed for a more precise understanding of the consequences of temporary agency work for well-being. Clearly there is a need for longitudinal study designs and follow-up data that take well-being and changes in employment status into account over time which analyze job content, employment conditions and job security (Kompier et al. 2009).

It is the aim of the present study to investigate temporary agency workers' transition patterns in relation to job conditions and well-being to advance an understanding of the effects of this contract. More specifically, we investigate how transitions: (1) from temporary agency to direct contract versus temporary employment relate to job conditions and workplace well-being; (2) from temporary agency to unemployment versus temporary employment or a direct contract relate to general well-being. For such purposes, we measured job conditions through job demands, job control, perceived organizational support and job insecurity. We selected work characteristics included in the job demands–control (JDC) model (Karasek 1989), which is widely acclaimed as an important tool in the explanation of workers' well-being (Kain and Jex 2010; van der Doef and Maes 1999). We also evaluated workers' perceptions of organizational support (POS, Eisenberger et al. 1986) as this general perception regarding the extent to which the organization values their contributions and cares about their well-being fulfills workers' socio-emotional needs (approval, esteem, affiliation, and emotional support), resulting in an increase in their psychological well-being (Kurtessis et al. 2015). Finally, we also evaluated job insecurity since it has been considered one of the most important stressors in contemporary working life that affect workers' well-being (Dekker and Schaufeli 1995), particularly temporary agency workers' well-being (Virtanen et al. 2005, 2011). As for workplace well-being, we measured burnout and work engagement as both are independent, moderately and negatively connected, and burnout is a negative dimension of well-being at work, whereas work engagement is positive (Schaufeli and Bakker 2004). Regarding general well-being, we measured satisfaction with life and perception of health. As suggested by Ryan and Deci (2001), well-being is a complex construct related to optimal experience and functioning. Moreover, they affirm that opportunities for positive affect and life satisfaction can be detracted by functional limitations that may be caused by illness. Other authors have also found empirical results that support the association between health status and well-being (Ryff and Singer 2000). Based on this assumption, we decided to measure general well-being through satisfaction with life and health perception.

This study goes beyond previous research with temporary agency work in three ways. Firstly, it uses an exclusive sample with temporary agency workers, contrary to the majority of previous studies that have samples without homogeneous temporary workers—for example, it includes fixed-term, on-call, probationary and seasonal workers. These different temporary arrangements have different work and job conditions that influence workers' attitudes, behaviors and well-being which have contributed to the inconsistencies across studies (Connelly and Gallagher 2004; Kompier et al. 2009; Virtanen et al. 2005). Secondly, this study has a two-wave design with a time lag of 9 months, contrary to this research area where there is a predominance of cross-sectional studies. Only longitudinal studies should enhance our causal understanding of the consequences of temporary agency work for job conditions and well-being (De Lange et al. 2003; Taris and Kompier 2003). Thirdly, this study compares workers whose temporary agency contract is maintained or changes over time, either for a direct contract or for an unemployment situation, and previous studies that have analyzed these transitions are scarce, particularly in the case of temporary-to-temporary (De Cuyper et al. 2009b). Only with these three transitions are we able to compare contract employment changes, whether for better, the same or worse.

### Transition to a direct contract or remaining as a temporary agency worker

The assumption of a core-periphery model of employment contracts (Aronsson et al. 2002; Hudson 2007) stemming

from organizational segmentation theories, means we can differentiate between the primary segment (core) workers and secondary segment (peripheral) workers. Core workers are well-sheltered organizational insiders since they possess rare skills, valuable knowledge and useful experience and are hard to replace and consequently, they receive more secure (permanent) and higher-quality employment (better job conditions and work content). Peripheral workers surround the primary segment workforce and are the opposite as they have skills that are available elsewhere in the market, can be easily replaced and therefore, often receive temporary employment contracts with poor job conditions and work content. These conditions are thought to be potential psychosocial and material pathways through which temporary employment can damage well-being (Benach et al. 2000; Virtanen et al. 2003).

In support of this assumption, Kompier et al. (2009) verified in a sample representing the Dutch working population that temporary agency workers had lower autonomy, a higher dynamic workload, performed more repetitive work and reported lower work engagement, more depressive symptoms and lower satisfaction with work than permanent workers. Furthermore, the upward moving group (i.e., out of temporary agency work into a more stable contract) reported more supervisory tasks, more colleague support and an increase in work engagement. This upward moving group included workers that had left temporary agency work and had managed to obtain a direct, permanent or fixed-term contract. In fact, despite the fact that a fixed-term contract is still temporary, the TAW perform work under the immediate control of the organization and their employment relationship is very similar to that of permanent workers (Connelly and Gallagher 2004). Moreover, their employment is more stable because they generally remain in the organization longer than TAW and may succeed in extending their work through a new temporary direct contract or a permanent contract with the organization (Chambel and Castanheira 2006).

Thus, it may be expected that when temporary agency workers move upwards (toward a direct, permanent or fixed-term contract) they perceive an improvement in their job security, the quality of organizational support and in the work content, thus improving their workplace well-being.

