



Intentions to Participate in Training Among Older Unemployed People: A Serial Mediator Model



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Abstract

While a considerable number of studies have focused on factors driving employees to voluntarily participate in training programs, much less is known on this topic with regard to the unemployed population, in particular the older unemployed, who often are in a vulnerable labor market position due to educational deficits and skills obsolescence. This study proposes and investigates a serial mediator model of older unemployed individuals' training intentions grounded in propositions from social cognitive theory and the theory of planned behavior as well as prior models of employee involvement in training. The results, based on cross-sectional questionnaire data from 176 unemployed Portuguese individuals aged 40+, suggest that age, education, and proactivity have an indirect effect on training intentions via learning self-efficacy and training-related outcome expectations. Age was also directly related to stronger training intentions. These results may be useful for interventions aiming to encourage older unemployed individuals' participation in training.

Keywords

older unemployed, training intentions, self-efficacy, mediational models

Introduction

The past two decades have witnessed an increased frequency of organizational changes such as downsizing, outsourcing, and flexible working arrangements (e.g., Kovács, 2004). In addition, due to profound and continuous technological advances, several types of occupations—especially the traditional

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manual and low-qualified jobs—have disappeared, while new jobs have emerged (Moraal & Schönfeld, 2011). These require new competencies and higher educational attainments as well as continuous updating of skills (Kyndt, Dochy, Onghena, & Baert, 2012). In this context, the sustainability of employment for a great number of older workers is threatened by their low (formal) education levels, lack of qualifications valued by employers and/or skills obsolescence (McNair, 2011), in addition to the widespread discrimination in the labor market on the grounds of age (e.g., Clayton, 2010).

Although there is definitely not a linear relationship between participation in education and training programs and reemployment, the provision of such programs is an active labor market policy that may be particularly effective for low-qualified and older unemployed people (Cedefop, 2014). Moreover, participation in training during unemployment is in general associated with increased psychological well-being (e.g., Sousa-Ribeiro, Sverke, & Coimbra, 2014). However, older people tend to participate considerably less in training activities than do their younger counterparts (e.g., Cedefop, 2014). Older unemployed may thus benefit from training policies and career interventions targeted at supporting and encouraging them to participate more in education and training.

While research has investigated individual and situational factors underlying employees' participation in training, much less is known with regard to factors that may explain why unemployed individuals (regardless of age) participate in such activities (for an exception, see Niessen, 2006). However, the circumstances in which employed and unemployed people decide to participate in training activities are substantially different. Employees' engagement in training occurs mostly within an organizational setting, with training opportunities being directed toward the development of competences that likely have the potential to be applied in the workplace. On the other hand, for most unemployed people, job prospects are uncertain, career outlook is unclear, confidence in one's abilities may be diminished, and one may not know what to expect from training, which may make it more difficult to find a purpose for engaging in it. Factors identified in prior research in employment contexts may therefore differ from those determining unemployed people's willingness to participate in education and training. Furthermore, relatively few studies have addressed the potential intervening motivational processes that may be decisive for the intention to participate in education and training as well as the possible antecedents of such processes. Greater knowledge on this topic may be useful for the development of training policies and interventions targeted at encouraging unemployed people to participate in education and training opportunities.

Given this, the present study aims to increase the understanding of factors and psychological mechanisms underpinning the intention of older unemployed individuals to participate in formal educational and vocational training activities. The focus is on older unemployed individuals as this is a particularly disadvantaged group which has been understudied in unemployment research (Paul & Moser, 2009). We propose and investigate an explanatory model (presented in Figure 1) of the intention to attend a vocational education and training program during unemployment (hereinafter referred to as *intention to participate in training*).

