

# Training, exhaustion, and commitment of temporary agency workers: A test of employability perceptions

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The aim of this study was to analyse whether the social exchange between temporary agency workers (TAWs) and the client organization is associated with a perception of training. In this study, we developed and tested a moderated mediation model that accounts for TAWs' exhaustion and desire to obtain a direct contract with the client company in the relationship between the perception of training and affective commitment. Our hypotheses were tested on a sample of 425 blue-collar workers from four Portuguese companies with temporary agency work contracts. Our findings support a conditional indirect relationship between the perception of TAWs that the training provided by the client company facilitates their internal employability and their commitment towards this company via exhaustion for those TAWs who have a low desire to have a direct contract with this company. In addition, our findings show that TAWs do not reciprocally respond to the training that promotes external employability, as this factor is not associated with the affective commitment of these individuals, although exhaustion is associated with this perception. Moreover, we discuss the implications of these findings for the human resource management of TAWs.

**Keywords:** Temporary agency workers; Employability; Training; Affective commitment; Stress.

Temporary agency workers (TAWs) are a category of contingent workers that is increasing worldwide. In Portugal, temporary agency employment is such a large growing phenomenon that the number of TAWs has doubled between 1998 and 2008, and, at present, the penetration of TAWs in the employment market (1.6%) is the same as the average observed in Europe (CIETT, 2013). The agency is the employer of the TAWs, and a written "labour contract" is executed between these entities; however, the actual labour is performed for another organization, referred to as the client company.

It has been suggested that it is impossible for a TAW and a client company to develop an employment relationship characterized by a social exchange (Rousseau, 1995). As Blau (1964) described, social exchanges entail unspecified obligations for both the organization and the worker, with a reciprocity pattern determining the perceived balance of these exchanges over time. The worker's positive response towards the organization depends on the organization's favourable treatment of the worker. In temporary work situations, the organization does not offer a sustainable long-term relationship, job security, career development, or opportunity for career

advancement, and, consequently, workers respond with less favourable attitudes and behaviours towards the organization (Cappelli, 2000; Pfeffer & Baron, 1988; Purcell & Purcell, 1999; Rousseau, 1995).

However, this predicted lack of a social employment relationship between TAWs and the client company is not supported in different empirical studies. Indeed, these studies have demonstrated that TAWs develop a social employment exchange relationship, reciprocated with positive responses towards the client organization (Coyle-Shapiro & Kessler, 2002; Kuvaas & Dysvik, 2009; McDonald & Makin, 2000; Van Dyne & Ang, 1998). The development of a social exchange depends on how TAWs are treated by the client company (Gallagher & Connelly, 2008). When the company develops actions that consider the specific needs of TAWs, the workers reciprocate and engage with positive attitudes and behaviours towards the company (Koene & Van Riemsdijk, 2005).

The objective of this study was to investigate whether the perceptions of TAWs regarding employability facilitated through training from the client company plays a crucial role in explaining the social employment

relationship of the worker with the client organization. We propose that a social exchange relationship occurs because the TAWs perceive that this training facilitates employability by increasing opportunities for obtaining a new job with the current employer (internal employability) or with another employer (external employability). We expect that TAWs who consider that the training received at the client company facilitates their chances of finding a new job display the highest positive attitude towards the client company, i.e., higher affective commitment. Furthermore, we also expect that the relationship between the training perceptions and the affective commitment is partially mediated through exhaustion. TAWs, who regard training as a vehicle for obtaining a new job, experience reduced stress, namely, lower exhaustion, and exhibit higher affective commitment. However, we consider that this mediating role relies on the desire of the TAW to obtain a direct contract with the client company. The responses of TAWs to the actions of the client companies differ on the basis of this desire (Connelly & Gallagher, 2004; Coyle-Shapiro & Kessler, 2002). Thus, exhaustion will be less (or more) prevalent in the relationship between the perception of training, facilitating internal (or external) employability and commitment when TAWs have a high (or low) desire to obtain a direct contract with the client company.

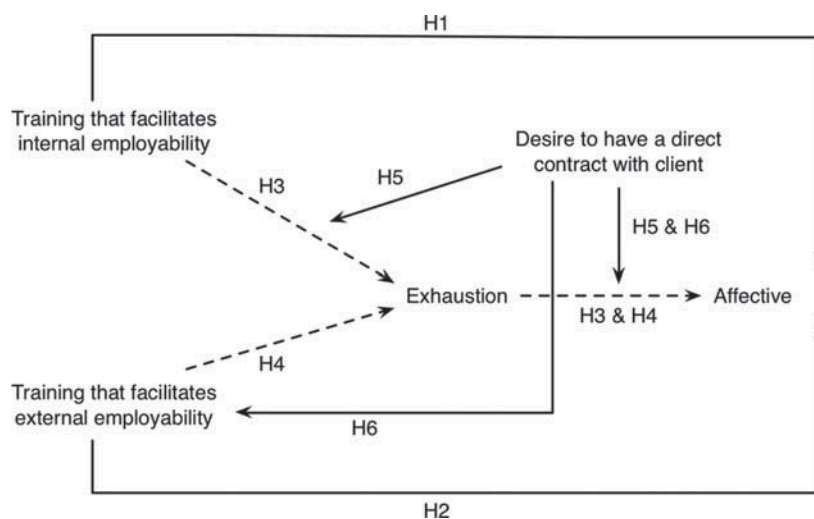
This study exceeds previous research with TAWs in five ways. First, this study distinguishes internal and external employability facilitated through training and, to our knowledge, no other study has applied this distinction to TAW research. Second, previous studies have documented the effects of training on TAWs outcomes by examining the role of the actions of the organizations (Finegold, Leveson, & Van Buren, 2005; Forrier & Sels, 2003). The present study conceptualizes the importance of analysing the perceptions and interpretations of training of TAWs. Third, consistent with other studies, we

considered that the job insecurity that typically characterizes TAW employment is positively associated with the stress experienced by the worker (Bernhard-Oettel, Sverke, & De Witte, 2005; Kompier, Ybema, Janssen, & Taris, 2009; Virtanen et al., 2005). However, based on the assumptions of Karasek's Job Demand-Control Model (Karasek, 1989), this study considers that TAWs may experience lower stress if they perceive that the training received from the organization facilitates subsequent employability, owing to low demands (e.g., job insecurity) and high control (e.g., more chances of remaining employed). Fourth, a large percentage of studies that have analysed the impact of temporary employment have examined either affective commitment or stress (De Cuyper et al., 2008). However, no studies have conducted a simultaneous examination of how these two factors interrelate to explain employee-level outcomes. In the present study, we consider the insights of Cropanzano, Rupp, and Byrne (2003) and use the social exchange theory to integrate the simultaneous analysis of the affective commitment and exhaustion of TAWs. Moreover, we extended prior research on TAWs through an examination of the influence of the desire for a direct contract with the client company on the mediating role of exhaustion between the perceptions of training and affective commitment (cf. Figure 1).

