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Perceived Employability in Relation to Job Performance: A Cross-lagged Study Accounting for a Negative Path via Reduced Commitment

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This study challenges the idea that perceived employability boosts job performance: perceived employability may indirectly decrease employees' performance through reduced affective organizational commitment. We define performance broadly in terms of task, helping, and creative behaviors. Results are based on cross-lagged structural equation modeling involving two-wave data from 791 Flemish (i.e., Dutch-speaking Belgian) employees. Perceived employability had a negative cross-lagged effect on commitment. In turn, commitment had a positive cross-lagged effect on all three components of job performance. The cross-lagged effect of perceived employability on performance was non-significant. Our results suggest that perceived employability could entail a 'dark side': it might decrease affective organizational commitment, which, in turn, may compromise job performance. This may defy earlier assumptions on the overall positive effects associated with perceived employability.

Perceived employability is generally defined in terms of an individual's perceived chance of finding a new job in the external labor market (Berntson and Marklund, 2007). This concept has particular resonance in the context of the erosion of lifelong job security provided by the organization: it stimulates employees to take control over their career across organizational boundaries (Direnzo and Greenhaus, 2011). Perceived employability is also relevant in the context of the war for talent: since it is generally assumed to boost employees' job performance (e.g., De Cuyper, Van der Heijden and De Witte, 2011), employers may want to attract/retain highly employable staff (e.g., De Cuyper et al., 2014). Yet, the relationship between perceived employability and job performance is complex for three reasons.

First, job performance refers to all employee behaviors that add to organizational goal accomplishment (e.g., Rotundo and Sackett, 2002). So far, employability studies have focused on task performance (e.g., Kinnunen et al.,

2011), which concerns (the performance quality of) core job activities (Abramis, 1994). A richer account of job performance would also include spontaneous, co-operative and creative employee behaviors, which are critical for effective organizational functioning and innovation (e.g., Frese and Fay, 2001). Citizenship, for instance, concerns contributing to the organization's social and psychological environment (Borman and Motowidlo, 1993), while creativity concerns producing new, useful ideas in a proactive change- and organization-oriented manner (Amabile, 1998).

Second, the idea that perceived employability strengthens performance may be too straightforward, as perceived employability may also reduce performance indirectly through decreased organizational commitment (De Cuyper and De Witte, 2011). Perceiving high chances of a job elsewhere may reduce the desire to remain with the employer, which in turn may decrease job performance. Since commitment, and especially affective organizational commitment, is an established predictor of job performance (e.g., Allen and Meyer, 1996), one may thus question the general opinion that perceived employability is a win for the employer by introducing affective organizational commitment as an intervening factor.

Third, previous studies have used cross-sectional designs (e.g., De Cuyper, Van der Heijden and De Witte, 2011; Kinnunen et al., 2011) making it impossible to investigate the direction of the relationships. We predict relationships

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from perceived employability to performance via commitment, but this needs to be validated since reversed causation is plausible: high performance may increase employees' perceived chances to find another job (Allen and Griffeth, 1999), and being highly committed may reduce their focus on the external labor market.

In all, we aim to examine the cross-lagged relationship between perceived employability and job performance, accounting for affective organizational commitment. Our contributions are threefold. First, we probe perceived employability in relation to different performance aspects, namely task performance, citizenship in the form of helping behavior (i.e., voluntary helping colleagues with tasks/problems; Organ, 1988), and creativity. Second, we account for a potential downside to employability by probing two opposite paths to performance: the generally assumed positive direct path and a negative indirect path through reduced affective organizational commitment. Both paths are theoretically framed using Conservation of Resources (COR) Theory (Hobfoll, 1989), a stress theory that has recently been extended to employee behavior (e.g., Winkel et al., 2011). Third, we use a two-wave cross-lagged panel design to examine the direction of the relationships between perceived employability, commitment, and performance.

Employability: Clarifying the concept

Employability concerns the individual's chance of finding new employment (e.g., Berntson and Marklund, 2007) and is studied from different approaches that can be classified as input- or output-oriented (Vanhercke et al., 2014). Input-oriented approaches consider factors that increase the individual's chance of new employment, such as personal features in the form of personal flexibility (Van der Heijde and Van der Heijden, 2006). Output-oriented approaches see employability in terms of the consequences associated with the chance of new employment: they highlight potential output associated with employability, such as labor market transitions (e.g., Jackson, Tienda and Huang, 2001) and perceived employability (PE; e.g., Vanhercke et al., 2014).

PE entails the employee's perceived chance of finding a new job (Berntson and Marklund, 2007). The focus in this study is upon PE for two reasons. First, people's attitudes and actions (i.e., commitment and job performance) are based on their perceptions rather than on any other kind of reality (e.g., McLean Parks, Kidder and Gallagher, 1998). Second, PE accounts for both personal and situational aspects: it may reflect a more general sense derived from the estimated importance of one's stock of skills and competences compared to what is demanded in the labor market (De Cuyper et al., 2011).

Though PE is generally conceived with reference to the external labor market, employees may also perceive chances on a new job with the current organization (e.g., De Cuyper and De Witte, 2011). Still, we take the dominant approach to PE, with a focus on the external opportunities, since this type of PE has particular resonance in a context of reduced employment security within one organization: people may strive for employment security

across jobs and organizations. In doing so, we complement earlier research that has established that perceiving external opportunities is an asset for the employee in terms of enhanced well-being (e.g., Berntson and Marklund, 2007): we examine whether this employee perception is also an asset for the employer in terms of job performance.

Perceived employability and job performance: Direct and indirect paths

We build on Conservation of Resources (COR) Theory, which states that individuals strive to foster and protect existing resources (Hobfoll, 1989). PE is considered a personal resource (De Cuyper, Van der Heijden and De Witte, 2011): it is tied to the employee and highly valued as it provides a sense of control over and impact on the environment (Hobfoll et al., 2003). Accordingly, employees with high PE will try to foster, protect, and build on their sense of being employable.