The model incorporates elements from prior models that have addressed employees' involvement in training and development activities (Garofano & Salas, 2005; Maurer, 2001; Maurer, Weiss, & Barbeite, 2003) such as age, learning self-efficacy, training-related outcome expectations, and attitudes toward learning. Furthermore, the model includes two other factors (education and proactivity) that have consistently been found to predict participation in learning activities in research conducted in employment settings but which, to our knowledge, have not previously been investigated in studies on unemployed people's training intentions. The sequence of relationships proposed in the model is theoretically rooted in social cognitive theory (Bandura, 1986, 1997) and the theory of planned behavior (Ajzen, 1991). While parts of the proposed chain derive from different theoretical approaches, the main contribution of the present study is that it integrates these into a coherent model and tests it in the context of older unemployed people. Below, we present the theoretical and empirical rationale

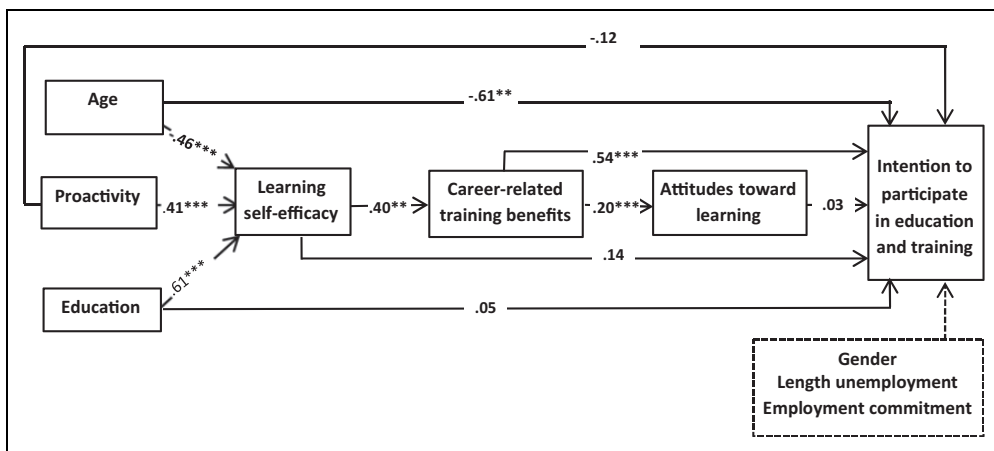


Figure 1. Serial multiple mediation model of the intention to participate in vocational education and training with the hypothesized direct and indirect relationships between the predictors and the outcome. Dashed arrows indicate statistical controls. The figures correspond to unstandardized regression coefficients resulting from the analyses (see the Results section). * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

for the model's predictions and respective Hypotheses (1–6) beginning with the model's core constructs, after which we discuss the central mediational chain and its antecedents.

Core Constructs of the Model

The central outcome in the proposed model is the *intention to participate in training*. Behavioral intentions are “indications of a person's readiness to perform a behavior” (Ajzen, 2011, p. 1122) and “are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior” (Ajzen, 1991, p. 181). The formulation of an intention to participate in learning activities is indeed central within the individual's decision-making process (Kyndt & Baert, 2013) and is a proximal determinant of actual participation in such activities (Ajzen, 1991; Kyndt & Baert, 2013). In the present study, the focus is on unemployed people's intention to participate in a vocational education and training program in the near future.

According to the proposed model, one central determinant of the intention to participate in training is *learning self-efficacy*. Self-efficacy refers to “people's judgments of their capabilities to organize and execute courses of action to attain designated types of performances” (Bandura, 1986, p. 391). Efficacy beliefs greatly influence the tasks that individuals choose to undertake, the effort they exert on these tasks, and their persistence even in the face of uncertain outcomes or setbacks (Bandura, 1997). In the present study, learning self-efficacy corresponds to individuals' beliefs that they are capable of learning the content of an adult vocational education and training program and successfully overcoming the challenges posed by such a program. Learning self-efficacy has consistently been shown to be positively associated with employees' participation in learning activities (e.g., Maurer, Lippstreu, & Judge, 2008). Although less is known regarding its role in training intentions among older unemployed individuals, the first hypothesis expects the same association to be found also among unemployed.

Hypothesis 1: Learning self-efficacy has a positive direct effect on the intention to participate in training.

The social cognitive theory postulates that “people act on their beliefs about what they can do [self-efficacy], as well as their beliefs about the likely effects of various actions [outcome expectations]” (Bandura, 1997, p. 126). Participation in education and training activities during unemployment is considered one problem-focused coping strategy aimed at gaining reemployment (Leana & Feldman, 1995). Hence, we operationalize training-related outcome expectations as the extent to which the individual believes that participation in training during unemployment can increase his or her reemployment chances. The literature has shown that expected positive outcomes arising from training may play an important role in the voluntary participation in such activities among employed samples (e.g., Lim & Chan, 2003). While no study was found to have investigated this in unemployment contexts, we expect to find similar associations in the present study.