In the case of temporary agency workers who remain on a temporary contract, although their job conditions do not change, they may experience a decrease in well-being over time (De Cuyper et al. 2009b). In fact, temporary agency work may not be related to unfavorable well-being outcomes in the short term. The majority of temporary agency workers accept this employment arrangement because they cannot find a permanent position, as desired; however, a large percentage of them also believe that a temporary contract will facilitate obtaining permanent employment (Lopes and Chambel 2014). With this stepping stone motive, they tend to show high workplace well-being (Chambel et al. 2014) or low strain (Chambel et al. 2015), regardless of their job conditions. By doing so, temporary agency workers seem to be balancing future benefits from the client company with their inducements while concurrently maximizing the fulfillment of future benefits from this organization, namely the offer of direct employment, which is what they desire (Chambel and Castanheira 2007; Coyle-Shapiro and Kessler 2002). However, when they remain in a temporary agency contract, their investments—high workplace well-being and low strain—have no return. According to the norm of reciprocity (Gouldner 1960), they expect a return on these investments, and when this does not occur, they reduce their own investments to restore the balance. Thus, maintaining temporary agency employment may be a disadvantage for workers who perceive not getting what they deserve, which, in turn, may lead them to develop feelings of frustration, and consequently, poor workplace well-being. However, when the maintenance of this contract is not long, they can still maintain their levels of workplace well-being.

This leads to the following hypotheses:

**Hypothesis 1** Temporary agency-to-direct contract workers report better job conditions (lower demands, higher control and higher perceived organizational support and lower job insecurity) at time 2 compared with time 1, while this is not the case among temporary agency-to-temporary agency workers who maintain their job conditions.

**Hypothesis 2** Temporary agency-to-direct contract workers report better workplace well-being (lower burnout and higher engagement) at time 2 compared with time 1, while temporary agency-to-temporary agency workers report an identical or poorer workplace well-being (higher burnout and lower engagement) at time 2 compared with time 1.

### Transition to unemployment or a direct contract or remaining as a temporary agency worker

Unemployment deprives individuals of different important benefits—income, time structure, social contact and the sharing of common goals, activity and status—that have negative consequences on their well-being (Jahoda 1987). Furthermore, the unemployed experience stress in such a way that it may translate directly into poor well-being or behaviors (i.e., smoking and drinking) that negatively impact their well-being (Wanberg 2012). In support of these assumptions, the meta-analysis of Paul and Moser (2009), which includes cross-sectional studies comparing

the psychological health of unemployed individuals with the psychological health of an employed comparison group, showed that unemployed individuals had significantly lower levels of psychological health—mixed symptoms of distress, depression, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem—than employed individuals. Moreover, these authors also summarized the results of longitudinal studies: studies that followed individuals from employment into unemployment and studies that followed individuals from unemployment into employment. Their findings suggested that across the studies, there was a significant increase in distress as individuals moved into unemployment and a significant decrease in distress as individuals moved into employment. In the same vein, Strully (2009) showed that unemployment is linked to declines in physical health: individuals who had lost their jobs due to an establishment closure reported poor health and a new health condition such as hypertension, arthritis, or diabetes. Korpi (2001), who used data from the 1981 and 1991 Swedish Level of Living Survey, reported similar results: unemployed individuals (especially with multiple or long spells of unemployment) had a worse health status. Thus, temporary agency workers on a downward contract change (toward unemployment) may be expected to have a decrease in general well-being (i.e., satisfaction with life and perception of health).

On the other hand, work is an essential dimension of individuals' lives, and it is known that workplace well-being has a spillover effect on well-being in contexts other than work (Bakker and Demerouti 2013; Sonnentag 2015). This fact can be understood through the job demands–resources model which postulates that job demands and job resources evoke two psychological processes: "health impairment" and "motivational process" (Schaufeli and Bakker 2004). "Health impairment" is caused by chronic job demands (e.g., perceived lack of organizational support and time pressure and workload) that can produce high levels of burnout and health deterioration. Consequently, burnout can lead to ill-health (Ahola and Hakanen 2007) and to poor satisfaction with life (Demerouti et al. 2001). The ''motivational process'' begins with the presence of suitable job resources (e.g., perceived organizational support and job control) that increase employees' motivation, namely work engagement which, in turn, contributes to enhancing general well-being (Matthews et al. 2014). In other words, when employees develop work engagement, they are more globally satisfied with their lives (Diener et al. 1985) and develop positive health perceptions (Ware et al. 1978). Therefore, when individuals who maintain temporary agency employment report poor workplace well-being, they may also be expected to develop poor general well-being. However, when they maintain their workplace well-being they should also expect their general well-being to be maintained. Contrariwise, those that remain in a direct contract situation and developed an increase in workplace well-being may also be expected to develop an increase in general well-being.

Thus, we hypothesize the following:

**Hypothesis 3** Temporary agency-to-direct contract workers report better general well-being (higher satisfaction with life and higher health perception) at time 2 compared with time 1, while temporary agency-to-temporary agency workers maintain their general well-being or, in similarity with temporary agency-to-unemployed workers, report poorer general well-being (lower satisfaction with life and lower health perception) at time 2 compared with time 1.

**Hypothesis 4** The general well-being (satisfaction with life and health perception) decrease at time 2 compared with time 1 is more acute for temporary agency-to unemployed workers than for temporary agency-to-temporary agency workers.

## Methods

### Procedure

In 2013, 1280 temporary agency workers from seven agency companies working in different economic sectors across a number of cities in Portugal were contacted to fill out a questionnaire on work and well-being. 693 (54.14 %) completed these questionnaires on-line during working hours or at home. Confidentiality and anonymity were guaranteed and there was no incentive (cash or otherwise) for participating in this project. Nine months later, they were sent an e-mail, which called for participation in the second wave. At both times the questionnaire remained open for a period of 2 months and workers received two reminders during these periods. This yielded a response of 41.70 % ($n = 289$), which is comparable to the response in other studies that include temporary workers (De Cuyper et al. 2009b; Mauno et al. 2005).