## LITERATURE REVIEW AND HYPOTHESES

### Perceptions of training and temporary agency workers' affective commitment

Organizational commitment is an attitude associated with an attachment to the organization, which is conducive to the workers' desire to maintain an organizational membership (Mowday, Steers, & Porter, 1979). Although Meyer and Allen (1997) distinguished three forms of



commitment— affective, continuance, and normative— we examined only affective commitment in the present study, as this commitment entails an emotional attachment to the organization that presupposes a broad employment relationship, involving the intangible benefits characterizing a social exchange. In addition, affective commitment is a form of the employment relationship that better explains positive workers' outcomes (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Riketta, 2002, 2008).

Indeed, workers respond reciprocally according to their level of affective commitment to perceptions of the organization's commitment towards them (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Shore & Tetrick, 1991). When workers perceive that the organization develops human resource management practices that satisfy their needs, they will respond reciprocally with this affective liaison towards the organization (Conway & Monks, 2009; Nishii, Lepak, & Schneider, 2008). The need to acquire a new job is crucial for the motivation of TAWs because they do not know how long they will be employed or how long they will work in this client company (Bernhard-Oettel et al., 2005; De Cuyper & De Witte, 2008; Kluytmans & Ott, 1999). Thus, the client company might contribute to the positive attitudes of TAWs through actions that fulfil the needs of these workers (Koene & Van Riemsdijk, 2005), namely, through the development of training (Chambel & Sobral, 2011). Through training, workers acquire new knowledge and skills and, consequently, increase their chances of employment, e.g., their employability or the acquisition and fulfilment of employment, within or outside the current organization, immediately and in the future (Van der Heijden, Boon, Klink, & Meijjs, 2009). Training may develop "general" skills, such as those that increase the labour productivity across all companies and increase external job opportunities, e.g., external employability, or "specific" skills, such as those that increase labour productivity within a single company and increase the worker's chances for continued employment, e.g., internal employability (Becker, 1993).

For TAWs, the benefits acquired through training may be more salient than for permanent workers, involving perceptions concerning future employment after the temporary relationship with the client-organization is terminated, as this employment relationship is short-termed. The client organization shows commitment towards TAWs through the development of training programmes, which are perceived by TAWs as facilitating their internal or external employability. Benson (2006) verified that employees who participate in on-the-job training that facilitates internal employability exhibit more positive attitudes, whereas employees who participate in tuition-reimbursement programmes that facilitate external employability express more intentions to leave the firm. However, we propose that these considerations might be different for TAWs, as both perceptions of

training-facilitated employability, internal and external, satisfy their need for future employment.

*Hypothesis 1:* The extent to which TAWs perceive that training facilitates internal employability is positively associated with their affective commitment towards the client organization.

*Hypothesis 2:* The extent to which TAWs perceive that training facilitates external employability is positively associated with their affective commitment towards the client organization.

## Mediation through exhaustion

Exhaustion is a state of chronic stress characterized by emotional and physical depletion, and this state is central to understanding stress caused through daily work (Schaufeli & Enzmann, 1998). This dimension of chronic stress exhibits a strong relationship with task performance and organizational citizenship behaviours (Cropanzano et al., 2003; Taris, 2006).

Demands at work predict exhaustion, as this psychological state is an indication that employees are no longer able to suitably manage these demands (Schaufeli & Bakker, 2004). As previously mentioned, TAWs have high levels of insecurity regarding future employment, and this demand increases the chances of a poor quality of life (McLean Parks, Kidder, & Gallagher, 1998; Sverke, Hellgren, & Näswall, 2002). Indeed, different studies have shown that the insecurity characterizing temporary employment negatively affects the workers' quality of life (Kompier et al., 2009; Virtanen et al., 2005). Based on the logic of the appraisal theory of stress of Lazarus and Folkman (1984), the reaction to an environmental hazard is partially dependent on the individual's cognitive appraisal of that potential hazard. TAWs who consider that training facilitates their employability could perceive their current employment situation as less threatening and, as a consequence, experience less stress. Moreover, this situation prompts feelings of being in control of one's career, as TAWs with high employability identify opportunities to acquire or maintain employment (Fugate, Kinicki, & Ashforth, 2004). The Job Demand–Control (JDC) model (Karasek, 1989) suggests that the feeling of control over one's career alleviates the stress experienced by TAWs (Schreurs, Van Emmerik, Notelaers, & De Witte, 2010). Consistent with the JDC model, on-the-job stress results from situations with high demands and low control. However, with high control, workers experience lower stress because the exposure to stressful jobs is minimized (Van der Doef & Maes, 1999). TAWs who perceive high employability might experience less stress not only because they regard the job as having low demands (e.g., job incertitude), but

also these workers might feel more security (e.g., a higher likelihood of remaining employed). Consistent with these ideas, we propose that the perception of training as a facilitator of internal or external employability is associated with the reduced stress on TAWs.

However, a deleterious consequence of the exhaustion is that exhausted workers manifest lower levels of affective commitment towards the organization (Lee & Ashforth, 1996; Wright & Cropanzano, 1998; Wright & Hobfoll, 2004). Cropanzano et al. (2003) proposed the social exchange theory to explain this relationship. Workers form social exchange relationships to the extent that they receive worthwhile benefits, and jobs that produce emotional exhaustion are likely to violate this condition. Exhausted workers place less value on the benefits received through employment. Furthermore, social exchange relationships also depend on the extent to which these benefits are assigned in a fair manner, and jobs that produce exhaustion are also likely to violate this condition. If an employee considers that working for an organization causes his/her exhaustion, then this organization is consequently perceived as unfair in its actions. Thus, exhaustion deters the development of a social exchange relationship, manifested through reduced organizational affective commitment.

This study considered that TAWs' perception of training as an employability facilitator entailed a social exchange that was positively associated with affective commitment towards the organization. Indeed, this relationship reflects the positive perception of training, which reduces exhaustion. Through actions that facilitate employment opportunities, TAWs experience lower exhaustion and more value is attributed to this employment benefit and more fairness is assigned to the organization, thereby strengthening the social exchange between TAWs and the client organization.