Hypothesis 2: Training-related outcome expectations have a positive direct effect on the intention to participate in training.

The last construct in the model is *attitudes toward learning*. The theory of planned behavior (Ajzen, 1991) assumes that the individual’s attitude toward a certain behavior is a central determinant of behavioral intentions. Indeed, individuals with positive attitudes toward learning have shown stronger intentions to participate in training (Maurer et al., 2003). This relationship is assumed in the chain of influence that we describe next.

The Central Chain of Influence

According to social cognitive theory, “self-efficacy is a focal determinant because it affects behavior both directly and by its influence on the other determinants, [. . . such as] the outcome expectations for prospective courses of action” (Bandura, 2012, p. 14). Since outcome expectations to a large extent depend on self-efficacy beliefs, having a great belief in one’s ability to learn may increase the belief that one will obtain certain rewards from participating in training (e.g., Garofano & Salas, 2005). The model in Figure 1 proposes, then, a positive relationship between learning self-efficacy and training-related outcome expectations. The expectation that a certain behavior will produce a desired outcome should in turn positively influence the individual’s attitude toward that behavior (e.g., Maurer et al., 2003). Accordingly, positive training-related outcome expectations are expected to be associated with more positive attitudes toward learning. Finally, positive attitudes toward learning are expected to be positively associated with a stronger intention to participate in training. This prediction is theoretically sustained in the theory of planned behavior (Ajzen, 1991) and has received empirical support (e.g., Maurer et al., 2003). The central chain of influence is reflected in the third hypothesis of the present study.

Hypothesis 3: Learning self-efficacy has a positive indirect effect on the intention to participate in training via a sequence of relationships in which learning self-efficacy positively predicts training-related outcome expectations, which in turn positively predicts attitudes toward learning, which subsequently positively predicts the intention to participate in training.

Antecedents

The model in Figure 1 includes three antecedents assumed to have both direct and indirect associations with the intention to participate in training via the central mediational chain. While a number of such antecedents have been proposed in the literature, we chose to focus on age, education, and proactivity. In the following, we discuss the rationale for including them in the model.

Age. Older workers tend to engage considerably less in formal education and training than do younger workers (e.g., McNair, 2011). Besides the existence of age-based discriminatory practices that prevent older people's access to education or training activities (e.g., Maurer, 2001), their lower willingness to participate in education and training may also be explained by a decline in self-efficacy for learning (Maurer, 2001; Warr & Birdi, 1998). Indeed, in a study on employees' involvement in work-related learning and development activities, Maurer, Weiss, and Barbeite (2003) found that age was positively associated with perceptions of mental decline and negatively associated with beliefs about one's learning qualities. This evidence leads to our fourth hypothesis:

Hypothesis 4: Age has (a) a negative direct effect and (b) a negative indirect effect on the intention to participate in training.

Education. An individual's level of education is one of the most robust predictors of participation in learning activities (Cedefop, 2014; Kyndt et al., 2012). This may be because for many people with low levels of education, for instance, due to early school dropouts, school was unpleasant and may have led to a sense of failure and lack of confidence in their learning abilities, discouraging participation in further training (Illeris, 2006; Kyndt et al., 2012). Warr and Birdi (1998) indeed found a significant association between education and learning confidence. In line with this, the fifth hypothesis of the study is as follows:

Hypothesis 5: Education has (a) a positive direct effect and (b) a positive indirect effect on the intention to participate in training.

Proactivity. Proactivity is a personal disposition that differentiates people in the extent to which they take action to influence their environments (Crant, 1995). Proactivity is positively associated with learning goal orientation (Fuller & Marler, 2009) and self-directed career management (Briscoe, Hall, & DeMuth, 2006). Proactive individuals, therefore, may be more prone to identify and engage in opportunities for development such as education and training (Seibert, Crant, & Kraimer, 1999). Considering that participation in training may be considered a problem-focused coping strategy the individual may engage in during unemployment (Leana & Feldman, 1995), that is, a proactive behavior directed toward reemployment, a positive association between proactivity and the intention to participate in training may be expected. Frese and Fay (2001) propose that personality constructs (such as proactivity) are distal and more general causes of proactive behaviors (such as personal initiative), while self-efficacy is understood as a specific and proximal factor that is assumed to have a more direct influence on such behaviors. In line with this reasoning, it is plausible that self-efficacy mediates the association between proactivity and behavior. Empirical evidence for this mediational hypothesis is given for example in Brown et al. (2006) who found that job search self-efficacy mediates the association between proactivity and job search behaviors. While no study was found to have investigated the linkages between proactivity and the intention to participate in training during unemployment, the above evidence supports the sixth hypothesis of the present study.