### Sample

A description of the sample in total and across groups is reported in Table 1. The mean age of the sample was 31 years (SD = 7.48; range 18–56 years), and the participants were mainly women (60.60 %), with secondary education (22.10 %), university attendance (26.30 %) or a degree (20.80 %). Regarding the work-related variables, most of the participants had a job tenure of under 3 months (18.70 %) or over 18 months (37.00 %). The majority of participants (78.50 %) reported having a full-time position

**Table 1** Demographics of the sample

| Sample | Total ($N = 289$) | Temporary agency-to-direct contract ($N = 57$) | Temporary agency-to-temporary agency contract ($N = 187$) | Temporary agency-to-unemployed ($N = 45$) | $F$ values/$\chi^2$ |
|---|---|---|---|---|---|
| Age (mean) | 31.05 (SD = 7.48) | 29.96 (SD = 5.95) | 30.69 (SD = 6.93) | 33.84 (SD = 10.34) | $F(2, 284) = 4.04$* |
| Gender (% female) | 60.60 % | 61.40 % | 60.40 % | 60.00 % | $\chi^2(df = 2, N = 289) = .02$, n.s. |
| Education (%) | | | | | $\chi^2(df = 10, N = 289) = 11.40$, n.s. |
| Secondary | 22.10 % | 24.60 % | 21.90 % | 20.00 % | |
| University attended | 26.30 % | 28.10 % | 25.70 % | 26.70 % | |
| Graduation | 20.80 % | 17.50 % | 21.90 % | 20.00 % | |
| Job tenure (%) | | | | | $\chi^2(df = 10, N = 289) = 20.59$* |
| Less than 3 months | 18.70 % | 19.30 % | 17.60 % | 22.20 % | |
| More than 18 months | 37.00 % | 29.80 % | 42.20 % | 24.40 % | |
| Full-time (%) | 78.50 % | 78.90 % | 77.50 % | 82.20 % | $\chi^2(df = 4, N = 289) = 1.81$, n.s. |
| Sector (%) | | | | | $\chi^2(df = 2, N = 288) = 13.30$** |
| Industry | 21.90 % | 38.60 % | 16.00 % | 25.00 % | |
| Services | 78.10 % | 61.40 % | 84.00 % | 75.00 % | |
| Student (% yes) | 15.20 % | 10.50 % | 18.70 % | 6.70 % | $\chi^2(df = 2, N = 289) = 5.30$, n.s. |
| Employment situation before present job (%) | | | | | $\chi^2(df = 8, N = 245) = 3.78$, n.s. |
| Unemployed | 48.60 % | 53.70 % | 48.50 % | 42.40 % | |

* $p > 0.05$; ** $p < 0.01$

and worked mainly in the services sector (78.10 %). Only a small number of participants were students (15.20 %), and in terms of their previous employment status, prior to being in the present contract, the largest percentage had been unemployed (48.60 %). Despite the lack of official Portuguese data, the sample characteristics are identical to those found in TAW, particularly in several European countries: They are young and there tends to be a higher rate of females working in the services sector; a high percentage of these TAW have experienced previous unemployment, have secondary or higher education and have been in agency work for more than 3 months (CIETT 2015).

As verified in Table 1, there were no significant differences between workers in the three types of transition patterns (i.e., temporary agency-to-direct contract, temporary agency-to-temporary agency contract, and temporary agency-to-unemployed) in terms of gender, education, and some of the work-related variables, such as: having a full-time position, being a student, and the previous employment situation before the present job. However, there were differences in terms of age, job tenure, and sector. These differences seem to suggest that temporary agency workers were more likely to receive a direct contract when they were younger [$F(2, 284) = 4.04$, $p < .05$] had lower job tenure [$\chi^2(df = 10, n = 289) = 20.59$, $p < .05$] and worked in the industry sector [$\chi^2(df = 2, n = 288) = 13.30$, $p < .01$.

## Measures

### *Work characteristics*

We measured job characteristics using the Job Content Questionnaire (Karasek et al. 1998). Items were as follows: workload and time pressure (7 items)—"I have too much to do"; control (4 items)—"I have the opportunity to decide how to organize my work." Items were scored on a five-point rating scale from (1) "totally disagree" to (5) "totally agree" where high scores indicate high levels of demands and control. This scale was used in a previous Portuguese study, which reported a Cronbach's alpha of .84 for time pressure and .79 for control (Castanheira and Chambel 2010). In the present study, at time 1, Cronbach's alpha was .83 for workload and time pressure and .86 for control, for the whole sample of 289 participants. At time 2,

Cronbach's alpha was .87 and .88 for workload and time pressure and .83 and .89 for control, for workers who had obtained a direct contract and workers who had maintained a temporary agency contract, respectively.

*Perceived organizational support*

The shortened version of the Eisenberger et al. (1986) scale comprising eight items was used to measure the POS of the organization. This scale was used in a previous study in Portugal with TAW and reported a Cronbach's alpha of .86 (Chambel and Sobral 2011). An example of an item is: "Help is available from the organization when I have a problem." Items were scored on a seven-point rating scale from (1) "totally disagree" to (7) "totally agree" where high scores indicate high levels of POS. In the present study, at time 1, Cronbach's alpha was .86 for the whole sample of 289 participants. At time 2, Cronbach's alpha was .88 for both workers who had obtained a direct contract and for those who had maintained a temporary agency contract.

*Job insecurity*

Job insecurity was measured using De Witte's scale (2000) that was used in a previous Portuguese study with TAW, which reported a Cronbach's alpha of .85 (Giunchi et al. 2016). The scale included 5 items (e.g., "I think I might lose my job in the near future") scored on a five-point Likert scale ranging from (1) "totally disagree" to (5) "totally agree." High scores on this scale indicate high levels of job insecurity. In the present study, at time 1, Cronbach's alpha was .88 for the whole sample of 289 participants. At time 2, Cronbach's alpha was .89 for both workers who had obtained a direct contract and for workers who had maintained a temporary agency contract.

