

How does employee development affect turnover intention? Exploring alternative relationships

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Abstract

This study explores alternative relationships between perceived investment in employee development (PIED) and turnover intention by including affective commitment, perceived internal employability, and perceived external employability as potential mediators. Data were collected through a structured survey from 337 employees working in two large companies in Italy. The factorial validity and dimensionality of the latent constructs studied were evaluated in a confirmatory factor analysis framework, and the mediation hypotheses were tested in a full structural equation model. Results show that the overall effect of PIED on turnover intention is negative and almost fully mediated by external employability and affective commitment, whereas the path through internal employability is not supported. More specifically, PIED increases commitment, which in turn limits the likelihood of turnover. In addition, although perceived external employability is positively associated with turnover intention, PIED seems to reduce this effect by negatively affecting employee perceptions of their marketability in the labour market. The study supports

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the assumptions of social exchange theory in explaining turnover behaviour as a consequence of employee development support. Contextually, it questions the existence of the employability paradox because it does not reveal either a retention path via perceived internal employability or a turnover risk via perceived external employability.

KEY WORDS

affective commitment, human capital theory, perceived employability, perceived investment in employee development, social exchange theory, turnover intention

INTRODUCTION

Employee development concerns companies' initiatives to train employees, strengthen their skill base, or retrain them. Although employee development is critical for maintaining and developing the capabilities of both individual employees and the entire organisation, and especially so in turbulent and dynamic contexts (Chen et al., 2020; De Vos et al., 2015), the debate is open about the potential risks and benefits to companies from their investments in human capital (Van Harten et al., 2020). In particular, it remains unclear how and through which mechanisms investment in employee development affects workers' turnover behaviour. Two main research perspectives can be distinguished in the literature.

First, some researchers have claimed that investment in employee development affects motivation and leads to positive employee attitudes and behaviour towards their organisation (e.g., Ichniowski et al., 1997; MacDuffie, 1995; Youndt et al., 1996). Building on social exchange theory, these studies show that when the organisation takes care of its employees by investing in continuous training and development, employees reciprocate through greater commitment and loyalty to the organisation (Croppanzano & Mitchell, 2005; Eisenberger et al., 2001). Accordingly, recent empirical research has revealed a retention path between employee development and turnover intention (TI), which is mainly due to increased employee affective commitment (AC) towards their employer (Koster et al., 2011; Lee & Bruvold, 2003; Rodrigues et al., 2019).

Second, investment in employee development may enhance employability and, concomitantly, employees' ability to access job opportunities within their organisation and with other employers (Fugate et al., 2021). According to human capital theory, employee development may create opposing effects on TI through employability. First, by enhancing external employability, development practices may increase employee TI by making employees more attractive to prospective employers (Benson, 2006; De Cuyper & De Witte, 2011; Nelissen et al., 2017; Rodrigues et al., 2019). Second, by enhancing internal employability, employee development practices may also strengthen the organisation's overall retention capacity by reducing employee interest in leaving the workplace (Moreira et al., 2020; Nelissen et al., 2017). Existing empirical results on the 'employability paradox' are rather discordant, and further evidence is needed on the mediating roles of internal and external employability in the relationship between employee development and TI (Van Harten et al., 2020).

To date, it is unclear which of the two theories and relative mechanisms prevail in explaining the relationship between employee development and personnel turnover (Koster et al., 2011). The present study addresses this gap by testing different paths between employee development and TI with a sample of 337 employees from two organisations in Italy. To do this, the study includes AC, perceived internal employability (PIE), and perceived external employability (PEE) as potential mediators in the relationship between perceived investment in employee development (PIED) and TI.

Furthermore, previous research has conceptualised and measured employee development in different ways (Wang et al., 2020). Building on a scant but growing literature, the present study considers PIED, which is an evaluative metric of human resources (HR) practices that focuses on employees' assessment of their organisation's commitment to help employees learn to identify and obtain new skills and competencies (Kuvaas & Dysvik, 2009; Lee & Bruvold, 2003). Previous empirical research has shown that PIED can lead to different positive organisational outcomes, such as job satisfaction, employee attitudes, and worker performance (Dysvik et al., 2016; Kuvaas, 2008; Kuvaas & Dysvik, 2009, 2010; Lee & Bruvold, 2003). However, evidence on the relationship between PIED and turnover behaviour is scarce, and further investigation is required (Fallon & Rice, 2015; Koster et al., 2011; Moreira et al., 2020).