Hypothesis 6: Proactivity has (a) a positive direct effect and (b) a positive indirect effect on the intention to participate in training.

Control Variables

Gender, length of unemployment, and employment commitment are controlled for in the model. Official statistics (Eurostat, 2016; Instituto do Emprego e Formação Profissional [IEFP], 2015) suggest that

women participate more in education and training activities than men and that participation rates in vocational education and training are higher for those who are unemployed for less than 12 months when compared with the long-term unemployed people. Employment commitment is defined as “the importance or centrality that an individual places on employed work beyond the income or money it provides” (Kanfer, Wanberg, & Kantrowitz, 2001, p. 841). We control for this because higher levels of employment commitment during unemployment, indicating a stronger interest in finding a new job, may be positively associated with greater engagement in a problem-focused coping behavior such as participation in education and training. A positive association between job involvement (a proxy to employment commitment) and training motivation in employed samples was found in a meta-analysis conducted by Colquitt et al. (2000).

Method

This study has a cross-sectional design and is part of a larger project on the psychosocial experience of unemployment among older Portuguese adults.

Sample

Participants were part of a convenience sample of 176 Portuguese-born individuals (age range 40–64, mean [M] = 51, standard deviation [SD] = 6; 67% had elementary education; 43% were women; the mean length of unemployment was 20 months; SD = 14). There is no consensus in the literature on a single definition of who is an “older (un)employed.” In the present study, we have chosen 40 years as the lower age limit because official statistics (e.g., Portuguese Statistic Bureau) suggest that as early as the age of 40, people may face higher threats to their continuity in the workforce, reflected in the considerably lower educational levels and higher long-term unemployment rates than those of their younger counterparts. To choose the upper age limit, we used the normative retirement age in Portugal, which was 65 years.

Procedure

The data collection took place at the end of 2006 in five job centers located in the Porto district in northern Portugal. These centers are run by the Institute of Employment and Vocational Training (IEFP) and their main purpose is to support people in their job search, providing, for example, career counseling interventions with psychologists, job placement services, and, for the unemployed, the possibility to participate in vocational education and training courses. All unemployed people registered with a job center must attend a prebooked general informative session. Participants were personally invited by the first author to take part in this study at the end of these sessions and participation in the study was voluntary. Questionnaires were completed on-site in the presence of the first author after the introductory page of the questionnaire was read out. In the introductory page, the confidentiality and anonymity of the data were assured and it was explained that no one but the research team would have access to the completed questionnaires.

Measures

Unless specified otherwise, all measures used a Likert-type scale ranging from 1 (*I don't identify myself with this statement*) to 5 (*I completely identify myself with this statement*), and items were coded such that higher scores indicate greater levels of each measured variable. The newly built or translated items were initially pilot tested on two groups of older unemployed individuals in order to check for language use and clarity. Items considered ambiguous/unclear or not to tap the constructs under analysis were excluded. All multiple-item measures were found to have acceptable reliability (i.e., above

.70; Nunnally, 1978). A confirmatory factor analysis (including all the items from the five newly built measures) showed that the five-factor model provided a reasonable fit to the data (Comparative Fit Index [CFI] = 0.90, Standardized Root Mean Square Residual [SRMR] = 0.07, Root Mean Square Error of Approximation [RMSEA] = 0.07), considerably better than the one-factor model (CFI = 0.67, SRMR = 0.11, RMSEA = 0.12).

Intention to participate in training. Intention to participate in training was assessed by a single item, “I am planning to participate in a vocational education and training program in the near future.”

Learning self-efficacy. Learning self-efficacy was measured with a 6-item modified version of the self-efficacy in skills upgrading scale (Lim & Chan, 2003). A sample item is “I have the capability to handle the demands of a vocational education and training course.”