*Workplace well-being*

We measured well-being at work with the assessment of engagement and burnout.

Work engagement was measured with a Portuguese version of a nine-item scale (Schaufeli et al. 2006). Example items include "When I wake up in the morning, I feel good about going work" and "My work inspires me." The respondents answered the items on a seven-point scale that ranged from "never" (1) to "every day" (7). Higher scores indicating high engagement levels. Regarding this nine-item scale, previous studies (e.g., Sonnentag et al. 2010; Carvalho and Chambel 2016) found the one-dimensional solution more suitable for the analysis of this positive dimension of well-being at work. However, other studies (e.g., Schaufeli et al. 2006; Lopes and Chambel 2014) analyzed this construct as being composed by three dimensions, namely vigor, dedication and absorption. Thus, we performed an exploratory factor analysis in order to identify how many factors emerged through our empirical data. In this study, our exploratory factor analysis showed a one-factor solution that explained 71.69 % of the variance at time 1, for the whole sample of 289 participants. For time 2, our exploratory factor analysis also showed a one-factor solution that explained 62.51 and 68.07 % of the variance for workers who had obtained a direct contract and for those who had maintained a temporary agency contract, respectively. At time 1, all items had factor loadings ranging from .45 to .87, for the whole sample of 289 participants. At time 2, all items had factor loadings ranging from .42 to .80 and from .53 to .80 for workers who had obtained a direct contract and workers who had maintained a temporary agency contract, respectively. At time 1, Cronbach's alpha was .95 for the whole sample of 289 participants. At time 2, Cronbach's alpha was .92 and .94 for workers who had obtained a direct contract and for workers who had maintained a temporary agency contract, respectively.

Burnout was assessed using a Portuguese translation of the Maslach Burnout Inventory–General Survey (1996). Following a previous study performed with a Portuguese sample of TAW (Lopes and Chambel 2014), we assessed the two core dimensions of burnout, namely exhaustion and cynicism. In this previous study, Cronbach's alpha was adequate: exhaustion = .91; cynicism = .84. Exhaustion included a five-item scale (e.g., "I feel emotionally drained from my work") and cynicism was assessed with a five-item scale (e.g., "I doubt the significance of my work"). In the present study, at time 1, Cronbach's alpha was .92 for exhaustion and .80 for cynicism, for the whole sample of 289 participants. At time 2, Cronbach's alpha was .85 and .90 for exhaustion, and .86 and .87 for cynicism, for workers who had obtained a direct contract and for workers who had maintained a temporary agency contract, respectively. Respondents also answered on a seven-point scale ranging from (1) "never" to (7) "every day," with high scores indicating high levels of exhaustion and cynicism.

*General well-being*

We measured individuals' general well-being with the assessment of Satisfaction with Life and Health Perceptions.

Satisfaction with Life was assessed with the five-item scale of Diener et al. (1985), which had already been used in Portugal with TAW (Chambel and Farina 2015). The Cronbach's alpha obtained in this previous study was .88. An item sample is "I am satisfied with my life" that were scored on a seven-point rating scale from (1) "totally disagree" to (7) "totally agree." In the present study, at time 1, Cronbach's alpha was .90 for the whole sample of 289

participants and at time 2 Cronbach's alpha was .88, .90 and .88 for workers who had obtained a direct contract, workers who had maintained a temporary agency contract and workers who were still unemployed, respectively.

The Health Perceptions Questionnaire developed by Ware et al. (1978) was used to assess Health Perceptions, which had already been used in Portugal with TAW (Chambel and Farina 2015). The Cronbach's alpha obtained in this previous study was .89. The scale was composed of four-items (e.g., "I am as healthy as others") that were scored on a five-point rating scale from (1) "absolutely false" to (5) "absolutely true." In the present study, at time 1, Cronbach's alpha was .93 for the whole sample of 289 participants, and at time 2 Cronbach's alpha was .93, .90 and .91 for workers who had obtained a direct contract, workers who had maintained a temporary agency contract and workers who were still unemployed, respectively.

It is important to note that all the scales that were previously used in Portugal were translated into Portuguese, and then a translator was asked to translate the Portuguese version back into English (Brislin 1980).

*Control variables*

The following control variables were taken from time 1 measurements: with regard to demographics, age (years); with regard to work-related variables, sector—we created a dummy variable (industry = 0 and service = 1)—and tenure at the client organization (months), and were controlled. We decided to control for these variables since we found significant differences among the three types of transition patterns analyzed (i.e., temporary agency-to-direct contract, temporary agency-to-temporary agency contract, and temporary agency-to-unemployed).

### Statistical analyses

As a preliminary step of the statistical analyses, we conducted dropout analyses to examine the differences between participants who dropped out at time 2 ($n = 404$) versus those who continued participation at time 2 and constitute the present studied sample ($n = 289$).

Before the hypotheses test we also conducted analyses of variance using the type of employment at time 2 (temporary agency, direct-contract, unemployed) as the independent variable and job conditions, workplace well-being and general well-being at time 1 as dependent variables. By using pair-wise comparisons (Tukey's least significant difference tests), we investigated which contract groups differed from each other ($p < .05$). Analyses were conducted controlling for the workers' age, job tenure and sector. These analyses were necessary to test the healthy worker effect and selection biases (De Cuyper et al. 2009b; Wagenaar et al. 2014): workers may have an increased risk of remaining temporarily employed or remaining unemployed owing to poor job conditions and well-being at time 1; employers may tend to select workers who report favorable well-being to be hired on a direct basis.