Our assumption is that exhaustion is a partial mediator between the perception of training and commitment. However, it is plausible that a direct relationship exists between the perception of training and the affective commitment. Consistent with the norm of reciprocity, which posits that people feel obliged to respond positively to favourable treatment received by others (Gouldner, 1960), when TAWs perceive that the client organization implements an action that satisfies their needs, these workers reciprocate with affective commitment (Finegold et al., 2005).

Thus, we formed the following hypotheses:

*Hypothesis 3:* The exhaustion of TAWs partially mediates the relationship between the extent to which they perceive that training facilitates internal employability and their affective commitment.

*Hypothesis 4:* The exhaustion of TAWs partially mediates the relationship between the extent to

which they perceive that training facilitates external employability and their affective commitment.

### Desire to obtain a direct contract with the client company as a moderator of these mediated relationships

Studies conducted in various countries have shown that TAWs are most often involuntary workers who opt for this type of employment because there are no other alternatives; in particular, there are no other options to obtain a direct contract with a company (Amuedo-Dorantes, 2000; DiNatale, 2001; Morris & Vekker, 2001; Remery, Van Doorne-Huiskes, & Schippers, 2002). These workers obtain temporary work, but their desires and needs include the acquisition of permanent employment (Von Hippel, Mangum, Greenberger, Skoglund, & Heneman, 1997).

These desires and needs may mediate the relationship between the client company actions and TAWs' reactions (Connelly & Gallagher, 2004; Coyle-Shapiro & Kessler, 2002). The expectation and desires of workers may serve as a filter of their perception of the employment relationship, and, when the main objectives of these workers depend on this relationship, employment will be more positively evaluated (Ferguson & Bargh, 2004). Indeed, the desires and expectations regarding the future employment situation influence the workers' reactions to present employment situations (Latack, Kinicki, & Prussia, 1995). When achieving their objectives depends on the client, TAWs might be unwilling to reciprocate with actions that could potentially harm their chances. TAWs are less sensitive to the actions of client organizations, as these actions are only a part of the treatment these workers expect to receive (De Jong & Schalk, 2010), thereby suggesting that the responses of TAWs are independent of the treatment of the client company when there is an increased desire to be eventually hired by that company. Thus, TAWs do not risk reciprocal responses for fear of lowering the positive action from the client organization, particularly if these responses compromise the fulfilment of this desire. The empirical evidence on this mechanism is scarce, but De Jong and Shalk (2010) showed that the perception of the fairness of the client organization was less associated with attitudes and behavioural intentions among employees who view a temporary job as a vehicle for achieving permanent employment. In this study, we further analyse two different perceptions of the client organizations actions: the extent to which workers perceive that training facilitates internal employability, and the extent to which workers perceive that training facilitates external employability. The first perception is consistent with a desire to obtain a direct contract with the client, but the second perception is not. We therefore expect that when TAWs have a high desire to obtain a place in the client

organization, they “mask” their psychological state and show lower exhaustion, regardless of the company’s action. In contrast, when TAWs express a low desire to obtain a direct contract with the client company, these workers have *nothing to lose* and show increased exhaustion when the client company does not develop training that will facilitate internal employability. However, this relationship might be different with training that facilitates external employability. When TAWs desire to obtain a direct contract, training that facilitates external employability is not consistent with this desire, and, consequently, these workers are more responsive to this practice, i.e., their psychological state of exhaustion is more associated with the actions of the client organization. In contrast, when TAWs express a low desire to obtain a direct contract with the client company, these employees become less sensitive to treatment, and their levels of exhaustion are less associated with the extent to which they perceive that training facilitates external employability.

However, we must consider that this same desire may also explain the relative importance of psychological states to predict the worker’s attitude towards the organization. When TAWs desire a direct contract with the client, they may present a positive attitude, even when under stress, to convince employers of their value to the organization. Therefore, TAWs affective commitment towards the client organization is less sensitive to their psychological states (De Cuyper, Castanheira, De Witte, & Chambel, in press), and these workers exhibit higher affective commitment, regardless of the degree of exhaustion experienced.

*Hypothesis 5:* The mediated role of exhaustion between training that facilitates internal employability and commitment is moderated by the desire to have a direct contract with the client company, because this desire interacts: first, with the extent to which TAWs perceive that training facilitates internal employability, so that the negative relationship between the extent to which TAWs perceive that training facilitates internal employability and exhaustion is significantly stronger at low as compared to high levels of desire to have a direct contract with the client company; and second, with exhaustion, so that the relationship between exhaustion and commitment is significantly stronger at low as compared to high levels of desire to have a direct contract with the client company.

*Hypothesis 6:* The mediated role of exhaustion between training that facilitates external employability and commitment is moderated by the desire to have a direct contract with the client company, because this desire interacts: first, with the extent to which TAWs perceive that training facilitates external employability, so that the negative relationship between the extent to which TAWs perceive that

training facilitates external employability and exhaustion is significantly stronger at high as compared to low levels of desire to have a direct contract with the client company; and second, with exhaustion, so that the relationship between exhaustion and commitment is significantly stronger at low as compared to high levels of desire to have a direct contract with the client company.

## METHOD

### Participants and procedure

A total of 425 blue-collar TAWs working at four Portuguese industrial companies participated in the study. In these companies, TAWs performed tasks similar to permanent employees and had similar management requirements and similar work conditions, namely, access to training (Lautsch, 2002). The four companies provided TAWs with 2 weeks of initial training to acquire the necessary skills to perform the job. If a TAW had not adapted by the end of this training period, another TAW from the same agency would be hired to replace him/her, and the initial training process would again ensue. Furthermore, whenever there was any change in the manufacturing process or the manufacture of a new product was initiated, both permanent workers and TAWs received training to prepare these employees for the new tasks. In this case, the number of training hours depended on the complexity of the product and manufacturing process. In addition, if a permanent worker or TAW showed difficulties in task performance, these employees would receive “on-the-job training”. Although these actions are more associated with internal employability (Benson, 2006), they can also be perceived by workers as promoting external employability, as improved skills and knowledge can be applied to other industrial companies (Matusik & Hill, 1998). The idea of the natural integration of skills likely reflects the fact that the companies included in our study were integrated in industrial parks where companies frequently use TAWs for operational tasks, and the skills acquired in one company are easily transferable to another.

The study sample included 53.9% men and 45.6% women. In terms of age, 57.1% of the respondents were under 30 years old, 22.2% were between 31 and 40 years old, and 20.7% were over 40 years old. To preserve the anonymity of the answers, we did not collect data concerning the workers’ tenure. Our study sample represented 87.1% of the population of TAWs.