Training-related outcome expectations. Training-related outcome expectations were assessed with a 3-item scale developed for this study. A sample item is “Participation in an education and training program would increase my chances to get a job.”

Attitudes toward learning. Attitudes toward learning were assessed with a 4-item scale developed for this study. A sample item is “The opportunity to extend the range of my abilities is important to me.”

Proactivity. Proactivity was measured with a 6-item scale developed after consulting other scales in this domain (e.g., Bateman & Crant, 1993; Frese, Fay, Hilburger, Leng, & Tag, 1997; Greenglass, 2002), since not all the items included in the existing measures were found adequate for the population under study (older unemployed individuals, the majority of whom had low educational attainment). Besides, the existing measures were typically too long to be included in a questionnaire used within a large research project on the unemployment experience. A sample item is “When I experience a problem, I take initiative in resolving it.”

Age. Age was scored in years.

Education. Education was initially coded in 5 categories (1 = Grades 4–5; 2 = Grades 6–8; 3 = Grades 9–10; 4 = Grades 11–12; 5 = university degree) and later converted into a dummy variable (0 = elementary education, 1 = secondary/university education) so it could be entered as an independent variable in the mediational model.

Controls. Employment commitment was assessed with 4 items from the employment commitment scale (Rowley & Feather, 1987). A sample item is “Having a job is very important to me.” Gender (man = 0; woman = 1) and length of unemployment (in months) were also controlled for in the model.

Analytic Method Applied to Investigate the Hypotheses

All variables were first entered into a missing value analysis at the item level using the SPSS Missing Value Analysis (MVA) procedure. Only 7 items presented missing data (ranging from 0.6% to 1.7%), which were imputed using the Expectation Maximization (EM) estimation method within SPSS MVA. All variable means in the files with and without missing data were compared and the differences found were at the centesimal level, showing that the imputation did not affect the data set at all.

To test the hypotheses, ordinary least squares path analyses were calculated using the SPSS macro PROCESS (Model 6; Hayes, 2013). This statistical tool allows for multiple mediators and covariates and investigates both direct and indirect effects using a bootstrapping approach to obtain estimates of confidence intervals (CIs). The present study used a 95% bias-corrected bootstrap to estimate CIs and calculated 10,000 bootstrap samples.

The dependent variable was the intention to participate in training. PROCESS only allows one independent variable to be included at a time in the model. For models with more than one independent variable, Hayes (2013) recommends calculating *one model for each independent variable*, while the other(s) are included in the model(s) as covariate(s). Four serial multiple mediator models were therefore tested, one for investigating the central mediational chain, that is, the indirect effects of learning self-efficacy on the intention to participate in training, and the others for investigating the indirect effects of each antecedent of the central chain of influence (i.e., age, education, and proactivity) on the outcome. Learning self-efficacy was included as the independent variable in one model and as the first mediator in the chain in all the other models. Age, education, and proactivity were included as the independent variables in one model each and as covariates in all the other models. Control variables (gender, length of unemployment, and employment commitment) were included as covariates in all models.

Results

Table 1 presents descriptive statistics, bivariate correlations, and reliability estimates (Cronbach's α) for all study variables. Table 2 presents a summary of the results, and the unstandardized regression coefficients from the mediational models tested may be found in Figure 1.

With regard to the control variables, employment commitment was significantly related to training intentions, while gender and length of unemployment were not. The analyses were conducted with and without these statistical controls with similar results. This section reports the results from the analyses conducted with the three control variables.

Hypothesis 1 was not supported, as learning self-efficacy was not directly related to the intention to participate in training, while positive direct associations were found between training-related outcome expectations and the intention to participate in training, as expected in Hypothesis 2. Regarding the model's central mediational chain (Hypothesis 3), there was a significant positive indirect effect of learning self-efficacy on the intention to participate in training via training-related outcome expectations. More specifically, learning self-efficacy was positively associated with training-related outcome expectations, which in turn were positively associated with the intention to participate in training. While training-related outcome expectations were positively associated with attitudes toward learning, there was no significant association between the latter and the intention to participate in training, and therefore the full central mediational chain was not sustained.