The direct path

Traditionally, PE is thought to stimulate job performance (e.g., De Cuyper, Van der Heijden and De Witte, 2011). First, PE may enhance *task performance*. This can be understood along two COR-principles (Hobfoll, 1989). The first principle (see above) indicates that employees with high PE will attempt to foster their resource, for example by performing well. After all, future employers prefer hiring high performers (e.g., Trevor, 2001). Moreover, even if relatively invisible, high performance produces many positive signals on the labor market, such as promotions, superior reference letters, and all kinds of success experiences (Trevor, Hausknecht and Howard, 2007). The second principle is that resource-endowed persons can and will invest available resources to acquire even more resources, so as to form 'resource caravans' that are less vulnerable to loss (Hobfoll, 1989). PE is built on a large set of resources such as knowledge and expertise (e.g., Wittekind, Raeder and Grote, 2010). Accordingly, PE may lead employees to invest these resources in performing well on the job to obtain other valued resources, such as good performance records. Such records may be particularly valuable for those with high PE, as they have a higher need for displaying competence through work (Dries et al., 2014).

Second, PE may likewise enhance *helping behavior*. Employees with many resources, like those with high PE, may invest in helping colleagues in an attempt to foster this (and other) resource(s). Helping behavior may strengthen the social networks, and thus feed the 'knowing whom'-competency (e.g., Forrier and Sels, 2003) and ultimately also one's PE. Third, employees with high PE may invest in *creativity* (e.g., proactively refining daily ways of organizational working), as such behavior is highly valued by current and future employers facing high pressures to be innovative (Frese and Fay, 2001).

In sum, PE may boost performance because employees high on PE a) want to retain and obtain valuable strong(er) resource caravans and b) can because of the large set of resources available to invest (see De Cuyper et al., 2014; Hobfoll, 1989). De Cuyper et al. (2014) found initial

cross-sectional evidence for a (weak) positive association of PE with task and helping behavior. To our knowledge, no studies have examined the link with creativity. We hypothesize the following:

Hypothesis 1: PE has a positive cross-lagged effect on job performance, a) task performance, b) helping behavior, and c) creativity in particular.

The indirect path

PE may affect performance also indirectly through affective organizational commitment (AOC). First, we predict a negative cross-lagged effect of PE on AOC. Following COR theory, AOC is conditional upon individuals' willingness and ability to invest resources in the relationship (Wright and Hobfoll, 2004). Higher PE may reduce employees' willingness to commit, as long-term commitment to the employer may threaten their possibilities in the external labor market (Direnzo and Greenhaus, 2011). It may leave them with less marketable skills (Rousseau, 2011), or it may signal to other organizations that they are not interested in changing employer. Conversely, lower PE may enhance employees' willingness to invest remaining resources in commitment because they benefit from the relationship with the employer (Meyer and Allen, 1991): the inducements (i.e., employment) gained from the employer are difficult to obtain in the external labor market (De Cuyper and De Witte, 2011). This may elicit a need to reciprocate, reflected in increased willingness to commit (Ng and Feldman, 2008a).

Higher PE may also imply reduced ability to invest in AOC. According to COR theory, resources are limited and there is a tradeoff between different life domains: resources invested in one domain can no longer be invested in another. For example, employees who are highly engaged with their work spend large amounts of resources at work, leaving them with less energy and resources at home (Halbesleben, Harvey and Bolino, 2009). Likewise, employees high on PE may be so focused on (advancing) career opportunities, and investing their resources (e.g., knowledge, time, and energy) there, that they may be less able to invest those resources in the current employment relationship.

In line with theory, two cross-sectional studies have found first indications for a negative association between PE and AOC, either among a specific sample (i.e., temporary employees; De Cuyper, Notelaers and De Witte, 2009) or in a specific setting (i.e., human resources and educational services; De Cuyper and De Witte, 2011). Accordingly, we hypothesize the following:

Hypothesis 2: PE has a negative cross-lagged effect on AOC.

Subsequently, we predict a positive cross-lagged effect of AOC on performance for two reasons. First, the attitude-behavior model (Eagly and Chaiken, 1993) states that when evaluating an attitude object (un)favorably, people tend to act in a (non) supporting way towards it. Since AOC is a positive employer-focused attitude (Solinger, Van Olffen and Roe, 2008), it may prompt positive employer-targeted behaviors such as task, helping, and creative behaviors. Second, employees with high AOC are likely to define their core job responsibilities more broadly, covering more work behaviors (Morrison, 1994). Assuming that employees are more likely to perform behaviors they consider as a core part of the job (Morrison, 1994), more versus less committed employees will enhance their display of helping and creative behavior.

A multitude of cross-sectional studies have demonstrated positive relationships between AOC and job performance, particularly regarding task performance and helping behavior (e.g., Mathieu and Zajac, 1990). A positive link has also been found with a more general notion of innovative work behavior (i.e., exploring, generating, championing, and implementing novel, useful ideas; De Jong and Den Hartog, 2010) (Lee, 2008). Accordingly, we hypothesize the following:

Hypothesis 3: AOC has a positive cross-lagged effect on job performance, a) task performance, b) helping behavior, and c) creativity in particular.

The present study

Bringing Hypotheses 1–3 together, we advance the idea of two opposite processes: a) PE may directly promote performance since those with high PE want to and can foster their resources, and b) PE may decrease AOC and indirectly also performance, because employees with high PE do not want to and cannot invest in the current employment relationship. **Figure 1** shows our theoretical model. Note that we also test reversed and reciprocal cross-lagged relationships between the study variables.

Method

Procedure and respondents

The data for this study were collected in collaboration with a Human Resources (HR) magazine. Targeting employees, jobseekers, and employers, this Flemish (i.e., the Dutch-speaking part of Belgium) magazine distributes information on vacancies and work-related topics along three ways, all free: as a supplement to the weekend editions of several newspapers, via a website, and in periodical newsletters. As such, the magazine's readership covers individuals employed in all kinds of jobs and sectors, which enabled us to collect data from, and provide research evidence for, a heterogeneous group of employees.