The present study makes numerous contributions to the literature (e.g., Koster et al., 2011; Lee & Bruvold, 2003). First, it tests alternative explanatory mechanisms in the relationship between employee development and TI. By considering AC, this study examined a retention path from employee development to TI that is predicted by social exchange theory and widely demonstrated by previous empirical works (e.g., Lee & Bruvold, 2003). Contextually, by including self-perceived employability and distinguishing between internal and external employability, the study also explores the incremental explanatory power of human capital theory (Benson, 2006). More specifically, it concurrently verifies the existence of a retention path induced by development activities through PIE, and a turnover path from employee development that is mediated by PEE. Furthermore, because the present study simultaneously considers the antecedents and consequences of perceived internal and external employability, it also fulfils calls for empirical and 'holistic' evidence on the employability paradox in HR management (Iman & Chambel, 2020; Van Harten et al., 2020). Finally, the study contributes to the relatively small literature on PIED (Kuvaas & Dysvik, 2009) by shedding light on the link between PIED and perceived employability that, to the best of our knowledge, has not previously been tested.

THEORETICAL BACKGROUND AND STATE OF RESEARCH

PIED and TI through AC: Social exchange perspective

Most studies on the effect of employee development on turnover approach the issue from the perspectives of organisational support theory and social exchange theory. Organisational support theory assumes that employees develop personal beliefs regarding the extent to which their employer values their contributions and cares about their well-being (Rhoades & Eisenberger, 2002). Social exchange theory suggests that employees feel an obligation to give the employer a positive attitude and behaviour when they perceive themselves to have received a high level of support from the organisation (Eisenberger et al., 2001). In particular, social exchange theory assumes that employees develop a greater AC towards their organisation when

the organisation demonstrates a commitment towards their needs and provides adequate monetary and nonmonetary rewards (Coyle-Shapiro et al., 2006).

PIED detects a specific form of organisational support and distinguishes organisations focused on providing continuous training and development opportunities to their employees (Kuvaas & Dysvik, 2010). More specifically, PIED is conceptualised and operationalised as employees' perceptions of the level of the organisation's commitment towards enriching their skills, knowledge, experience, and abilities (Kuvaas & Dysvik, 2009). Although many studies prove the positive relationship between perceived organisational support and AC, empirical support for the role of the PIED in employee commitment is scarce. Exceptions include Lee and Bruvold (2003) and Kuvaas and Dysvik (2010), who report positive and statistically significant associations between PIED, AC, and other organisational outcomes. Accordingly, we form the following hypothesis:

Hypothesis 1: *PIED is positively associated with AC.*

Managerial literature shows that AC can bring important benefits to the organisation in motivation, productivity, and financial performance (Meyer et al., 2002). Furthermore, it is argued that when employees identify with and are emotionally attached to their organisation, they are less likely to leave the organisation and tend to stay longer. Building on these assumptions, several studies have demonstrated a negative relationship between AC and TI (e.g., D. G. Allen & Shanock, 2013; Fazio et al., 2017). Accordingly, we form a second hypothesis:

Hypothesis 2: *AC is negatively associated with TI.*

The above theorising and research findings suggest that AC mediates the relationship between PIED and TI. Indeed, Lee and Bruvold (2003) reported that AC mediates the relationship between PIED and employee intention to leave the organisation, and more recent studies have reached similar conclusions (Koster et al., 2011; Rodrigues et al., 2019). The common conclusion from previous research is that when an organisation takes care of its employees by investing in their development, employees reciprocate through greater commitment and intention to stay with the company for the long term. Therefore, and in accordance with H1 and H2, we expect a retention path to go from PIED to TI via AC, as an important mediator. This leads to our third hypothesis:

Hypothesis 3: *AC mediates the relationship between PIED and TI.*

PIED and TI through perceived employability: Human capital perspective

The relationship between employee development and TI can be also approached from the perspective of human capital theory. According to this theory (Becker, 1965), by investing in training and development, employers contribute to strengthening the employability of their employees (Van Harten et al., 2016). Previous research has shown that formal and informal training (De Grip & Sanders, 2004; De Vries et al., 2001; Groot & Maassen, 2000; Van der Heijden et al., 2009), job characteristics (Nelissen et al., 2017; Van Harten et al., 2016), and specific managerial support practices (Akkermans et al., 2019; De Vos et al., 2011; Martini &

Cavenago, 2017; Rodrigues et al., 2019) all contribute to increasing employee eligibility for job opportunities within and between employers. Furthermore, depending on whether an employer's investments focus on specific or general human capital, they can increase employees' perceived internal or external employability and, in turn, generate opposing effects on employees' TI.