We conducted a confirmatory factor analysis (CFA), with the use of the AMOS 22.0 program, to examine our measurement model (with eight latent variables, i.e.: job demands, job control, perceived organizational support, job insecurity, work engagement, burnout, satisfaction with life, and health perceptions) and compare it with another alternative model (i.e., one latent factor model—where all items of the studied variables loaded on a single latent variable), in order to assess whether common method variance constitutes a problem (Podsakoff et al. 2003). The models were compared based on Chi-square difference tests and on other fit indices: the standardized root-mean-square (SRMR), the Bentler's comparative fit index (CFI), the Tucker–Lewis index (TLI), and the root-mean square error of approximation (RMSEA). Levels of .90 or higher for CFI and TLI and levels of .06 or lower for RMSEA, combined with levels of .08 or lower for SRMR, indicated that the models fit the data reasonably well (Arbuckle 2003).

Hypotheses were tested using repeated measures ANCOVA with time as the within-group variable (i.e., the repeated measure variable) and transition pattern (temporary-to-temporary, temporary-to-direct, temporary-to-unemployed) as the between-group variable (i.e., the independent variable). Repeated measure designs, like the one used in the present study, reduce the error that might be due to individual variability within a population; a problem more commonly found in cross-sectional designs. This type of repeated measures design is utilized more frequently in longitudinal studies, in line with our purpose. Before performing these analyses, we confirmed in all groups that there were no significant outliers, that the distribution of the dependent variable was approximately normally distributed, and that the variances of the differences between groups were equal. To assess change within each group and between-groups, we inspected pairwise comparisons with Bonferroni correction, as suggested by Parker et al. (2002).

Assuming that the effect of time is different for the three types of transition patterns (i.e., temporary agency-to-direct contract, temporary agency-to-temporary agency contract, and temporary agency-to-unemployment), we concentrated on Group × Time interaction effects to observe whether or not our hypotheses were supported by the data.

## Results

### Dropout

Some differences were found in the dropout analyses. More precisely, fewer women dropped out compared with

the group that continued participation at time 2 [51.70 and 60.60 %, respectively; $\chi^2(df = 1, n = 674) = 5.25$, $p < .05$]. Furthermore, the first group compared to the second, had lower levels of schooling [participants with a degree = 14.80 and 20.80 %, respectively; $\chi^2(df = 5, n = 673) = 12.51$, $p < .05$], lower job tenure [participants with over 18 months of job tenure = 24.90 and 37.00 %, respectively; $\chi^2(df = 5, n = 675) = 18.20$, $p < .01$], and a higher percentage of participants working in industries [33.90 and 21.90 %, respectively; $\chi^2(df = 1, n = 672) = 11.54$, $p < .01$]. However, we did not find significant differences concerning the studied variables, namely: job demands [$F(1, 691) = .17$, n.s.], job control [$F(1, 691) = 1.44$, n.s.], perceived organizational support [$F(1, 691) = 2.49$, n.s.], job insecurity [$F(1, 691) = 4.04$, n.s.], work engagement [$F(1, 691) = .02$, n.s.], exhaustion [$F(1, 691) = 2.05$, n.s.], cynicism [$F(1, 691) = 3.46$, n.s.], satisfaction with life [$F(1, 691) = .38$, n.s.], and health perceptions [$F(1, 691) = .94$, n.s.]. As we were unable to find significant differences between those who had dropped out in comparison with those who continued participation in most variables, and as we were also unable to find any serious threat attributable to systematic drop-out in other variables, we considered the response rate acceptable.

### Selective characteristics

As regards the job conditions, workplace well-being, and general well-being, the three groups did not have significant differences, namely for: job demands [$F(2, 286) = 2.75$, n.s.], job control [$F(2, 286) = .17$, n.s.], perceived organizational support [$F(2, 286) = 2.55$, n.s.], job insecurity [$F(2, 286) = 2.62$, n.s.], work engagement [$F(2, 286) = .26$, n.s.], exhaustion [$F(2, 286) = .80$, n.s.], cynicism [$F(2, 286) = .17$, n.s.], satisfaction with life [$F(2, 286) = 1.00$, n.s.], and health perceptions [$F(2, 286) = .54$, n.s.].

### Measurement model

The model with eight latent factors (i.e., job demands, job control, perceived organizational support, job insecurity, work engagement, burnout, satisfaction with life, and health perceptions), corresponding to our theoretical model, showed a good fit [$\chi^2$ (826) = 1708.48, $p < .01$, SRMR = .06, CFI = .91, TLI = .90, RMSEA = .06]. Compared with the single-factor model tested, we verified a significantly lower fit to the data [$\chi^2$ (854) = 5462.30, $p < .01$; SRMR = .13, CFI = .51, TLI = .48, RMSEA = .14]. Furthermore, the difference between our theoretical model and the alternative tested model was significant [$\Delta\chi^2$ (28) = 3753.82, $p < .01$]. Thus, our theoretical model was the one that represented the best fit.

### Hypotheses test

As regards job conditions (i.e., job demands, job control, perceived organizational support and job insecurity; see Table 2), there was a significant interaction effect for job demands [$F(1, 242) = 4.06$, $p < .05$] and for job insecurity [$F(1, 242) = 7.57$, $p < .01$]. More specifically, workers who had received a direct contract reported an increased perception of job demands, but a significant reduction in their perceptions of job insecurity. On the other hand, workers who had maintained a temporary contract also reported an increased perception of job demands, but this increase in their perception of job demands was lower in comparison with workers who had received a direct contract. However, the levels of job demands at T2 were very similar in both groups. Furthermore, workers who had remained in their temporary agency work maintained their levels of job insecurity over time. In addition to these interaction effects, main effects were also found of group and of time for job insecurity [$F(1, 242) = 6.64$, $p < .01$; $F(1, 242) = 5.69$, $p < .05$; respectively], which seems to suggest that workers with a temporary agency contract were more inclined to report higher job insecurity. Additionally, for job control we also found a significant main effect of time [$F(1, 242) = 6.57$, $p < .01$]. However, since the Group × Time interaction effect was not significant, both workers who had received a direct contract or had maintained a temporary position tended to increase their perceptions of job control over time at approximately the same level. Finally, for perceived organizational support we did not find any significant Group × Time interaction effect. Therefore, Hypothesis 1 received partial support.