A call for participation in our online survey study was launched in April 2012 (Time 1; T1) via an open online link that was published on the website of the HR magazine and in its newsletter. Participation was voluntary and could be ceased at any point in time during the study. All data were treated confidentially, which was communicated to the respondents in the introduction to the survey. Thus, we considered starting the survey as an informed consent. At the end of the survey, respondents could fill out a contest question to win one of five vouchers of a multimedia store. As the focus of the study was on paid employees, unemployed respondents and non-paid employees (e.g., volunteers) were immediately diverted to the contest question to prevent them from filling out the study questions.
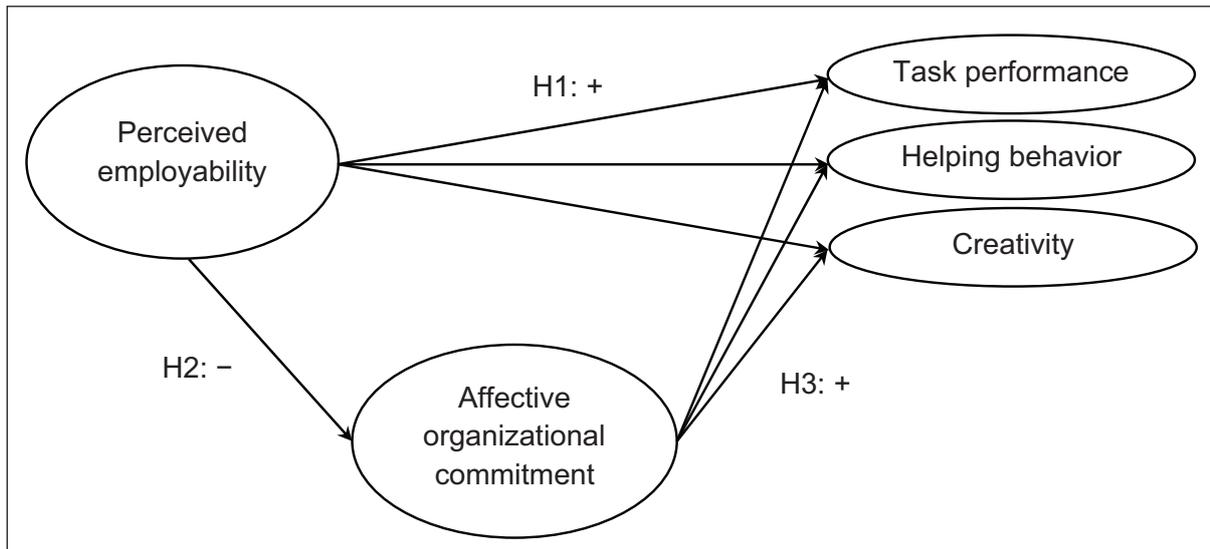
Figure 1: Theoretical model with the two hypothesized paths from perceived employability to job performance, task performance, helping behavior, and creativity in particular: a direct positive path and an indirect negative path through affective organizational commitment. *Note.* H1: Hypothesis 1; H2: Hypothesis 2; H3: Hypothesis 3.

A total of 2,560 individuals responded to the call for participation and provided complete data at T1. After removing those self-employed or younger than 17, and those who filled out the questionnaire more than once (based on e-mail address, a combination of background variables, and IP address), the final sample at T1 included 2,419 respondents.

Six months later, in October 2012 (Time 2; T2), T1-respondents who provided a valid e-mail address were invited to voluntarily participate in the follow-up (N = 2,239). Confidential treatment of their responses was again guaranteed. The same rewards as at T1 could be won based on filling out another contest question. Of the invitees, 960 (response of 43%, relative to T1) started filling out the survey. However, 169 respondents were removed due to loss of employment (n = 40), incomplete data regarding core study variables (n = 87), and/or an inter-organizational transition (n = 42). Inter-organizational transitions imply a change of employer, and hence also a change in attitude-target regarding AOC. As such, the final sample counted 791 respondents.

The average age of the final sample was 40.34 years (SD = 10.86). Most were female (58%), white-collar employees (88% versus 4% management and 9% blue-collar employees), and permanently employed (91% versus 9% temporary). Respondents came from different sectors (less than 1% primary sector including agriculture and fishery; 16% secondary sector including minerals and food industries; 32% tertiary sector or commercial services including trade, transportation, and business services; 51% quaternary sector or non-commercial services; 1% of the respondents provided no or unclear sector information). Five percent of the respondents changed job within their organization between T1 and T2.

We conducted logistic regression analyses to examine attrition from T1 to T2. Specifically, we examined whether dropout at T2 (0 = no dropout, n = 791; 1 = dropout, n = 1,628) was predicted by gender, age, and occupational position (Step 1), as well as by PE, AOC, and the three performance components at T1 (Step 2). Chi-square for Step 1 was significant, $\chi^2(7)$ = 72.71, $p < 0.001$: dropout was lower among male respondents, OR = 0.73, $p < 0.001$, and decreased with age, OR = 0.97, $p < 0.001$. Chi-square for Step 2 was non-significant, $\chi^2(5)$ = 3.31, ns, demonstrating that dropout was not predicted by the core study variables.

Measurements
All variables were measured twice, using (items from) internationally validated scales. Dutch versions of the scales for task performance and AOC were not available, but obtained using the standard forward-and-back-translation approach.

Perceived employability was measured with the scale developed by De Witte (1992), which was used successfully across countries and work settings by Isaksson et al. (2007). Respondents rated the following four items on a five-point scale ranging from 1 (*totally disagree*) to 5 (*totally agree*): 'I will easily find another job, if I lose this job,' 'I could easily switch to another employer, if I wanted to,' 'I am confident that I could quickly get a similar job,' and 'I am optimistic that I would find another job, if I looked for one'. Cronbach's alpha was 0.95 at both measurement times.[1]

Task performance was measured with six items (Abramis, 1994). Respondents indicated how well they completed aspects of their tasks during the last week (e.g., decision making). Answers ranged from 1 (*very badly*) to 5 (*very well*). Cronbach's alpha was 0.88 at T1 and 0.89 at T2.

Helping behavior was measured with four items from the scale by Podsakoff et al. (1990; Dutch translation by Andreas and Van Yperen, 2002). We selected items to reduce questionnaire length, applying the criterion of avoiding redundancy in content. Respondents indicated to which extent they, for instance, had helped others with heavy workloads during the last six months. Answers ranged from 1 (*never*) to 5 (*daily*). Cronbach's alpha was 0.74 at T1 and 0.72 at T2.