By investing in 'specific' skills, employers contribute to increasing the productivity of workers within the firm (Becker, 1965) and their capability to achieve higher performance. To benefit from their investments in specific human capital, employers may wish to retain their more valuable and high-performing employees (Lepak & Snell, 1999). Consequently, by investing in specific human capital, employers can enhance employees' self-PIE. De Vos et al. (2011), for example, showed that a greater perception of employer investment in employee development is associated with greater competencies, including 'occupational expertise', which make a person more employable in the internal labour market. A recent study by Moreira et al. (2020) has also revealed a positive link between perceived support for competence development and PIE. Furthermore, focusing on PIED, Solberg and Dysvik (2016) found that organisational support for development was positively related to employee internal employability orientation. Thus, we form the following hypothesis:

Hypothesis 4: *PIED is positively associated with PIE.*

PIE may reduce employees' interest in leaving their organisation (Steel & Landon, 2010). Employees who believe they are more likely to be retained and have good career prospects with their current employer may place greater weight on the disadvantages of leaving the organisation (De Cuyper & De Witte, 2011). Similarly, when employees feel that their organisation offers opportunities for future advancement, they may respond reciprocally with increased loyalty (Nelissen et al., 2017). Consequently, PIE is expected to negatively affect TI, although prior empirical evidence on this relationship is scarce (Moreira et al., 2020; Nelissen et al., 2017). Thus, we form the following hypothesis:

Hypothesis 5: *PIE is negatively associated with TI.*

Based on the above discussion, employee development can help to retain staff because it can support and improve employees' beliefs about their employment prospects with their current employer (Moreira et al., 2020; Soares & Mosquera, 2021). Then, given that PIED is expected to positively affect PIE (H4) and internal employability is expected to negatively affect TI (H5), we expect PIED to reduce TI via self-reported internal employability. This leads to the following hypothesis:

Hypothesis 6: *PIE mediates the relationship between PIED and TI.*

Employee development can also increase employee opportunities in the external labour market (Benson, 2006; Nelissen et al., 2017), especially when the employers' investments include the reinforcement of general skills. Returning to Becker (1965), 'general' skills are those that increase the productivity of labour across, and can be appreciated by, different employers. General human capital theory suggests that by developing skills that are useful across a wide range of organisations, employers increase workers' employment prospects and the likelihood that employees will market their skills elsewhere (Becker, 1965; Lynch, 1991; Mincer, 1988). Previous empirical literature

confirms the assumptions of general human capital theory. De Vos et al. (2011), for example, have revealed a positive relationship between PIED and PEE. Similarly, Nelissen et al. (2017) have shown that both upward job transitions and lateral job transitions can enhance employees' PEE. According to general human capital theory and existent empirical evidence, we propose the following hypotheses:

Hypothesis 7: *PIED is positively associated with PEE.*

Turnover theories affirm that perceived ease of movement and job alternatives shape employee turnover behaviour (De Grip & Sanders, 2004; Griffeth et al., 2005). More specifically, employees who perceive themselves to be employable in the labour market are motivated to consider other employment options, to consider leaving their current organisation, and finally to quit. Although scant research exists on this topic, the employability literature reveals a positive and statistically significant association between PEE and employee TI (De Cuyper & De Witte, 2011; De Cuyper et al., 2011; Nelissen et al., 2017). Thus, we form the following hypothesis:

Hypothesis 8: *PEE is positively associated with TI.*

Employee development may thus involve a risk to the organisation of an increase in labour turnover and its related costs (Koster et al., 2011; Nelissen et al., 2017). Research on the employability paradox links turnover risk to the impact of employer investments in training and development on employees' external employability (Benson, 2006; De Cuyper & De Witte, 2011; Van Harten et al., 2020). Although recent empirical research has questioned the assumptions behind the employability paradox (Akermans et al., 2019; De Cuyper & De Witte, 2011; Rodrigues et al., 2019), other research has demonstrated a substantial positive path between employee development practices and turnover, mediated by PEE (Acikgoz et al., 2016; Nelissen et al., 2017). According to H7 and H8, we expect that PEE partially mediates the relationship between PIED and TI; in particular, we expect employee development increases TI by enhancing employee perceptions of employment opportunities in the external labour market. This leads to the following hypothesis:

Hypothesis 9: *PEE mediates the relationship between PIED and TI.*

In light of the discourse above, the study intends to simultaneously verify different paths that may connect PIED to TIs, considering AC, PIE and PEE as possible mediators. The hypotheses of this study are summarised in Figure 1.

MATERIALS AND METHOD

Data and sample

Data were collected in 2019 from two large, private organisations in Italy operating in the information and technology (IT) and pharmaceutical sectors (pharma). These two companies were chosen for this study because they voluntarily decided to participate in a pilot research project conducted by the authors and aimed at developing a corporate employability index. A