The research procedure involved several steps. The study was presented to the Human Resources Director of each company. After obtaining his/her approval, we collected data concerning the training provided by the company and requested him/her to select TAWs who had been in the company for more than 3 months. Thus, we ensured that the TAWs had at least participated in 2

weeks of initial training, acquired some job experience, and could develop an affective liaison with the client company. Subsequently, a researcher met with a group of team leaders to explain the purpose and requirements of the study. The team leaders were requested to ask the TAWs to complete questionnaires. The team leaders then handed out the questionnaires and provided each respondent with a sealable envelope to enclose the completed survey. The researcher returned to the organization after 14 days to collect the surveys. All participants were assured of the total confidentiality of their responses, and we emphasized that participation in the study was voluntary.

## Measures

*Training that facilitates employability.* Based on studies involving training as a strategic human resource management practice and employability research, we developed six items to assess training that facilitates employability, three items to assess external employability and three items to assess internal employability. Human Resource Managers also read and examined the questionnaires for ambiguous or unfamiliar items and determined whether the questions covered the most important aspects of training that facilitates external and internal employability. The items were scored on a 5-point Likert scale (1 = “disagree”, 5 = “agree”). High scores on these scales indicated a high perception that training facilitates employability. The exploratory factor analysis (Appendix) was used to assess the factorial independence of the two constructs. The scale scores presented adequate reliability: alpha = .82 for external employability and alpha = .71 for internal employability.

*Affective commitment.* Affective commitment was measured using the scale from the Organizational Commitment Questionnaire of Meyer, Allen, and Smith (1993), previously used in another study (Chambel & Sobral, 2011). The six items were measured on a 7-point scale, ranging from “strongly disagree” (1) to “strongly agree” (7). An example item included “I feel a strong sense of belonging to (organization name)”. High scores indicated high levels of affective commitment, alpha = .82.

*Exhaustion.* Exhaustion was assessed using the Portuguese version of the Exhaustion scale of the Maslach Burnout Inventory—General Survey (Schaufeli, Leiter, Maslach, & Jackson, 1996), previously used in another study (Castanheira & Chambel, 2010). The five items were scored on a 7-point scale ranging from 0 (“never”) to 6 (“always”). An example item included “I feel used up at the end of a work day”. High scores indicate high levels of exhaustion, alpha = .86.

*Desire to obtain a direct contract with the client.* The desire to obtain a direct contract with the client organization was measured using five items constructed in this study, and the items were answered using a 5-point Likert scale (1 = “strongly disagree” to 5 = “strongly agree”). The items included the following: “It is my aim to be directly hired by (name of client organization)” and “If I could choose, I would opt for being directly hired by (name of client organization)”. High scores on this scale indicate high levels of desire to obtain a direct contract with the client, alpha = .80.

*Control variables.* Age and gender might be associated with commitment (Hanlon, 1986; Marsden, Kalleberg, & Cook, 1993) or to exhaustion (Schaufeli & Buunk, 2003). Accordingly, we controlled the demographic variables, gender (by coding “0” if the respondent was male and “1” if the respondent was female) and age (in years). We also considered that the organization might have been associated with study variables; thus, we controlled its effect by coding the organizations into three dummy variables.

## RESULTS

### Confirmatory factor and descriptive analysis

First, we performed a confirmatory factor analysis to examine the distinction between the various constructs. Three measurement models were compared: one-, four-, and five-factor models. In the one-factor model, all items were loaded onto a single latent variable, whereas in the four-factor model, the training items were grouped together under one factor. In the five-factor model, all the observed items were loaded onto their respective latent variables (training that facilitates internal employability, training that facilitates external employability, a desire to obtain a direct contract with the client company, exhaustion, and affective commitment). The latent variables were correlated. The one-factor model showed a poor fit to the data,  $\chi^2(206) = 2036.52$ ,  $p < .001$ , SRMR = .12, TLI = .53, CFI = .52, RMSEA = .15. The four-factor model, although better, also showed a poor fit,  $\chi^2(200) = 754.80$ ,  $p < .001$ , SRMR = .19, TLI = .86, CFI = .86, RMSEA = .08. The five-factor model showed an acceptable fit,  $\chi^2(196) = 529.97$ ,  $p < .001$ , SRMR = .06, TLI = .93, CFI = .92, RMSEA = .06, fitting the data significantly better than the one-factor model,  $\Delta\chi^2(6) = 1506.55$ ,  $p < .01$ , and the four-factor model,  $\Delta\chi^2(3) = 224.83$ ,  $p < .01$ . These analyses showed that the factor structures of the research variables were consistent with the conceptual model, and the manifested variables loaded onto latent variables, as intended (Table 1).

The means, standard deviations, correlation coefficients, and alpha reliability coefficients for each of our constructs are shown in Table 2.

TABLE 1  
Results of confirmatory factor analysis

Models	$\chi^2$	$\Delta\chi^2$	SRMR	TLI	CFI	RMSEA
Five-factor-model	$\chi^2 (196) = 529.97^{**}$		.06	.93	.92	.06
One-factor model	$\chi^2 (206) = 2036.52^{**}$	$\Delta\chi^2 (10) = 1506.55^{**}$	.12	.53	.52	.15
Four-factor model	$\chi^2 (200) = 754.80^{**}$	$\Delta\chi^2 (3) = 224.83^{**}$	.09	.86	.86	.08

\*\* $p < .01$ .

TABLE 2  
Descriptive statistics and correlations for all variables

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Organization A <sup>a</sup>	—	—									
2. Organization B <sup>b</sup>	—	—	-.35**								
3. Organization C <sup>c</sup>	—	—	-.19**	-.28**							
4. Age	30.80	10.09	.54**	-.54**	.02						
5. Gender <sup>d</sup>	—	—	.25**	.23**	.34**	.17*					
6. Desire to have a direct contract with the client	3.76	0.81	-.01	-.02	.17**	.04	.08				
7. Training for external employability	3.35	0.78	.02	-.08	-.02	.04	-.04	.22**			
8. Training for internal employability	3.82	0.70	-.10*	-.01	.07	-.03	-.02	.44**	.45**		
9. Affective commitment	4.53	1.18	.07	-.02	.18**	.14*	.15**	.50**	.07	.34**	
10. Exhaustion	2.18	1.53	.13**	-.01	.07	-.04	.13*	-.32**	-.14**	-.34**	-.36**

Listwise  $N = 425$ . <sup>a</sup>Dummy variable coded 0 if Organization = B, C, and D; and 1 if Organization = A. <sup>b</sup>Dummy variable coded 0 if Organization = A, C, and D; and 1 if Organization = B. <sup>c</sup>Dummy variable coded 0 if Organization = A, B, and D; and 1 if Organization = C. <sup>d</sup>Dummy variable coded 0 if male and 1 for female. \* $p < .05$ , \*\* $p < .01$ .