Our Hypothesis 2 was refuted (see Table 2). The non-significant Group × Time interaction effect, both for work engagement [$F(1, 242) = .02$, n.s.] and for the two dimensions of burnout [i.e., exhaustion—$F(1, 242) = .11$, n.s., and cynicism—$F(1, 242) = .20$, n.s.], seems to indicate that both types of transitions (i.e., receiving a direct contract or maintaining a temporary agency position) present a similar evolution in their levels of workplace well-being. More precisely, in both the analyzed groups, we observed a relative stability of their levels of work engagement and burnout over time.

According to the results presented in Table 3, we observed a significant Group × Time interaction effect for satisfaction with life [$F(1, 242) = 2.82$, $p < .05$], but not for health perceptions [$F(1, 242) = .93$, n.s.]. Focusing on the mean levels registered for satisfaction with life, we observed that this significant interaction effect occurred for the transition temporary agency-to-unemployment. As expected, when workers move from a temporary job to an unemployment situation, their levels of satisfaction with life decreases (time 1: $M = 4.07$, SD = .22; time 2:

**Table 2** Longitudinal results for temporary agency-to-direct contract and temporary agency-to-temporary agency contract

| | Temporary agency-to-direct contract ($N = 57$) | | | | Temporary agency-to-temporary agency contract ($N = 187$) | | | | Group (between groups) | | Time (within groups) | | Group × Time | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time 1 | | Time 2 | | Time 1 | | Time 2 | | *F* | *p* | *F* | *p* | *F* | *p* |
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD | | | | | | |
| Job characteristics | | | | | | | | | | | | | | |
| Job demands | 2.99 | .10 | 3.41 | .11 | 3.25 | .05 | 3.42 | .06 | 1.62 | .20, n.s. | 1.65 | .20, n.s. | 4.06 | .04* |
| Job control | 3.17 | .13 | 3.32 | .13 | 3.13 | .07 | 3.25 | .07 | .21 | .65, n.s. | 6.57 | .01** | .04 | .84, n.s. |
| POS | 4.42 | .17 | 4.21 | .16 | 4.11 | .09 | 4.01 | .09 | 2.59 | .11, n.s. | .25 | .62, n.s. | .32 | .57, n.s. |
| Job insecurity | 2.89 | .13 | 2.45 | .13 | 3.00 | .07 | 2.99 | .07 | 6.64 | .01** | 5.69 | .02* | 7.57 | .01** |
| Work well-being | | | | | | | | | | | | | | |
| Engagement | 5.28 | .19 | 4.98 | .17 | 5.15 | .11 | 4.89 | .09 | .40 | .53, n.s. | .81 | .37, n.s. | .02 | .88, n.s. |
| Exhaustion | 3.13 | .21 | 3.54 | .20 | 3.40 | .11 | 3.73 | .11 | 1.41 | .24, n.s. | .31 | .58, n.s. | .11 | .74, n.s. |
| Cynicism | 2.44 | .18 | 2.80 | .19 | 2.53 | .10 | 2.78 | .11 | .03 | .86, n.s. | .72 | .40, n.s. | .20 | .65, n.s. |

*F* values refer to main and interaction effects of group and time. All the *F* values presented above have 1, 242 *df*

*n.s.* nonsignificant

* $p < .05$; ** $p < .01$

**Table 3** Longitudinal results for temporary agency-to-direct contract, temporary agency-to-temporary agency contract, and temporary agency-to-unemployed

| | Temporary agency-to-direct contract ($N = 57$) | | | | Temporary agency-to-temporary agency contract ($N = 187$) | | | | Temporary agency-to-unemployed ($N = 45$) | | | | Group (between groups) | | Time (within groups) | | Group × Time | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time 1 | | Time 2 | | Time 1 | | Time 2 | | Time 1 | | Time 2 | | *F* | *p* | *F* | *p* | *F* | *p* |
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | | | | | | |
| General well-being | | | | | | | | | | | | | | | | | | |
| Sat. life | 3.76 | .20 | 3.79 | .19 | 3.72 | .11 | 3.69 | .10 | 4.07 | .22 | 3.44 | .21 | .08 | .92, n.s. | .39 | .54, n.s. | 2.82 | .04* |
| Health p. | 3.67 | .12 | 3.52 | .11 | 3.64 | .06 | 3.53 | .06 | 3.79 | .13 | 3.47 | .13 | .07 | .94, n.s. | 2.97 | .09, n.s. | .93 | .39, n.s. |

*F* values refer to main and interaction effects of group and time. *F* values for the main effect of group and the interaction Group × Time have 2, 286 *df*, but for the main effect of time *F* values have 1, 286 *df*

*n.s.* nonsignificant

* $p < .05$

$M = 3.44$, SD = .21). However, comparing the mean levels registered for workers who had received a direct contract (time 1: $M = 3.76$, SD = .20; time 2: $M = 3.79$, SD = .19) with workers who had maintained a temporary agency contract (time 1: $M = 3.72$, SD = .11; time 2: $M = 3.69$, SD = .10), no significant differences were observed between these two groups. With regard to health perceptions, the nonsignificant Group × Time interaction effect indicates that the effect of time is not different for the three types of transition patterns (i.e., temporary agency-to-direct contract, temporary agency-to-temporary agency contract, and temporary agency-to-unemployment). Therefore, our Hypotheses 3 and 4 receive mixed support from the data.