Creativity was assessed using the Idea Generation Scale, measuring the production of new and useful ideas (De Jong and Den Hartog, 2010). Respondents indicated to which extent they a) found new approaches to execute tasks, b) searched out new working methods, techniques, or instruments, and c) generated original solutions for problems during the last six months. Answers ranged from 1 (*never*) to 5 (*daily*). Cronbach's alpha was 0.82 at both measurement times.

Affective organizational commitment was measured using three items on a scale from 1 (*totally disagree*) to 5 (*totally agree*). The items were selected from the eight-item scale developed by Allen and Meyer (1990) in view of reducing questionnaire length and thus risk of response fatigue. Following criteria were considered: a) high factor loadings (>0.60) as demonstrated by Allen and Meyer (1990) and b) lack of item content overlap. The selected items are 'I feel emotionally attached to this organization,' 'I feel "part of the family" at my organization,' and 'This organization has a great deal of personal meaning for me'. Cronbach's alpha was 0.81 at T1 and 0.85 at T2.

Controls. We included four covariates to exclude alternative explanations: age (in years), gender (0 = male, 1 = female), occupational position (with unskilled blue-collar employees as the reference group for: skilled blue-collar, lower-level white-collar, medium-level white-collar, higher-level white-collar together with lower-/medium-level supervisory, and higher-level supervisory/management employees), and intra-organizational job change (0 = no change, 1 = change). These variables relate to PE (e.g., Kinnunen et al., 2011), AOC (e.g., Mathieu and Zajac, 1990), and/or job performance (e.g., Ng and Feldman, 2008b). The analyses were performed with and without covariates, but resulted in similar findings. For reasons of parsimony, we report results from the analyses without controls (Spector and Brannick, 2011).

Analyses
After rejecting multi-collinearity (i.e., correlations higher than $r = 0.85$) and non-normality (i.e., skewness index >3; Kurtosis index >10; Weston and Gore, 2006), we performed cross-lagged longitudinal analyses using structural equation modeling (SEM) by means of the Lavaan 0.5–9 package in the R-environment (Rosseel, 2012) (maximum likelihood estimation). Alternative models were compared using the χ^2-difference test.

First, we tested the measurement models. For each measurement point, we compared the hypothesized five-factor model (PE, AOC, and the three performance components; M1) with four alternative models: i) a four-factor model in which the items of PE and AOC loaded on one factor, while all others loaded on their corresponding performance-factor (M2); ii) a three-factor model including PE, AOC, and a general performance factor (M3); iii) a two-factor model including PE and a general outcome factor (i.e., containing all AOC and performance items) (M4); and iv) a one-factor model (M5). Latent factors were allowed to correlate.

Second, we tested for factorial invariance across time (Meredith, 1993). We firstly evaluated an unconstrained stability model, in which the best-fitting measurement model from T1 and T2 were connected. In this model, error terms of corresponding items at T1 and T2 were allowed to correlate and factor loadings could vary across time. Then, we imposed equality constraints on the corresponding factor loadings across measurement points (i.e., constrained stability model). A non-significant loss of fit for the later model signals that factorial invariance holds.

Finally, to test the hypothesized and alternative structural models with two-wave data, we followed the guidelines by Cole and Maxwell (2003) and Taris and Kompier (2006) (see also Hakanen, Perhoniemi and Toppinen-Tanner, 2008). The following sets of tests were performed: a first set on the causal relationships between PE and the three performance components (A), a second on those between PE and AOC (B), and a third on those between AOC and the performance components (C). (B) and (C) allow detecting indirect paths. Following this approach, we can account for the time lags between the independent variable (PE), intermediary factor (AOC), and dependent variables (the performance components). Testing all causal relationships (i.e., between PE and the performance components, PE and AOC, and AOC and the performance components) in one model would imply similar time lags between PE and AOC, and PE and the performance components. Since a cause should always precede an outcome in time, such similar time lags are to be avoided when testing indirect paths (MacKinnon, 2008). Within each set of tests, we constructed four models: the i) stability; ii) normal causation; iii) reversed causation; and iv) reciprocal causation model. Auto-regression effects were always included to control for baseline levels of the endogenous variable.

Results
Descriptive results
Table 1 presents the correlations between the study variables, the Cronbach's alphas for each scale, and their means and standard deviations. PE, AOC, helping behavior, and creativity showed a relatively high rank-order stability over time, while it was moderate for task performance. PE correlated positively with task performance and creativity at each time and across times. PE did not correlate with AOC and helping behavior. AOC correlated positively with all performance components at each time and across times.

Measurement models
Table 2 shows the fit statistics for the measurement models. The hypothesized measurement model (M1) with five separate latent factors provided a good fit at both measurement times. However, adding correlations between the error terms of two task performance items (i.e., '. . . *take* initiative?' and '. . . *take* responsibility?') provided a significantly better fit. This could be the result of a language effect (i.e., two times 'take' in the items). Model comparison using the χ^2-difference test showed that the adjusted M1-model (M1b) fitted the data significantly better than the alternative models at both T1 and T2 (see **Table 2**). Additionally, all items loaded significantly and in the expected direction on their respective latent factors.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. PE T1 (1–5)	3.07	1.03	(0.95)									
2. PE T2 (1–5)	3.02	1.03	0.77***	(0.95)								
3. AOC T1 (1–5)	3.33	0.77	0.03	0.04	(0.81)							
4. AOC T2 (1–5)	3.28	0.84	−0.02	0.03	0.76***	(0.85)						
5. T-Perf T1 (1–5)	3.78	0.59	0.11**	0.08*	0.33***	0.30***	(0.88)					
6. T-Perf T2 (1–5)	3.74	0.62	0.10**	0.14***	0.29***	0.33***	0.56***	(0.89)				
7. Help T1 (1–5)	2.98	0.75	0.01	0.00	0.17***	0.14***	0.31***	0.25***	(0.74)			
8. Help T2 (1–5)	3.01	0.73	0.03	0.06	0.20***	0.22***	0.30***	0.31***	0.62***	(0.72)		
9. Cr T1 (1–5)	3.03	0.79	0.10**	0.13***	0.21***	0.21***	0.34***	0.29***	0.45***	0.36***	(0.82)	
10. Cr T2 (1–5)	3.00	0.79	0.10**	0.16***	0.25***	0.29***	0.31***	0.40***	0.33***	0.45***	0.67***	(0.82)

Table 1: Means, Standard Deviations, and Correlations Between the Study Variables.