## Hypotheses analysis

To directly test our proposed model we used a regression-based path analysis using PROCESS software, which is a computational tool for estimating and probing interactions and the conditional indirect effects of moderated mediation models (Hayes, 2012; Preacher, Rucker, & Hayes, 2007). This software provides many of the capabilities of INDIRECT (Preacher & Hayes, 2004), and MODMED (Preacher et al., 2007), estimates the coefficients of a model using OLS regression (for continuous outcomes), and generates direct and indirect effects in mediation models and conditional indirect effects in moderated mediation models using single or multiple mediators. PROCESS offers various tools for probing two- and three-way interactions and constructs percentile-based bootstrap confidence intervals for conditional and unconditional indirect effects. The application of bootstrapped confidence intervals avoids the power problems of asymmetry and nonnormal sampling distributions of an indirect effect (MacKinnon, Lockwood, & Williams, 2004). In addition, Preacher and Hayes (2004) advocate the Sobel Z-test for assessing indirect effects, as this test is more powerful than the Baron and Kenny (1986) approach. However, the Sobel test assumes the normality of the product terms  $ab$ , and this is a nebulous assumption, particularly in a small sample. The use of bootstrapping techniques also avoid this assumption.

To examine Hypotheses 1 to 4, we estimated Model 4 using 5000 bootstrap samples, 95% bias-corrected bootstrap confidence intervals for all indirect effects, and partial out effects due to belonging to different organizational units, which were generated from estimates of the coefficients and standard errors in the model by including the “cluster” argument in the syntax. We conducted separate analyses for the perceptions of internal (Table 3) and external employability (Table 4).

Hypothesis 1 proposed that the perception of training as facilitator of internal employability would be positively associated with the affective commitment of TAWs to the client organization. The results revealed that training that facilitated internal employability had a total effect on affective commitment,  $B = 0.56$ ,  $p < .001$ , thus supporting Hypothesis 1.

Hypothesis 2 proposed that the perceptions of training as a facilitator of external employability would be positively associated with the affective commitment of TAWs to the client organization. The results revealed that training that facilitated external employability did not have a significant effect on affective commitment of TAWs,  $B = 0.11$ ,  $p < .121$ ; thus, Hypothesis 2 was not supported.

Hypotheses 3 and 4 proposed that the exhaustion of TAWs would partially mediate the relationship between the extent to which these workers perceive that training facilitates internal and external employability, respectively, and affective commitment to the client organization. We observed a significant indirect effect of training

TABLE 3  
Results of mediation analysis (Hypotheses 1 and 3)

Steps	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Direct and total effects $R^2 = .25, p < .001$				
Affective commitment regressed on training for internal employability ( <i>c</i> path)	0.56	0.08	7.41	<.001
Exhaustion regressed on training for internal employability ( <i>a</i> path)	-0.69	0.10	-7.08	<.001
Affective commitment regressed on exhaustion, controlling for training for internal employability ( <i>b</i> path)	-0.24	0.04	-6.87	<.001
Affective commitment regressed on training for internal employability, controlling for exhaustion ( <i>c'</i> path)	0.39	0.08	5.13	<.001
Partial effects of control variables on affective commitment				
Sex	0.07	0.15	0.46	.649
Age	0.02	0.01	1.77	.077
	Unstandardized value	<i>SE</i>	LL 95% CI	UL 95% CI
Bootstrap results for indirect effect				
Effect	0.17	0.04	.102	.262

Listwise  $N = 425$ . LL = lower limit. CI = confidence interval. UP = upper limit. Bootstrap sample size = 5000. All predictor variables were mean-centred.

TABLE 4  
Results of mediation analysis (Hypotheses 2 and 4)

Steps	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Direct and total effects $R^2 = .20, p < .001$				
Affective commitment regressed on training for external employability ( <i>c</i> path)	0.11	0.08	1.55	.121
Exhaustion regressed on training for external employability ( <i>a</i> path)	-0.27	0.09	-2.96	.003
Affective commitment regressed on exhaustion, controlling for training for external employability ( <i>b</i> path)	-0.30	0.04	-8.62	<.001
Affective commitment regressed on training for external employability, controlling for exhaustion ( <i>c'</i> path)	0.03	0.07	0.43	.669
Partial effects of control variables on affective commitment				
Sex	0.07	0.15	0.46	.649
Age	0.02	0.01	01.77	.077
	Unstandardized value	<i>SE</i>	LL 95% CI	UL 95% CI
Bootstrap results for indirect effect				
Effect	0.08	0.04	.009	.158

Listwise  $N = 425$ . LL = lower limit. CI = confidence interval. UP = upper limit. Bootstrap sample size = 5000. All predictor variables were mean-centred.

that facilitates internal employability on affective commitment through exhaustion, indirect effect = .17,  $p < .001$ , 95% CI: .102 to .262. Given the direct effect of the perceptions of training on affective commitment remained significant after controlling for exhaustion,  $B = 0.39, p < .001$ , we can assume a partial mediation, supporting Hypothesis 3. Unexpectedly, we did not find a significant indirect effect of training that facilitates external employability on affective commitment through exhaustion, indirect effect = .08,  $p < .08$ , 95% CI: .009 to .158; thus, Hypothesis 4 was not supported. However, we observed that perception of training that facilitates external employability related significantly with exhaustion,  $B = -0.27, p = .003$ .

To test for Hypotheses 5 and 6, we estimated Model 58 in PROCESS, which accounts for a first- and second-stage moderation model with 5000 bootstrap samples and 95% bias-corrected bootstrap confidence intervals for all indirect effects, controlling for sex and age of participants and partialling out effects due

to belonging to different organizational units from estimates of the coefficients and standard errors in the model by including the “cluster” argument in the equation. In this model the conditional indirect effect is estimated for three points of the moderator: the mean, one standard deviation above, and one standard deviation below the mean.