## Discussion

Over recent decades many workers have been employed with a temporary agency contract (CIETT 2015). Despite the numerous studies with workers with this employment arrangement (De Cuyper et al. 2008), little is known about the effect of this status on job conditions and workers' well-being over time. In order to further the understanding on this issue, the current study focused on a sample of 289 Portuguese temporary agency workers and examined the impact of stable (maintaining this temporary status), upward (obtaining a direct contract) and downward (remaining unemployed) contract trajectories and

performed a longitudinal study with two waves. Based on the core-periphery model of employment contracts (Aronsson et al. 2002; Hudson 2007), we expected positive changes in job conditions and workers' well-being among the upward trajectory. Moreover, based on the idea that temporary agency workers consider this employment a vehicle to obtain permanent employment (De Jong and Schalk 2010; Lopes and Chambel 2014), when they do not get what they deserve and maintain this temporary contract, although the job characteristics do not change they develop feelings of frustration, and develop poor well-being (De Cuyper et al. 2009b). On the other hand, based on Jahoda's (1982) latent deprivation theory that considers the frustration of the manifest and latent functions of employment among unemployed individuals, we expect unemployment to have more serious effects on general well-being when compared with maintenance of a temporary agency status or obtaining a direct contract.

Our results suggest mixed support that gaining a direct contract is related to an expected increase in favorable job conditions in contrast with maintaining a temporary agency contract. As expected, this upward trajectory decreased job insecurity, whereas the group that maintained a temporary contract reported a stable perception. In line with the psychological concept of job insecurity concerning the continuation of one's job (Sverke and Hellgren 2002)—i.e., workers fear losing their job and becoming unemployed (De Witte 1999)—those that obtain a direct contract gain employment with lower job insecurity in contrast to workers who maintain a temporary agency contract, and who are involved in an objective insecure situation. This may be considered in light of strict dismissal regulations imposed on direct contracts which are in force not only in Portugal, but also in other Mediterranean European countries (i.e., Spain, Italy and Greece), and which act as a buffer, thus possibly further decreasing job insecurity (OECD 2014). However, Parker et al. (2002) in the UK and Wagenaar et al. (2012) in the Netherlands also observed that in a stable trajectory job insecurity did not change, whereas in an upward trajectory job insecurity decreased.

However, contrary to our hypothesis, neither job control nor perceived organizational support changed due to workers' contract type over time. There are several possible reasons for such unexpected results. Firstly, they may result from the fact that this change in contract did not imply a change for a better job (Kompier et al. 2009). Over recent years, Portugal has registered a high level of unemployment (2012 = 15.5 and 2013 = 16.2 %), and we may assume that the workers who were given the opportunity to gain a direct contract with more job security took this opportunity regardless of whether the job offered better conditions. This is even more plausible since in Portugal, as we said previously employees' have high expectations in terms of job security and prefer high-job stability (Chambel 2013). Thus, employees tend to avoid a temporary agency contract that goes against these principles of security and continuity of the employment relationship and perhaps they accept a contract that better fulfills these conditions even when the job resources (i.e., control and support) are no better. Secondly, we may assume that the direct contract obtained in the upward trajectory is likely to be in the same client organization or in a different organization but with a similar position or tasks (Wagenaar et al. 2014). In fact, temporary agency work is often a transitory stage for a direct position as employers often use temporary agency employment as a human resource tool for selection and screening (Amuedo-Dorantes 2000; De Cuyper et al. 2009b; Gagliarducci 2005). On the other hand, with each new assignment, temporary agency workers acquire new knowledge and skills and, consequently, increase their chances of employment, e.g., their employability or the acquisition and fulfillment of employment, within or outside the current organization, immediately and in the future (van der Heijden et al. 2009). However, previous studies have shown that temporary agency workers have noticeably fewer opportunities for training (Aronsson et al. 2002; Virtanen et al. 2003). Thus, employability promoting different assignments in temporary agency work may facilitate the acquisition of a direct contract in an identical position with equivalent tasks.

Also contrary to this hypothesis, the upward trajectory involved a greater increase in job demands (i.e., workload and pressure) than the same trajectory. However, the level of job demands for those with direct contract and temporary at time 2 is practically the same.

Temporary agency work effects on workers' well-being have also received mix support from our results. Contrary to our expectations, both upward and same trajectories show similar workplace well-being evolution. However, we may consider that this evolution occurs for different reasons. Although upward workers decrease job insecurity which should have positive effects on their well-being at work (De Cuyper et al. 2009a) the unchanged of job characteristics, particularly in the levels of job control and support that the workers may expect when they move from a temporary position to a direct contract, should buffer this positive effect and lead to the stability of the levels of work engagement and burnout (i.e., exhaustion and cynicism) (Karasek 1989). For those who maintain their temporary status, stability of their workplace well-being may occur because they want to demonstrate their willingness to become good organizational citizens with a view to acquiring a permanent job offer; perhaps the main reason for working on a temporary assignment (De Jong and Schalk 2010; Chambel et al. 2014). However, in our study anonymity was assured and, alternatively, we may consider that TAW maintained self-efficacy beliefs, hope, optimism

and resilience that they would obtain a direct contract as was their wish, which contributed toward maintaining their well-being (Luthans et al. 2007). Furthermore, the 9-month interval between the study waves may be too short to initiate the frustration sentiment and the decrease of associated well-being. This is more plausible in a country with high unemployment levels where temporary work may be compared with the worse situation of unemployment and be translated into an employment arrangement more acceptable, despite being more prolonged.