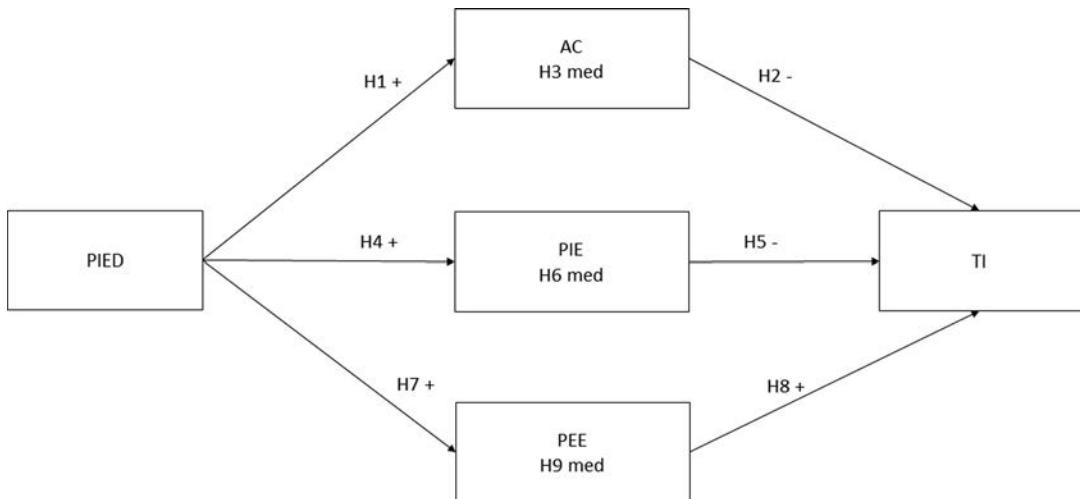


FIGURE 1 The empirical framework

web survey was administered to employees of the two organisations to detect, among other things, (1) the support provided by the organisation for employee development, (2) perceived internal and external employability, (3) AC and (4) TI. The questionnaire was initially shared with the HR managers of the two companies, who then provided employees' email addresses and promoted participation in the research on a voluntary basis through dedicated internal communications.

The web survey was administered between February and March 2019 and the response rate was 70.5 per cent, with 337 out of 478 employees completing the questionnaire. Of these, 68 per cent were male and 32 per cent were female. Ages were grouped as follows: less than 34 years (46.5 per cent), 35–44 years (21.7 per cent), 45–54 years (21.1 per cent), and more than 55 years (10.7 per cent). Similarly, job tenure was grouped as less than 5 years (47.0 per cent), 6–15 years (25.3 per cent), and more than 16 years (27.7 per cent). Educational level was measured by five categories; among these, 64 per cent held a university degree of 3 years' study or a higher educational qualification. 78.9 per cent were technical or professional employees, and the remainder were managers.

Of the total sample, 64.6 were employed by the IT organisation, and 35.4 by the pharma organisation. In IT, the workforce consists mainly of men and young highly qualified personnel, with a limited job tenure of less than 5 years. Instead, in pharma, employees are older with a greater seniority on average and the workforce is largely composed of females with different levels of education.

Measures

Five multi-item measures of worker perceptions were extracted from previously validated scales and used in the study. Apart from socio-demographic characteristics, respondents were asked to answer each item on a seven-point Likert scale (1 = completely disagree, 7 = completely agree). Their descriptive statistics are reported in the Supporting Information: Appendix. Before administering the survey, all the items were reviewed by the HR staff of the

two companies who verified their content validity and their adequacy to the specific organisational contexts.

PIED was measured using five items from the original scale of Kuvaas and Dysvik (2009). The five items were selected from the original eight-item scale to avoid excessively similar questions and, consequently, to reduce collinearity risk. This scale was preferred to that proposed by Lee and Bruvold (2003) because the former seems more suitable for comparing different organisations (Kuvaas & Dysvik, 2009). In fact, the scale used for the present study is not linked to the adoption of specific HR practices but instead considers employee perceptions about the company's long-term and continuous commitment to support development. Cronbach's alpha for PIED is 0.96.

AC was measured using three items extracted from the original eight-item scale of N. J. Allen and Meyer (1990). Allen and Meyer's scale contains several items that commonly cross-load with intention-to-stay or intention-to-turnover measures (Bozeman & Perrewé, 2001), so only items detecting affective attachment were selected to avoid artificial inflation of the correlation between AC and TI due to item overlap. Cronbach's alpha for AC is 0.71.

PIE was measured using two items assessing workers' perceptions of career opportunities available within their current organisation. Two items were selected from the scale of De Cuyper and De Witte (2011) and adapted to the empirical context, and measure employee expectations of finding another job and finding a better job within their current organisation. A third item was originally added which assesses the chance of the employee to keep his/her actual job. However, this item had low relevance in the factor model and the internal reliability of the subscale clearly benefited from its exclusion. Cronbach's alpha for PIE is 0.61.

PEE was measured using three items assessing workers' perceptions of available employment opportunities in the external labour market. Two items were selected from De Cuyper and De Witte (2011) and addressed expectations regarding getting a new job, getting a better job. An additional item was included to reinforce the overall meaning of construct and assess worker's chance of finding a job that fits with his/her expectations (Martini et al., 2021). Cronbach's alpha for PEE is 0.91.

TI was measured adapting the scale developed by Landau and Hammer (1986) to the specific context of study. The three items composing the original version of the scale were simply translated into Italian, while an additional reverse-item was added to strengthen the overall construct. Cronbach's alpha for TI is 0.85.