Note. Scale reliabilities are indicated between brackets on the diagonal. PE: perceived employability; AOC: affective organizational commitment; T-Perf: task performance; Help: helping behavior; Cr: creativity.

$* p < 0.05, ** p < 0.01, *** p < 0.001.$

Fit indices for the measurement models

Model		χ²	df	CFI	TLI	AIC	aBIC	RMSEA	SRMR	Δ Model	Δ χ²	Δ df
Time 1												
M1	5 factors	680.21	160	0.94	0.93	34,005.34	34,080.23	0.06	0.04			
M1b	*5 factors*	*474.07*	*159*	*0.96*	*0.96*	*33,801.20*	*33,877.59*	*0.05*	*0.04*	M1–M1b	206.14***	1
M2	4 factors	1,429.99	163	0.85	0.83	34,749.12	34,819.52	0.10	0.11	M2–M1b	955.92***	4
M3	3 factors	1,752.20	166	0.81	0.79	35,065.33	35,131.23	0.11	0.09	M3–M1b	1,278.10***	7
M4	2 factors	2,434.08	168	0.73	0.70	35,743.21	35,806.12	0.13	0.11	M4–M1b	1,960.00***	9
M5	1 factor	4,850.59	169	0.45	0.38	38,157.72	38,219.13	0.19	0.23	M5–M1b	4,376.50***	10
Time 2												
M1	5 factors	658.66	160	0.95	0.94	33,533.92	33,608.81	0.06	0.05			
M1b	*5 factors*	*488.28*	*159*	*0.97*	*0.96*	*33,365.54*	*33,441.92*	*0.05*	*0.05*	M1–M1b	170.38***	1
M2	4 factors	1,761.16	163	0.83	0.80	34,630.42	34,700.81	0.11	0.13	M2–M1b	1,272.90***	4
M3	3 factors	1,705.19	166	0.84	0.81	34,568.44	34,634.35	0.11	0.09	M3–M1b	1,216.90***	7
M4	2 factors	2,648.89	168	0.73	0.70	35,508.15	35,571.06	0.14	0.11	M4–M1b	2,160.60***	9
M5	1 factor	5,324.86	169	0.45	0.38	38,182.12	38,243.53	0.20	0.24	M5–M1b	4,836.60***	10
Cross-lagged relationships between perceived employability and job performance												
S1 Stability		966.04	505	0.97	0.97	54,366.72	54,501.52	0.03	0.05			
S2 Normal caus.		964.42	502	0.97	0.97	54,371.11	54,510.40	0.03	0.05	S1–S2	1.61	3
S3 Reversed caus.		*958.20*	*502*	*0.97*	*0.97*	*54,364.89*	*54,504.18*	*0.03*	*0.05*	S1–S3	7.84*	3
S4 Recip. caus.		956.58	499	0.97	0.97	54,369.27	54,513.05	0.03	0.05	S3–S4	1.62	3

Contd.

Model	χ^2	df	CFI	TLI	AIC	aBIC	RMSEA	SRMR	$\triangle$ Model	$\triangle \chi^2$	$\triangle$ df
Cross-lagged relationships between perceived employability and affective organizational commitment											
S1 Stability	183.06	71	0.99	0.99	21,960.31	22,011.23	0.05	0.04			
S2 Normal caus.	**179.16**	**70**	**0.99**	**0.99**	**21,958.40**	**22,010.83**	**0.04**	**0.04**	S1–S2	3.90*	1
S3 Reversed caus.	182.03	70	0.99	0.99	21,961.27	22,013.70	0.05	0.04	S1–S3	1.03	1
S4 Recip. caus.	178.15	69	0.99	0.99	21,959.40	22,013.32	0.05	0.04	S2–S4	1.01	1
Cross-lagged relationships between affective organizational commitment and job performance											
S1 Stability	1,009.13	442	0.96	0.95	51,981.09	52,109.90	0.04	0.06			
S2 Normal caus.	**990.12**	**439**	**0.96**	**0.95**	**51,968.09**	**52,101.39**	**0.04**	**0.05**	S1–S2	19.00***	3
S3 Reversed caus.	1,006.11	439	0.96	0.95	51,984.07	52,117.38	0.04	0.06	S1–S3	3.02	3
S4 Recip. caus.	987.30	436	0.96	0.95	51,971.27	52,109.06	0.04	0.05	S2–S4	2.82	3

Table 2: Fit Indices for the Measurement and Structural Models.

Note. CFI and TLI values above 0.90 indicate a good fit, values equal to or higher than 0.95 an excellent fit; RMSEA values below or equal to 0.08 indicate a good fit, values lower than 0.05 an excellent fit; SRMR values below 0.09 indicate an excellent fit (Weston and Gore, 2006). For AIC and aBIC, the following rule holds: the smaller the value, the better the fit.

Caus.: causation; Recip.: reciprocal.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Factorial invariance

We inspected factorial invariance across time by comparing the unconstrained to the constrained stability model. The unconstrained model combined M1b from T1 and T2 and provided a good fit (χ^2(693) = 1,380.89, $p < 0.001$, CFI = 0.97, TLI = 0.96, AIC = 64,101.64, aBIC = 64,291.86, RMSEA = 0.04, SRMR = 0.05). The constrained model included equality constraints on the corresponding factor loadings across time. The chi-square difference test indicated a non-significant loss of fit (χ^2(708) = 1,390.62, $p < 0.001$, CFI = 0.97, TLI = 0.96, AIC = 64,081.36, aBIC = 64,249.11, RMSEA = 0.04, SRMR = 0.05, $\Delta\chi^2$(15) = 9.72, ns), supporting factorial invariance.

Structural models

Table 2 presents the fit indices for each set of structural models. First, we probed the cross-lagged relationships between PE and performance (panel b). The normal causation model ($S2$) with cross-lagged associations from PE (T1) to the three performance components (T2) did not improve model fit compared to the stability model ($S1$; $\Delta\chi^2$(3) = 1.61, ns). The reversed causation model ($S3$) fitted the data better than S1 ($\Delta\chi^2$(3) = 7.84, $p < 0.05$). Furthermore, the reciprocal model ($S4$) did not improve model fit compared to S3 ($\Delta\chi^2$(3) = 1.62, ns). Thus, in terms of parsimony, the best fitting model was S3. In contrast with Hypothesis 1, the results show that creativity (T1) had a positive cross-lagged effect on PE (T2; $\gamma = 0.10$, $p < 0.01$; **Figure 2**).