Hypothesis 5 proposed first that the mediated role of exhaustion between training that facilitates internal employability and commitment is moderated by the desire to have a direct contract with the client company, such that the negative relationship between the extent to which TAWs perceive that training facilitates internal employability and exhaustion is significantly stronger at low as compared to high levels of desire to have a direct contract with the client company. Results suggest that the conditional indirect effects of training that facilitates internal employability in predicting commitment to client via exhaustion were significant at low level, indirect effect = .18,  $SE = 0.06$ , CI: .094 to .314, and moderate



TABLE 5  
Results of moderated mediation analysis (Hypothesis 5)

Predictor variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	
DV: Exhaustion (mediator variable model) $R^2 = .19, p < .001$					
Constant	1.18	0.45	2.17	.009	
Training for internal employability	-0.45	0.11	-3.63	<.001	
Desire to work for client	-0.37	0.10	-3.59	<.001	
Training for internal employability $\times$ Desire to work for client	0.22	0.10	1.79	.026	
DV: Affective commitment (dependent variable model) $R^2 = .35, p < .001$					
Constant	4.33	0.32	12.84	<.001	
Exhaustion	-0.18	0.03	-4.77	<.001	
Training for internal employability	0.18	0.08	1.83	.017	
Desire to work for client	0.41	0.07	5.40	<.001	
Exhaustion $\times$ Desire to work for client	0.10	0.04	2.16	.009	
Age	0.01	0.01	1.27	.206	
Sex	0.08	0.14	0.55	.580	
Desire to work for client					
	Unstandardized	Boot indirect effects	Boot <i>SE</i>	Boot LLCI	Boot ULCI
Conditional indirect effect at desire to work for client = $M \pm 1 SD$					
-1 <i>SD</i> (-0.81)	0.18	0.06	.094	.314	
<i>M</i> (0.00)	0.08	0.03	.036	.145	
+1 <i>SD</i> (0.81)	0.02	0.02	-.009	.102	

Listwise  $N = 425$ . DV = dependent variable. Bootstrap sample size = 5000. All predictor variables were mean-centred.

level, indirect effect = .08,  $SE = 0.03$ , CI: .036 to .145, of desire to have a contract with client organization (Table 5). As expected, conditional indirect effects of training for internal employability in predicting commitment to client via exhaustion were nonsignificant when TAWs had higher levels of desire to work for the client company, indirect effect = .02,  $SE = 0.02$ , CI: -.009 to .102. A closer inspection of this effect suggests that the first-stage moderation was significant,  $B = .22, p = .026$ . As can be seen in Figure 2, the relationship between the perception that training facilitates internal employability and exhaustion is stronger for TAWs with lower desire to have a direct contract with the client company, than for TAWs with higher desire.

Moreover, Hypothesis 5 also proposed that the relationship between exhaustion and commitment is

significantly stronger at low as compared to high levels of desire to have a direct contract with the client company. A closer inspection of the interaction between exhaustion and the desire to have a direct contract with the client suggests that the second-stage moderation was significant,  $B = 0.10, p = .00$ . As expected, the relationship between exhaustion and commitment to the client company is stronger for TAWs with lower desire to have a direct contract with the client company, than for TAWs with higher desire (Figure 3). These results give support to Hypothesis 5.

Hypothesis 6 first proposed that the mediated role of exhaustion between training that facilitates external employability and commitment is moderated by the desire to have a direct contract with the client company, such that the negative relationship between the extent to

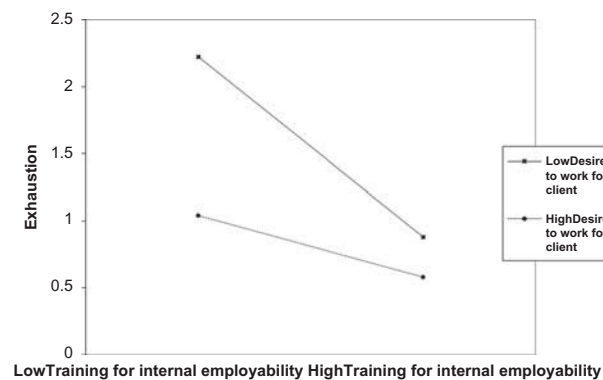


Figure 2. Interaction effect of desire to work for client with training for internal employability on exhaustion.

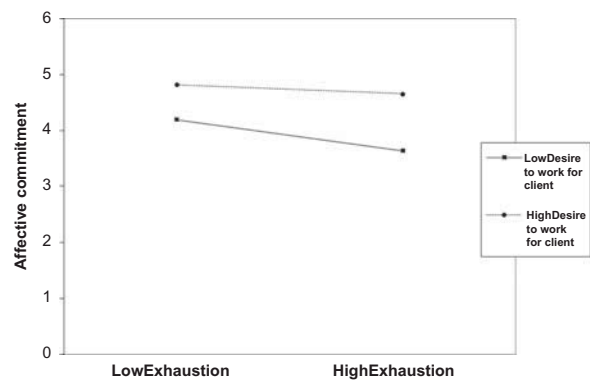


Figure 3. Interaction effect of desire to work for client with exhaustion on commitment to client company.

TABLE 6  
Results of moderated mediation analysis (Hypothesis 6)

Predictor variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	
DV: Exhaustion (mediator variable model) $R^2 = .16, p < .001$					
Constant	1.31	0.46	2.28	.005	
Training for external employability	-0.114	0.09	-1.03	.216	
Desire to work for client	-0.55	0.09	-5.28	<.001	
Training for external employability $\times$ Desire to work for client	0.13	0.09	1.14	.131	
DV: Affective commitment (dependent variable model) $R^2 = .34, p < .001$					
Constant	4.33	0.32	12.80	<.001	
Exhaustion	-0.19	0.03	-5.23	<.001	
Training for external employability	-0.09	0.06	-1.11	.159	
Desire to work for client	0.48	0.07	6.72	<.001	
Exhaustion $\times$ Desire to work for client	0.10	0.04	2.25	.008	
Age	0.01	0.01	1.20	.232	
Sex	0.08	0.14	0.59	.558	
Desire to work for client	Unstandardized boot indirect effects		Boot <i>SE</i>	Boot LLCI	Boot ULCI
Conditional indirect effect at desire to work for client = $M \pm 1 SD$					
-1 <i>SD</i> (-0.81)	0.06	0.04	-.004	.136	
<i>M</i> (0.00)	0.02	0.02	-.015	.073	
+1 <i>SD</i> (0.81)	0.00	0.02	-.037	.040	

Listwise  $N = 425$ . DV = dependent variable. Bootstrap sample size = 5000. All predictor variables were mean-centred.

which TAWs perceive that training facilitates external employability and exhaustion is significantly stronger at high as compared to low levels of desire to have a direct contract with the client company. Contrary to our expectations, we did not find a conditional indirect effect of the extent to which TAWs perceive that training facilitates external employability in predicting commitment to client via exhaustion when they had high level of desire to have a direct contract with client organization, indirect effect = .00,  $SE = 0.02$ , CI: -.037 to .040. In addition, we could not find a significant conditional indirect effect at a moderate level, indirect effect = .02,  $SE = 0.02$ , CI: -.015 to .073, or low level (indirect effect = .06,  $SE = 0.04$ , CI: -.004 to .136, of the desire to have a contract with client organization (Table 6). Thus, Hypothesis 6 did not receive support from our results.