Control variables

We included control variables for gender, age, and educational level because these often emerge as additional predictors of TI. Age was recorded using four categories (up to 34 years, 35–44 years, 45–54 years and over 55 years) and educational level differentiated between those holding at most a high school diploma and university graduates. Multicollinearity prevented us from using age and job tenure variables in the same model, so we performed the analysis using only age as an independent variable. We also included a dummy variable measured at the organisation level to control for the type of company (IT or pharma).

Analysis

Two stages of analysis were carried out in a full structural equation modelling framework using Mplus-7 statistical software. In the first stage, we evaluated a measurement model in which PIED, AC, PIE, PEE and TI latent constructs were simultaneously estimated and permitted to covary (Model 1). In the second stage, we estimated a structural model to investigate the parallel mediating roles played by AC, PIE, and PEE in the relationship between PIED and TI (Model 2). Model 1 allowed us to evaluate the factorial validity and dimensionality of the latent constructs in a confirmatory factor analysis (CFA) framework, testing whether observed items load on the expected factors with a sufficient fit to the empirical data. Model 2 enabled us to investigate the underlying mechanisms that regulate the relationship between PIED and TI by including the intervening variables AC, PIE and PEE, together with a set of covariates measured at the individual and company levels to check for the absence of potential confounders of the mediator-outcome relationships (Van der Weele, 2015). In other words, we evaluated whether the overall effect of PIED on TI was at least partially mediated by each of the three mediators under study and quantified the magnitude of the indirect effects passing through them. The significance of such mediation effects was estimated using the asymmetric distribution of products method (MacKinnon, 2008), a bootstrapping approach to correct for the inaccuracy of normal theory confidence limits.

RESULTS

A preliminary evaluation of the degree of uni- and multivariate normality of the data was performed for the overall sample by applying the Mardia (1980) test. The results reveal significant skewness and kurtosis. (Two-sided multivariate skewness test of fit: sample value = 34.004; $M = 17.205$; $SD = 0.859$; p -value = 0.000. Two-sided multivariate kurtosis test of fit: sample value = 377.927; $M = 321.174$; $SD = 2.576$; p -value = 0.000.) This suggests that the analyses should be performed using the mean- and variance-adjusted maximum likelihood (MLMV) and prioritising alternative fit indices for interpreting model fits (Bollen, 1989). Besides the chi-square statistic (χ^2), the following set of alternative fit indices were taken into account: the root mean squared error of approximation (RMSEA), the comparative fit index (CFI) and the standardised root mean square residual (SRMR). According to the rule of thumb, values of RMSEA lower than 0.05 indicate a good fit, while values lower than 0.08 are acceptable. The SRMR threshold for good fitting is usually fixed at 0.06, but values under 0.09 are still considered satisfactory. Finally, CFI values higher than 0.90 and 0.95 are synonyms of acceptable and good fit (Hu & Bentler, 1999).

The dimensionality and factorial validity of PIED, AC, PIE, and PEE were then evaluated in a single CFA model (Model 1) with MLMV under the assumption that all variables measure distinct but interrelated concepts. The four-factor model specification provided an adequate fit to the empirical data ($\chi^2 = 182.9$; $df = 109$; χ^2 p -value = 0.000; RMSEA = 0.045 [0.033–0.056]; CFI = 0.972; SRMR = 0.040) and standardised loadings gave values above 0.700 for most items (see Table 1). Except for PIE, the constructs under study are related as expected (Table 1): first, a strong positive interfactor correlation of AC exists with PIED and an equally strong but negative correlation of AC exists with TI; second, PEE resulted in a moderate negative correlation with PIED and a strong positive correlation with TI; finally, PIE was not statistically significantly correlated with either PIED or TI.

TABLE 1 Item descriptives and results of Model 1: Factor loadings and interfactor correlations

Items	M	SD	Skewness	Kurtosis	Standardised factor loadings				
					PIED	AC	PIE	PEE	TI
PIED1	3.7	1.7	-0.1	2.0	0.900				
PIED2	3.5	1.7	0.1	2.0	0.956				
PIED3	3.6	1.7	0.0	2.1	0.957				
PIED4	3.4	1.7	0.1	2.3	0.844				
PIED5	3.8	1.8	-0.1	2.0	0.863				
AC1	4.7	1.7	-0.6	2.5		0.721			
AC2	4.9	1.8	-0.6	2.3		0.625			
AC3	4.4	1.8	-0.3	2.1		0.705			
PIE1	4.8	1.6	-0.5	2.6			0.577		
PIE2	3.9	1.4	0.2	2.5			0.755		
PEE1	4.8	1.7	-0.5	2.4				0.798	
PEE2	4.1	1.6	0.0	2.3				0.945	
PEE3	4.2	1.6	-0.1	2.4				0.885	
TI1	4.8	1.7	-0.4	2.3					0.754
TI2	3.2	1.8	0.6	2.3					0.877
TI3	4.0	1.7	0.1	1.9					0.698
T14	2.6	1.8	1.0	2.8					0.762
PIED					1.000				
AC					0.681*	1.000			
PIE					0.042	0.129	1.000		
PEE					-0.392*	-0.374*	0.464*	1.000	
TI					-0.512*	-0.661*	0.071	0.595*	1.000

Note: * p -value < 0.050.