Next, we probed the cross-lagged relationships between PE and AOC (panel c). The normal causation model ($S2$) with a cross-lagged association between PE (T1) and AOC (T2) fitted the data better than the stability model ($S1$; $\Delta\chi^2$(1) = 3.90, $p < 0.05$). The reversed causation model ($S3$) did not improve model fit compared to S1 ($\Delta\chi^2$(1) = 1.03, ns). Furthermore, the reciprocal causation model ($S4$) did not improve model fit compared to S2 ($\Delta\chi^2$(1) = 1.01, ns). Therefore, the best fitting model was the normal causation model. Supporting Hypothesis 2, PE (T1) had a negative cross-lagged effect on AOC (T2; $\gamma = -0.05$, $p < 0.05$; **Figure 3**).[2]

Finally, we studied the cross-lagged relationships between AOC and performance (panel d). The normal causation model ($S2$) with cross-lagged associations between AOC (T1) and the three T2-performance components fitted the data better than the stability model ($S1$; $\Delta\chi^2$(3) = 19.00, $p < 0.001$). The reversed causation model ($S3$) did not improve model fit compared to S1 ($\Delta\chi^2$(3) = 3.02, ns). Likewise, the reciprocal causation model ($S4$) did not improve model fit compared to S2 ($\Delta\chi^2$(3) = 2.82, ns). Thus, supporting Hypothesis 3, the normal causation model was the best fitting model. AOC (T1) had a positive cross-lagged effect on task (T2; $\gamma = 0.12$, $p < 0.001$), helping (T2; $\gamma = 0.09$, $p < 0.05$), and creative behavior (T2; $\gamma = 0.11$, $p < 0.001$; **Figure 4**).

In sum, the cross-lagged SEM analyses lent support for the negative indirect effect of PE on job performance, via commitment, over a six month follow-up period. Unexpectedly, PE showed no significant cross-lagged effect on job performance.