## DISCUSSION

The purpose of this study was to investigate whether the TAWs' perception of training related with their affective commitment towards the client organization and their exhaustion at work. In particular, the perceptions that training facilitates internal or external employability were expected to be associated with the exchange relationship between the TAW and the client organization. Our findings suggest that perception of training that facilitates internal employability is associated with the social exchange employment relationship of TAWs, in which high affective commitment is observed. More interestingly, our findings suggest that the exhaustion

of TAWs is a mechanism that contributes to this social exchange. We observed that the desire to obtain a direct contract with the client company buffered this relationship. Moreover, our findings highlight the differential relationship of perceptions of training that facilitates external employability. Our results show that, although exhaustion is associated with the perception of this action, the commitment of the TAW towards the client company is not associated. Furthermore, the relationship between the perception of this organizational action and affective commitment is not moderated by the desire to have a direct contract with the client company.

Indeed, this study confirms and builds on prior research concerning the relationship between training and the affective commitment of TAWs, and these findings are consistent with empirical research, demonstrating a positive relationship between training and the affective commitment of TAWs (Finegold et al., 2005). We extended this research by incorporating the idea that the reactions of the workers depend on their perceptions of the actions developed by the organizations (Nishii et al., 2008). In other words, our findings illustrate that TAWs respond reciprocally with high affective commitment when they consider that the training developed by the organizations facilitates the possibility of maintaining employment at this organization.

In addition, our results are also consistent with a previous study demonstrating a negative relationship between training and workers' exhaustion (Castanheira & Chambel, 2010). Moreover, we confirmed that the perception of training as a facilitator of internal or external employability is positively associated with the well-

being of temporary agency workers. This result is consistent with Berntson and Marklund (2007), who showed that employability increased the well-being of the workers. However, the aim of this research study was to show that this relationship is also observed for TAWs.

Consistent with Cropanzano, Chrobot-Mason, Rupp, and Prehar (2004) we observed that the exhaustion of TAWs serves as an important mechanism for understanding the attachment to the client organization, characterized by a social exchange relationship. TAWs who perceive that the training provided by these organizations facilitates continued employment experienced lower exhaustion, and this psychological state is associated with their social exchange relationship with the organization. TAWs attribute more value to the training provided by the organization when they consider that this action increases employment security, thereby increasing feelings of control over their future and lowering stress (i.e., exhaustion), consequently reinforcing the perception that the organization is fair and concerned with the needs of TAWs who reciprocally respond favourably with higher affective commitment.

Our study also confirms that the TAWs' desire to obtain a direct contract with the client company moderates the mediating role of exhaustion. As expected, we verified that exhaustion was not a mediator between the perception that training facilitates internal employability and commitment among employees hoping that this temporary job might serve as a vehicle to achieve permanent employment. This observation suggests that TAWs are workers with high vulnerability (De Jong & Schalk, 2010), as these workers avoid showing exhaustion because they depend on the client organization to fulfil their desires. Moreover, these employees also show commitment towards the client organizations, independently of feelings of exhaustion.

Unexpectedly, our findings show the perception that training provides TAWs with broadly marketable skills does foster affective commitment towards the client organization. This result is consistent with Benson's (2006) study, showing that the actions of tuition reimbursement facilitated the exit of employees. However, our research analysed TAWs, and this result was more significant. A large percentage of TAWs are reassigned to other organizations (Gallais & Moser, 2009), and the development of external employability might be an important benefit provided by the current organization (Finegold et al., 2005). However, this benefit does not imply a positive employment relationship between TAWs and the client organization. There might be a number of different explanations for the absence of this relationship. First, it might reflect the fact that TAWs also have a relationship with the employment agency (Coyle-Shapiro, Morrow, & Kessler, 2006; Liden, Wayne, Kraimer, & Sparrowe, 2003). We might also consider that the perceptions of training as a facilitator of employment opportunities in another organization

might be associated with commitment towards the company mediating the reassignment. Indeed, a triangular employment relationship is often associated with behavioural and attitudinal problems that result in two-sided ambiguities, such as loyalty, commitment, or career advancement (Ward, Grimshaw, Rubery, & Beynon, 2001). Second, the workers' reactions to organization practices depend on what they consider the underlying intentions of the organizations to implement such practices (Nishii et al., 2008). TAWs might interpret that the client organizations have developed training that facilitates their external employability not because of an intention to meet workers' needs, but simply because the competences acquired were transferable to other organizations. Consistently, the relationship between training and affective commitment might depend on the Perception of Organizational Support (Chambel & Sobral, 2011; Eisenberger et al., 1990), and, within a social exchange context, training for employability might be considered by the workers as "fair" (Cropanzano et al., 2004). However, training that facilitates external employability cannot be associated with these perceptions, as the client organization does not consider training as an obligation or promise (Coyle-Shapiro & Conway, 2005). Furthermore, as previously mentioned, the client companies were integrated in an industrial park where TAWs are commonly used for employment, potentially contributing to the perception of external employability, which was not associated with the perception of training.

However, our results support the assumption that training which facilitates external employability can be viewed as an organizational practice that reduces the stress of TAWs. Thus, we might consider that employment insecurity is an important stressor for TAWs, and employability is a valid resource to attenuate the effect of this demand on workers' stress or exhaustion (Kompier et al., 2009; Virtanen et al., 2005).

## Limitations and future research

Several limitations of this study should be considered when interpreting the results. Multiple measurements of exhaustion and organizational commitment over time would provide a more accurate assessment of the effects of training perceptions. A one-time measure precludes any measurement of change in variables directly attributed to the training experience or causal inferences from these data. There are also potential limitations to the generalization of the findings due to the particular sample of companies and TAWs studied. The motive for including temporary employment impacted the training actions developed with TAWs, and these blue-collar workers desired to acquire a contract with the client organization and had identical training opportunities as the workers directly hired by the companies. Furthermore, we did not know what training (e.g.,

exact hours, content) the TAWs had received, and this lack of knowledge limited the validity of the training that facilitates employability scales. Another possible limitation of this study is that all the variables were measured using self-reporting surveys. Consequently, the observed relationships might have been artificially inflated as a result of tendencies to respond in a consistent manner. However, a meta-analysis of the percept-percept inflation issue indicated that the magnitude of the inflation of relationships might be overestimated (Crampton & Wagner, 1994). Nevertheless, to minimize the impact of common method variance, we followed several of the methodological and statistical recommendations of Podsakoff, MacKenzie, Lee, and Podsakoff (2003). A final limitation of our study concerns the only analysis of affective commitment towards the organization where TAWs developed their skills and did not include the liaison with the agency that initially hired these workers. However, there is considerable empirical work confirming the mutual influence between these two relationships (Connelly, Gallagher, & Gilley, 2007; Coyle-Shapiro & Morrow, 2006; Lapalme, Simard, & Tremblay, 2011). Thus, the explanation of TAWs' attitudes requires a perspective that considers the triangular employment relationship (Liu, Wu, & Hu, 2010).