Abbreviations: AC, affective commitment; PEE, perceived external employability; PIE, perceived internal employability; PIED, perceived investment in employee development; TI, turnover intention.

Table 2 lists the results of a full structural equation model in which the direct effect of PIED on TI is mediated in parallel by AC, PIE, and PEE. This model is estimated using MLMV and a bootstrapping procedure with 10,000 iterations and includes a set of covariates measuring participant gender, age and educational level. The alternative fit statistics indicate an acceptable level of goodness of fit ($\chi^2 = 488.1$; $df = 191$; χ^2 p -value = 0.000; RMSEA = 0.068 [0.061–0.076]; CFI = 0.929; SRMR = 0.074), whereas structural parameter estimates show that only some of our initial hypotheses are empirically confirmed (Table 2).

We find evidence of a negative overall effect of PIED on TI ($\beta = -0.417$, $p < 0.001$, 95% confidence interval [CI] [-0.500; -0.334]), which is almost fully mediated by the constructs AC, PIE, and PEE. Considering the direct effects that are the basis of the first mediation path

TABLE 2 Model 2: Direct, indirect and total effects estimated from overall sample

Effect	β	SE	Bootstrapped 95% confidence interval	
			Lower	Higher
Direct effects:				
PIED—TI (c')	0.012	0.072	-0.100	0.137
PIED—AC (a_1)	0.539***	0.055	0.450	0.629
PIED—PIE (a_2)	0.028	0.053	-0.058	0.117
PIED—PEE (a_3)	-0.303***	0.052	-0.387	-0.216
AC—TI (b_1)	-0.528***	0.114	-0.738	-0.361
PIE—TI (b_2)	-0.138	0.095	-0.288	0.022
PEE—TI (b_3)	0.465***	0.065	0.361	0.576
Indirect effects:				
PIED—AC—TI (a_1-b_1)	-0.284***	0.065	-0.409	-0.193
PIED—PIE—TI (a_2-b_2)	-0.004	0.009	-0.026	0.006
PIED—PEE—TI (a_3-b_3)	-0.141***	0.031	-0.141	-0.094
Total effect:	-0.417***	0.051	-0.500	-0.334
Covariates:				
Gender (ref. female)				
Male—AC	0.190	0.141	-0.046	0.415
Male—PIE	-0.278*	0.164	-0.556	-0.015
Male—PEE	0.045	0.182	-0.236	0.359
Male—TI	0.088	0.153	-0.173	0.328
Age group (ref. up to 34 years)				
35–44 years—AC	0.492*	0.213	0.137	0.841
35–44 years—PIE	-0.040	0.185	-0.348	0.264
35–44 years—PEE	-0.284	0.198	-0.637	0.018
35–44 years—TI	0.251	0.172	-0.025	0.543
45–54 years—AC	0.495*	0.220	0.119	0.847
45–54 years—PIE	-0.157	0.225	-0.526	0.223
45–54 years—PEE	-0.326	0.226	-0.706	0.040
45–54 years—TI	0.373*	0.190	0.082	0.713
Over 55 years—AC	0.550*	0.252	0.151	0.979
Over 55 years—PIE	-0.335	0.267	-0.770	0.106
Over 55 years—PEE	-0.953**	0.313	-1.481	-0.444
Over 55 years—TI	0.438*	0.247	0.050	0.857

(Continues)

TABLE 2 (Continued)

Effect	β	SE	Bootstrapped 95% confidence interval	
			Lower	Higher
Educational level (ref. tertiary)				
Secondary—AC	−0.314	0.222	−0.702	0.031
Secondary—PIE	−0.260	0.223	−0.639	0.125
Secondary—PEE	−0.419*	0.248	−0.827	−0.010
Secondary—TI	0.002	0.174	−0.297	0.272
Type of company (ref. Pharma)				
IT—AC	−0.233	0.194	−0.551	0.085
IT—PIE	−0.121	0.195	−0.441	0.203
IT—PEE	0.188	0.217	−0.170	0.547
IT—TI	−0.200	0.188	−0.498	0.115

Note: * p -value < 0.050, ** p -value < 0.010, *** p -value < 0.001.