Discussion

The current study highlighted two opposite pathways between perceived employability and job performance: a direct positive path and an indirect negative path through
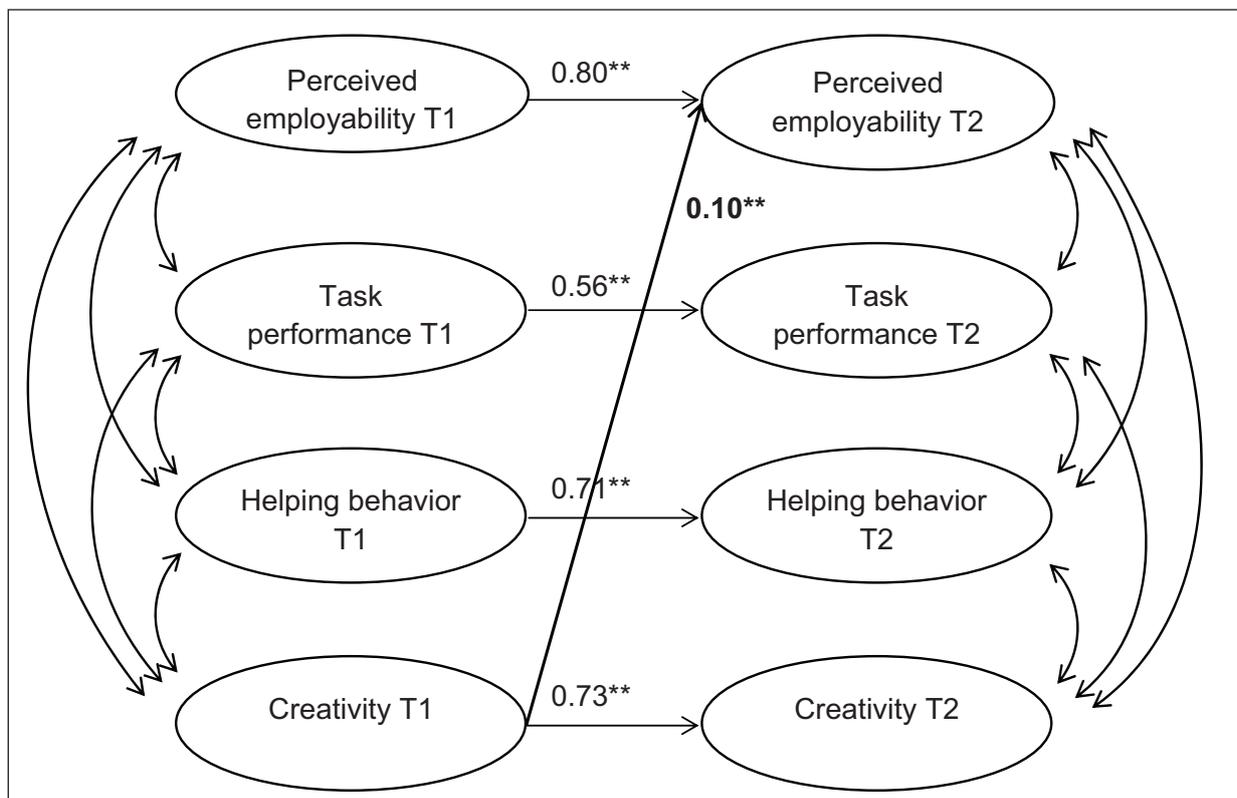
Figure 2: Final structural model with the cross-lagged relationships (in bold) between perceived employability, and task performance, helping behavior, and creativity. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.
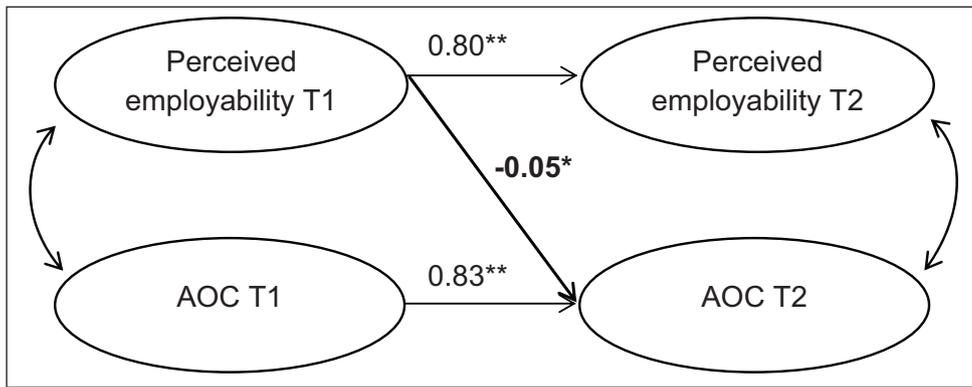
Figure 3: Final structural model with the cross-lagged relationship (in bold) between perceived employability and affective organizational commitment. *Note.* AOC: affective organizational commitment. $p < 0.05$, $p < 0.01$, $p < 0.001$.
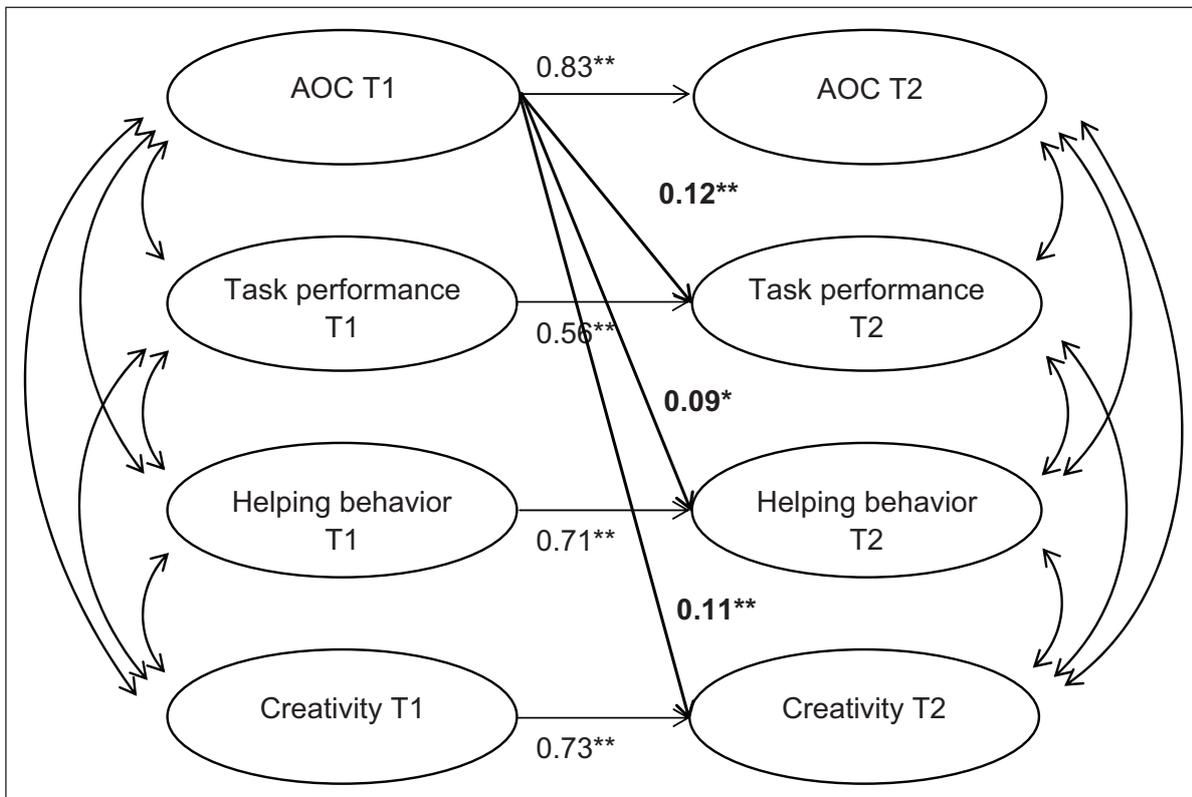
Figure 4: Final structural model with the cross-lagged relationships (in bold) between affective organizational commitment, and task performance, helping behavior, and creativity. *Note.* AOC: affective organizational commitment. $p < 0.05$, $p < 0.01$, $p < 0.001$.

affective organizational commitment. As such, it challenged the idea that perceived employability is overall positive. Strong features are the broad scope of performance outcomes (i.e., task, helping, and creative behavior) and the two-wave cross-lagged design.

Our results supported the idea that PE might have a dark side, at least from the employer's perspective: PE might reduce AOC, which, in turn, could diminish performance. This aligns with the idea that higher PE may cause employees to focus more strongly on protecting and fostering their career opportunities outside the organization (Hobfoll, 1989), and investments in long-term commitment to the employer may be conceived as a threat to such

opportunities (Direnzo and Greenhaus, 2011). Conversely, lower PE may lead employees to be more willing to invest remaining resources in the current employment relationship, reaping the benefits of such investments (Ng and Feldman, 2008a). Additionally, employees tend to act in a more/less supporting way towards their organization when they feel more/less committed (Solinger, van Olffen and Roe, 2008). As a result, PE may reduce AOC, and hence task as well as spontaneous co-operative and creative performance behaviors.

We additionally tested for reversed and reciprocal relationships. Unexpectedly, creativity related to an increase in PE. Plausibly, creative behaviors are especially valuable

for (future) employers since today's economic context thrives on innovation (Frese and Fay, 2001), and creativity is transferrable across organizations (Fugate, Kinicki and Ashforth, 2004). Yet, caution is needed since our results hint at the existence of a reciprocal process: creativity may strengthen perceived employability across time (creativity → enhanced PE), which, in turn, could reduce creativity across time via diminished AOC (PE → reduced AOC → reduced creativity).

Our study results contribute to the literature by probing the potential dark side of resources, PE in particular. Personal resources may not be a win for all involved, as they may stimulate self-interest with unintended negative outcomes for the employer (e.g., Gorgievski, Halbesleben and Bakker, 2011). Such downsides have already been shown for emotional intelligence (Winkel et al., 2011): emotionally intelligent individuals were more likely to harm their employer (e.g., stealing or hurting co-workers with insults). Our study may add to possible downsides of resources: it showed a negative, though relatively weak, cross-lagged effect from PE to AOC, which then could reduce positive performance behaviors.