Relatively little is known about the complex reality of temporary agency work. Future studies should seek to replicate the findings reported here among TAWs with different conditions, namely, those not having the same training opportunities as the permanent workers or those with high voluntary statuses. However, the theoretical model tested in the present study should be enriched with the inclusion of different variables to enable a better explanation of the employment relationship and the psychological states of TAWs. For example, we considered that temporary agency workers experience stressful situations attenuated through training, and consequently, workers feel less exhaustion. However, training might also increase job demands and promote exhaustion, as workers receive more training when more complex tasks are assigned; thus, the content of training might be more specific to goals to standardize the workers' skills and respective tasks. This specificity and standardization might have pervasive effects on stress (Holman, 2005). Therefore, training would increase job demands because workers would devote part of their time to training and might have less time to perform work-related tasks, or training could increase the level of expectations of the organization concerning the performance of the worker, thereby increasing stress. Future studies should analyse the content and respective effects of training. As previously noted, a social exchange relationship should develop when TAWs perceived training as an organizational action that satisfies their need for future employment. However, Kuvaas and Dysvik (2009) showed that the social exchange relationship of TAWs depended on their perceived investment in permanent employee

development (PIPED) within the client organization (i.e., not self-investment). Future studies are needed to include these variables to explain the employment relationship of TAWs. Moreover, our study highlights the moderating role of the desire to obtain a direct contract with the client company. However, our cross-sectional study did not assess the effects of these factors over time. Longitudinal studies are needed to show the reaction of TAWs when their desire for a permanent contract is not fulfilled or, on the contrary, when these workers manage to obtain a permanent contract. Furthermore, based on the assumption of Cropanzano et al. (2004) and the results of other studies (Hakanen, Bakker, & Schaufeli, 2006; Hakanen, Schaufeli, & Ahola, 2008; Schaufeli & Bakker, 2004), we considered that exhaustion predicted affective commitment; however, it is also plausible that there was a reversed effect between these variables. For example, we might hypothesize that workers with a high affective relationship with the organization (e.g., commitment) have the ability to broaden their thought-action repertoires and build enduring personal resources, including physical, intellectual, social, and psychological resources, which contribute feelings of less exhaustion (Fredrickson, 2001). Thus, the development of future longitudinal studies to confirm the causality direction between these variables is needed. Furthermore, TAWs receive training that improves their skills, which might be useful in other organizational settings when these workers are relocated to another client (Matusik & Hill, 1998). Future research needs to follow TAWs through various placements to analyse the extent and conditions under which transferable knowledge is acquired and examine the advantages for organizations and employees. Consistent with previous studies (Connelly & Gallagher, 2004; Coyle-Shapiro & Kessler, 2002), our research model presupposed that the desires and needs of TAWs influence the relationships between the client company actions and the reactions of these workers. However, according to the Self-Determination Theory (Ryan & Deci, 2000), the organizational context plays an important role in the prediction of the desires and motives of the workers, characterized by actions that promote the workers' competences (e.g., training) to predict higher self-determination motivation (Lam & Gurland, 2008). Thus, future studies analysing the predictive role of training in the motivation of TAWs, namely, the desire to obtain a direct contract with the client, are still needed.

### Theoretical implications

Gallagher and Connelly (2008) proposed that it is necessary to evaluate whether the existing theory developed in the context of standard employment is adaptable to contingent workers and to determine the individual and contextual factors that affect the possible utilization of this theory. By building on the social exchange theory,

this study shows that TAWs might develop a social exchange with the client organization, and these observations are consistent with those of previous studies (Coyle-Shapiro & Kessler, 2002; McDonald & Makin, 2000; Van Dyne & Ang, 1998). Moreover, the present study has contributed to the refinement of this theoretical framework. Consistent with the idea that the inducements responding to TAWs need to include those that entail the reciprocity of these workers (Koene & Van Riemsdijk, 2005), we showed that the TAWs who perceived that the training developed by the client company facilitated their chances of finding a new job within this company displayed lower work exhaustion and higher affective commitment towards this company. Furthermore, studies concerning TAWs have focused on the workers' stress but have not integrated this individual reaction into the workers' employment relationship (De Cuyper et al., 2008). Consistent with the model of Cropanzano et al. (2004), we verified that the exhaustion of TAWs was the mechanism underlying the relationship between the perception that the client organization acts positively towards TAWs and the positive attitudes of these employees towards this company. However, our findings showed that desires to obtain a direct contract with the client company moderates the mediating role of exhaustion. Consistent with Connelly and Gallagher (2004), we also observed that this desire was associated with the employment relationship. We observed some evidence for the attenuation in the importance of exhaustion to explain the relationship between the perception of the actions of the client company and the effective commitment of the TAW. Indeed, the desire to obtain a direct contract might be a motivational condition that *buffers* the mediating role of exhaustion in the perception of the training/affective commitment relationship.

### Implications for practitioners

Our study has several practical implications for training TAWs. This study has shown that training can have a different relationship between commitment and exhaustion, depending on the nature of the perception regarding training actions. Actions that increase opportunities for maintaining employment within the client organization positively affect both the well-being and the affective liaison of TAWs. However, when workers consider that training facilitates the acquisition of new general skills, the relationship between TAWs and the client organization does not improve despite improvements in well-being. This observation indicates that it is a good option to invest in both an initial and ongoing training programmes to equip TAWs with the skills and knowledge needed to conduct and improve job performance. These investments are good for both TAWs and client organizations and contribute to an effective employment relationship.

Although our results have shown that exhaustion is less associated with the employment relationship of TAWs desiring a direct contract with the client company, as stated by De Jong and Shalk (2010), both the legislation and ethical codes prohibit discriminative selection procedures. Indeed, our results show that training is a valuable human resource practice for TAWs, and practitioners should pay special attention to workers who have a vulnerable position with respect to client practices due to a desire to attain positions within the company. The agency is the contractor of TAWs; thus, employment agencies are the first responsible entity to ensure the client does not participate in discriminatory practices that affect TAWs.

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