Abbreviations: AC, affective commitment; PEE, perceived external employability; PIE, perceived internal employability; PIED, perceived investment in employee development; TI, turnover intention.

indicates that AC is positively affected by PIED ($\beta = 0.539$, $p < 0.001$, 95% CI [0.450; 0.629]) and, in turn, negatively influences TI ($\beta = -0.528$, $p < 0.001$, 95% CI [−0.738; −0.361]), as a partial mediator of the relationship between the two ($\beta = -0.284$, $p < 0.001$, 95% CI [−0.409; −0.193]). These results confirm H1, H2, and H3, which postulate that greater investment in employee development increases employee AC towards the employer, and consequently reduces TI.

Conversely, PIE is not statistically significantly related to either PIED or TI. Considering both paths, participant internal employability is not influenced by perceived support and does not affect TI, so does not mediate the relationship between the two. This second group of results rejects H4, H5 and H6.

Finally, although we find statistically significant results for the PEE mediation path, the overall indirect effect has the opposite sign to our initial hypothesis. PEE is, in fact, negatively related to PIED ($\beta = -0.303$, $p < 0.001$, 95% CI [−0.387; −0.216]) and positively related to TI ($\beta = 0.465$, $p < 0.001$, 95% CI [0.361; 0.576]), meaning that the more employees perceive they are supported by the firm, the less they feel externally employable and, consequently, willing to change employers ($\beta = -0.141$, $p < 0.001$, 95% CI [−0.141; −0.094]). These last results show an opposite relationship to that predicted by H7, H8, and H9, suggesting that being supported by the employer indirectly reduces TI.

DISCUSSION AND CONCLUSION

This study explores several explanatory mechanisms in the relationship between PIED and TI, simultaneously considering AC, PIE and PEE as possible mediators. The results reveal a negative relationship between PIED and TI, which is almost fully mediated by AC and PEE. More specifically, PIED reduces employee TI by increasing AC towards the employer. Simultaneously, and

counterintuitively, PIED also reduces TI by reducing PEE. Finally, PIE does not statistically significantly mediate the relationship between PIED and TI.

The results of the study are discussed below in light of their theoretical implications and contributions to the literature.

The study shows that higher investment in employee development increases employee AC towards the firm, consequently reducing TI. Thus, this study confirms the point of view of social exchange theory, which considers competence development to be a gift and an additional benefit to employees. In particular, the results support the assumption of social exchange theory that when an employer shows concern for employees' development needs, employees feel gratitude, which translates into greater emotional commitment and loyalty to the organisation. In other words, investments in developing skills and competencies strengthen the psychological contract and the relationship between employer and employee, and consequently reduce employees' intention to leave (Koster et al., 2011; Lee & Bruvold, 2003; Rodrigues et al., 2019). This mechanism may be particularly effective in contexts such as the current employment environment, in which work and the labour market seem particularly unstable and uncertain (Akkermans et al., 2019).

In providing these findings, this study also contributes to recent PIED literature (e.g., Koster et al., 2011; Moreira et al., 2020; Rodrigues et al., 2019) and addresses the need for additional evidence on the relationship between PIED and organisational performance (Dysvik et al., 2016; Kuvaas & Dysvik, 2009). More specifically, this study provides support for the existence of a negative relationship between PIED and TI.

This study has also explored the incremental explanatory power of perceived employability in the relationship between employee development and TI by distinguishing retention and a turnover path via perceived internal and external employability. However, the results do not support the hypothesis of a mediating role of PIE (e.g., Moreira et al., 2020). Indeed, PIED does not influence PIE, nor is PIE associated with employees' TI. Consequently, the empirical findings surprisingly contradict one of the main tenets of human capital theory, that investment in specific skills can increase an employee's prospects, or at least their perceptions of their prospects, to grow and realise a career with their current employer (De Vos et al., 2011; Moreira et al., 2020; Solberg & Dysvik, 2016).

This study also found no support for the predictions of general human capital theory. Although PEE plays a statistically significant mediating role in the relationship between PIED and TI, this mediation operates in the opposite direction to that expected (De Cuyper & De Witte, 2011; Van Harten et al., 2020). In fact, although greater external employability is associated with higher TI, greater investment in employee development by the employer does not increase employee external employability but rather, and counterintuitively, reduces it. Consequently, perceiving support from the organisation in terms of development indirectly reduces TI by decreasing the perception of external employability.

These surprising and counterintuitive results deserve to be discussed further, and could be partially explained by the characteristics and nature of the dependent variable. Indeed, PIED follows a referent shift consensus approach (Chan, 1998; Kunze & Menges, 2017) and measures employee development by noting the extent to which the employer is perceived to provide development support to employees collectively and not to a single employee in the workplace. Thus, a respondent could value the employer's commitment to development as high, even when this concerns his/her colleagues but not him/her directly. Consequently, a high perception of the employer's investment in employee development may not affect the individual's perceived employability, or may even have negative effects.

Furthermore, PIED detects the extent to which the employer is committed to employees' development, but not why or how the employer keeps this commitment (Wang et al., 2020).