The results may also inform practitioners wanting to attract/retain a workforce with high (perceived) employability: they may want to account for these employees' potentially reduced affective organizational commitment across time. Following COR Theory, practitioners may try to counter this detrimental effect by enhancing these employees' willingness to invest in the current employment relationship (Wright and Hobfoll, 2004). Since we argued that such reduced willingness to invest may originate from (amongst others) the threat(s) of long-term commitment to skill marketability, providing skill enhancing internal job transitions might prove a valuable approach. Moreover, many studies have already shown the positive impact of developmental opportunities on employees' commitment (e.g., Mendelson, Turner and Barling, 2011).

Limitations
Our study has some limitations. First, attrition from T1 to T2 was higher among female and younger respondents. Still, the implications of this bias owing to dropout may be limited: cross-lagged analyses with and without gender and age as controls yielded similar findings. Nevertheless, our sample may represent a rather exceptional population: the respondents were perhaps more career-oriented as they were readers of an HR magazine publishing information on job opportunities. This might have enhanced the salience of certain theoretical arguments (e.g., employees high on PE as more likely to invest in their career rather than employment relationship). Future research may therefore examine aspects like career orientation as moderators in the (cross-lagged) relationship between PE and AOC. Nevertheless, our sample may also be conceived as a strength, since we found a cross-lagged relationship with AOC in a group with a possibly restricted range in PE. Social desirability may also be less an issue as the data were collected free from the organizational context.

Second, we applied a two-wave repeated-measurement design to probe an indirect effect. Indirect paths are ideally studied using three-wave designs, which also allow testing direct and indirect paths in one model (e.g., Preacher and Hays, 2008). Nevertheless, two-wave designs are a good alternative upon constant causal structures over time (Cole and Maxwell, 2003). We believe that stationarity holds, since we see few reasons why the cross-lagged relationships between the core variables would change over time. Moreover, compared to cross-sectional designs, this approach provides more certainty about the direction of relationships and rules out alternative explanations by controlling for autoregressive effects (Cole and Maxwell, 2003).

Third, the study is based on single-source self-reported measurements, inducing the risk of common method bias. In this regard, we followed several of the recommendations by Podsakoff et al. (2003), such as guaranteeing confidentiality, testing the discriminant validity, and applying a two-wave design. Together, these actions increase our confidence in the validity of the study conclusions. Future research may, however, replicate our findings using objectively or supervisory rated performance measures.

Fourth, a potential criticism may concern the apparent discrepancy between the results of the correlation and cross-lagged SEM analyses: PE did not relate to AOC within and across times, yet showed a significant small negative cross-lagged effect. The reason for this apparent discrepancy may concern the differential meaning of cross-lagged effects: whereas correlations concern the relationships between variables at different points in time, cross-lagged effects concern the *change* in a concept across time (i.e., the effect of one variable onto another after controlling for baseline) (e.g., De Lange et al., 2004; Taris and Kompier, 2006). Significant correlations thus do not automatically imply significant cross-lagged effects and vice versa. Also, cross-lagged effects are often rather small (e.g., De Lange et al., 2004; Taris and Kompier, 2006): since concepts are largely stable across time, longitudinal research with short time lags (e.g., less than one year) generally shows that other variables fail to explain large amounts of additional variance. This was also apparent in our study, especially as regards the cross-lagged effect of PE on AOC: b was –0.05 and the rank-order stability for AOC was 0.83 (for similar stabilities in AOC, see Kam et al., In press; Meyer, Allen and Gellatly, 1990). In other words, whereas PE did not predict future AOC per se – relatively speaking those with higher/lower AOC at T1 largely held higher/lower AOC at T2, it did predict a (small) reduction in AOC across time.

Note that although a small effect-size might be in line with expectations, one could wonder whether the cross-lagged effect of PE on AOC is meaningful. This question relates to practical rather than statistical significance. We believe our results are of value for practitioners. As De Lange et al. (2004) note, small effects may accumulate across time as little drops of water dent a stone, ensuing in a strong reduction in the outcome across time. Also, many small factors together create a large negative impact. We therefore encourage employers to take measures to prevent reduced affective organizational commitment owing to perceived employability. Also, we encourage future research to probe whether the negative cross-lagged effect

of perceived employability on affective commitment is particularly strong or even positive for some and/or under certain circumstances (see earlier).

Conclusion

Our study provides indications for the idea that there may be a dark side to perceived employability, at least from the employer's perspective: employees with higher versus lower perceived employability may reduce affective commitment across time, while affective commitment is important for employee job performance in terms of task performance, helping behavior, and creativity. This observation prompts many further questions: 'Does perceived employability entail a dark side for all or are moderators such as career orientations involved?,' 'Does perceived employability also have positive effects on performance?,' and 'Does it's dark side also show in destructive work behaviors, such as stealing?'. Research addressing these questions may further scholarly and practitioner insight into the true meaning of perceived employability for employee job performance.

Competing Interests

The authors declare that they have no competing interests.

Notes

[1] Only one item explicitly refers to employment elsewhere. Yet, we are confident that respondents interpreted the other three items with reference to the external labor market as well. First, our study was framed with reference to employee reactions to uncertainty about employment, particularly within one organization. As stated previously, perceived external employability has particular resonance in such a context. Thus, we trust that all items were interpreted in terms of external opportunities. Also, PE is intuitively interpreted in terms of chances in the external rather than internal labor market (e.g., De Cuyper and De Witte, 2011; Rothwell and Arnold, 2007). Second, our scale had an internal consistency of 0.95. Past research showed correlations no larger than 0.50 between items measuring perceived internal and external employability (e.g., Rothwell and Arnold, 2007).

[2] Despite the non-significant correlations between PE and AOC, both within and across waves (**Table 1**), we found a significant cross-lagged effect of PE (T1) on AOC (T2). This can in part be attributed to the fact that SEM takes measurement error into account (for a further discussion on the reason for this apparent discrepancy, see the Limitations section).

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