As for the general well-being results, as expected, unemployment was observed to have a negative effect on satisfaction with life. The deprivation of important resources involved in this unemployment situation has negative consequences on this indicator of general well-being (Jahoda 1982; Paul and Moser 2009). The deprivation of structure of life, of social contacts, of self-realization and contribution to society involved in unemployment has negative consequences on different aspects directly included in the definition of satisfaction with life. These aspects may include issues such as satisfaction with relationships with others, goal achievement, self-perceived competence to cope with daily life and social participation (Diener et al. 1985). However, our results, contrary to our expectations, also show that both gaining a direct contract and maintaining a temporary agency contract have no effects on satisfaction with life. Perhaps this may be a result of the deprivation of all work functions which has an acute and immediate impact on this indicator of general well-being than gaining a more secure employment position (Griep et al. 2015). This is particularly true in the situation of our study where there is no difference in job resources (i.e., job control and organizational support) and workplace well-being (i.e., burnout and engagement) between those who receive a direct contract and those who remain in a temporary position (Schaufeli and Bakker 2004).

As far as self-perception of health is concerned, contrary to initial expectations, workers in all the transitions under study were found to maintain their perception of health. Perhaps this result occurred due to the fact that in our study, the unemployment situation was short-term (1–9 months), while the effects on health, particularly, the effect of unemployment, is long term (Griep et al. 2015).

### Strengths and limitations

The major strengths of the current study are its longitudinal two-wave design and its focus on temporary agency work transitions in relation to job conditions and workers' well-being after gaining a direct contract, maintaining a temporary agency contract and remaining unemployed. Moreover, this is one of the first studies to extend temporary agency work transitions to upward, maintenance and downward trajectories. We analyze a variety of job condition indicators including job insecurity, demands, control, organizational support, and indicators of workplace well-being, including work engagement and burnout, and indicators of general well-being, namely health perception and satisfaction with life. In addition to controlled selection processes (i.e., temporary agency workers with some personal characteristics, with better job conditions who are more engaged, satisfied, and healthy have greater likelihood of gaining a direct contract. On the other hand, however, those who have other personal characteristics, worse job conditions and are less engaged, satisfied, and healthy, are more likely to remain unemployed), we compared demographic characteristics, job conditions, and the well-being of temporary agency workers at baseline. We confirmed that these baseline indicators did not play an important role in this trajectory process of temporary agency work. Despite these strengths, there are also several important limitations. First, the study sample size, particularly the unemployed group and the group that obtained a direct contract, may have contributed to not obtaining significant results. In fact, our multivariate analyses are likely to have suffered from a lack of power, which may at least explain some of the nonsignificant results. Furthermore, our group that obtained a direct contract included workers with a permanent and fixed-term contract. Although this option is equal to other studies (Kompier et al. 2009; Wagenaar et al. 2012), workers with a fixed-term contract also have a temporary contract and this could also contribute to nonsignificant results. Secondly, we performed a two-wave longitudinal study with a time lag of 9 months. However, some of the well-being indicators—such as health perception—might require more time to manifest themselves as consequences of becoming unemployed or maintaining a temporary agency job. Thirdly, all measurements were based on self-reports, which may have inflated the association between the job conditions and well-being. However, most of our well-being indicators can only be measured through self-reports (e.g., burnout, engagement and satisfaction with life). Finally, although we relied on three different trajectories, we did not control in the downward trajectory for whether these unemployed individuals were drawing from sufficient income replacement benefits that might determine the effects of unemployment on well-being (Paul and Moser 2009).

### Future research

The current study suggests several directions for further research. First, it is important to further unravel the process that leads to temporary agency workers into direct contracts. The current study showed that apart from job insecurity, other job conditions warrant importance in

this decision. In this respect, future research could relate workers' motive to employment trajectories, and study its relationship with well-being, which is an important precursor (Connelly and Gallagher 2004; Lopes and Chambel 2014).

Secondly, how long temporary agency workers maintain this contract should be considered when studying the effect of this situation on well-being (De Cuyper et al. 2009b). It would be interesting to further investigate the maintenance of this contract and take into account workers' in a short-term (i.e., up to 1 year) and long-term (i.e., from 1 to 2 years) situation.

Thirdly, the data came from Portugal, and it would be interesting to replicate this study in other countries. In different countries, the institutional frames of agency work and the work values of individuals vary greatly, hence the trajectories of temporary agency workers and their consequences should also be different.

Finally, we studied temporary agency transition to unemployment, while these situations are also reversely related since temporary agency work is an option for reentry into the labor market for the unemployed (CIETT 2015). Therefore, future studies could include more waves to identify trajectories that include changes between temporary agency work and unemployment.

## Final considerations

Regarding the core-periphery idea that temporary workers are being used as a buffer stock to sustain the permanent workforce (Aronsson et al. 2002; Hudson 2007) and have worse job conditions, we observed that gaining a direct contract does not necessarily make for a better job, with the exception of job insecurity. These findings challenge this segmentation's approach and its deterministic view on employment contracts and confirm that job conditions are independent of contracts (Wagenaar et al. 2012). This may be partly due to a high level of unemployment that influences individuals to accept a job with low job insecurity even without better job content or organizational support. The high levels of unemployment may also reinforce the vulnerability of temporary agency workers as they avoid showing poor well-being because they depend on the client organization to obtain a less insecure contract (De Jong and Schalk 2010; Chambel et al. 2015). We observed that maintaining a temporary contract despite the concomitant requirement to maintain a situation of undesirable job insecurity does not have consequences in workplace and general well-being. Corroborating the deprivation theory of unemployment (Jahoda 1982; Paul and Moser 2009), we further observed that temporary agency workers who remain unemployed register a decrease in their satisfaction with life.

**Compliance with ethical standards**

**Conflict of interest** The authors declare that they have no conflict of interest.

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