PIED, for example, does not distinguish whether organisational investments concern specific or generic skills, or even whether these investments are intended to improve the employee's performance in their current role or prepare them for a future role. Also, the distinction between specific skills and transversal skills is critical for detecting the effect of employers' development investments on employees' internal and external employability (De Grip & Sanders, 2004; Forrier & Sels, 2003; Groot & Maassen, 2000; Hodzic et al., 2015). Then, PIED does not directly measure the quality or effectiveness of employers' investments in employee development, which, on the other hand, may be decisive in determining whether employees are able to strengthen their employability (Forrier & Sels, 2003; Hodzic et al., 2015).

The study also contributes to the emerging literature on the role employers can play in enhancing individuals' employability (Van Harten et al., 2020). Our results are substantially different, and in some way opposite, to those of previous works (e.g., Dello Russo et al., 2020; Fugate et al., 2021; Rodrigues et al., 2019). Specifically, the present study finds that the employer's actions seem not only ineffective for strengthening internal employability, but also even detrimental to external employability. Consequently, this study raises doubts about the existence of an employability paradox, because the empirical analysis shows neither a turnover risk due to increased external employability nor a retention benefit for the employer due to improved internal employability, associated with employee development (Van Harten et al., 2020). In a sense, the present work is consistent with a series of empirical studies that substantially deny the existence of an employability paradox (Akkermans et al., 2019; De Cuyper & De Witte, 2011; Rodrigues et al., 2019).

The results of this study must be interpreted bearing in mind the limitations of the research. The first limitation concerns the sample, which is composed of employees in just two organisations, which reduces the generalisability of the findings. Future studies should consider larger samples covering different sectors and fields of activity.

Furthermore, the results obtained in this study could be linked to the specific organisational characteristics of the two companies considered. For example, if the two companies considered mainly offered task-oriented training that does not contribute to increasing the value of workers in the labour market, this would explain the counter-intuitive relationship between PIED and PEE. Indeed, the training investment made by employers would be perceived by workers as being largely firm specific and useful for their actual job performance, but not for their prospects in the external labour market. For this reason, further qualitative research is needed to understand the characteristics of the training and development practices adopted by the companies included in the sample. Moreover, although belonging to one or the other company does not significantly associate with any of the mediating or dependent variables, a multigroup analysis could be carried out (Gerosa, 2019) to check whether the direct and indirect effects differ between the two organisations.

The main methodological limitation concerns the use of self-reported and cross-sectional data, which raises the issue of common method variance. However, although the data do not allow us to verify causality (Bollen & Pearl, 2013), we are interested in evaluating the plausibility of the hypothesised causal chains, which could be more robustly investigated in future research using longitudinal data. Following suggestions by Conway and Lance (2010), some strategies have been adopted in this study to deal with common method variance. For example, the questionnaire was administered anonymously and the questions on the dependent and independent variables were spatially separated, to make it more difficult for respondents to infer logical answers and to promote greater disclosure of stigmatising information (Podsakoff et al., 2003). Furthermore, the presence of overlaps between dependent and independent variables has been limited by excluding items found to be highly correlated with each other. A Harman single-factor test was also conducted which found that neither a single factor nor a general factor accounted for most of the variance. Although the

Harman single-factor test does not allow us to exclude common method variance (Podsakoff et al., 2003), it suggests this not to be a serious issue in our study. Finally, results concerning PIE should be interpreted with particular caution due to the rather low value of the Cronbach's alpha, which is barely acceptable. In future studies, a different scale of internal employability should be used and tested to ensure better internal validity.

Beyond conducting similar studies with larger samples and longitudinal designs, an interesting avenue for future research would be to investigate if and how personal factors influence the relationship between employee development and organisational outcomes. In this vein, recent studies have highlighted that age, seniority, educational level, and the role of the employee can significantly shape the effect of personnel development on workers' behaviour (e.g., Imam & Chambel, 2020) and there has been interest in this kind of inquiry in the recent employability literature (Fugate et al., 2021). Thus, exploring how the effects of employee development on commitment, employability, and, finally, TI, differ according to employee characteristics can be particularly useful for practitioners when designing employee investment programmes.

Despite its limitations, the present study has several important managerial implications. First, it suggests that investing in the training and development of employees rewards the organisation. In fact, employees value investment by the employer in employee education and reciprocate with a stronger AC and loyalty towards the organisation. The study also highlights the importance of individual perceptions and suggests that if employers wish to stimulate commitment and reduce TI, they should not only guarantee adequate training and development opportunities in the workplace but also adequately communicate their commitment and attention to their employees. Also, employers should not overestimate the employability paradox associated with employee development. Although the results of the study show a positive relationship between PEE and TI, the employer's own investment in the development of employee competencies does not seem to increase the risk of turnover.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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SUPPORTING INFORMATION

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