With respect to the antecedents in the model, as expected in Hypothesis 4a, the results showed a negative direct effect of age on the intention to participate in training. Furthermore, indirect negative effects of age on the intention to participate in training via learning self-efficacy were found, giving support to Hypothesis 4b. Contrary to Hypothesis 5a, education did not have a direct effect on the intention to participate in training. The results however provide support for Hypothesis 5b, as education had a positive indirect effect on the intention to participate in training via learning self-efficacy. When it comes to proactivity, the results do not support Hypothesis 6a, as proactivity did not have a direct effect on the intention to participate in training. Hypothesis 6b, however, was supported by the findings, as proactivity had a significant indirect positive effect on the outcome by means of learning self-efficacy.

Discussion

The present study aimed at increasing the understanding of factors and psychological mechanisms that are involved in older people's willingness to participate in training during unemployment. Specifically, an explanatory model was tested and this model suggests direct relationships between multiple

Table 1. Bivariate Intercorrelations Between the Variables Under Study.

Variable	Range	M	SD	α	1	2	3	4	5	6	7	8	9	10
1. Intention to participate in training	1-5	2.64	1.43	—										
2. Age	40-64	51.4	6.06	—	-.27*									
3. Education ^a	0-1	—	—	—	-.02	.03								
4. Proactivity	1-5	3.70	0.72	.79	.11	-.08	.08							
5. Learning self-efficacy	1-5	3.65	0.82	.74	.28*	-.31*	.36*	.43*						
6. Training benefits	1-5	3.41	1.18	.81	.53*	-.27*	-.12	.20*	.30*					
7. Attitudes toward learning	1-5	3.83	0.87	.73	.33*	-.30*	.27*	.38*	.61*	.44*				
8. Gender (woman) ^b	0-1	—	—	—	-.00	-.14*	.06	-.17*	-.05	-.07	.03			
9. Length of unemployment ^c	1-70	20.33	13.70	—	.05	.25*	.01	.06	.06	-.02	.02	-.09		
10. Employment commitment	1-5	3.89	0.93	.76	.27*	-.31*	-.11	.22*	.22*	.32*	.34*	-.13	.02	

Note. N = 176. — = not applicable.

^a0 = 4-10 years of education; 1 = \geq 11 years of education. ^b0 = man, 1 = woman. ^cIn months.

*p < .05.

Table 2. Regression Results for the Hypothesized Direct and Indirect Effects on the Intention to Participate in Training.

Model no.	Postulated relations	B	SE B	95% CI [LL; UL]
Model 1	Direct effect of learning self-efficacy	.14	.15	[-0.168, 0.442]
	Specific indirect effects of learning self-efficacy			
	Learning self-efficacy → training-related outcome expectations → intention to participate in a training program	.21	.07	[0.085, 0.367]
	R ²	.19***		
Model 2	Direct effect of age	-.61	.21	[-1.029, -0.187]
	Specific indirect effects of age			
	Age → learning self-efficacy → training-related outcome expectations → intention to participate in a training program	-0.10	.04	[-0.193, -0.032]
	R ²	.16***		
Model 3	Direct effect of education	.05	.22	[-0.378, 0.489]
	Specific indirect effects of education			
	Education → learning self-efficacy → training-related outcome expectations → intention to participate in a training program	.13	.05	[0.049, 0.239]
	R ²	.16***		
Model 4	Direct effect of proactivity	-.12	.14	[-0.401, 0.167]
	Specific indirect effects of proactivity			
	Proactivity → learning self-efficacy → training-related outcome expectations → intention to participate in a training program	.09	.03	[0.030, 0.164]
	R ²	.16***		

Note. Covariate in all models: employment commitment. B = unstandardized regression coefficient; CI = confidence intervals; LL = lower level; SE B = standard error; UL = upper level.

*** $p \leq .001$.

factors (selected on theoretical and empirical grounds) and the intention to participate in training as well as indirect effects occurring in a mediational chain.

Starting with the core constructs of the model and the central mediational chain, our findings support a positive indirect effect of learning self-efficacy on the intention to participate in training via training-related outcome expectations. This is in line with Bandura (1997) who argues that outcome expectations to a large extent depend on self-efficacy beliefs and that self-efficacy affects behavior by its influence on outcome expectations. However, a direct effect of self-efficacy on behavior, also assumed in the social cognitive theory (Bandura, 1997), was not found in this study. Rather, the results suggest that the higher the learning self-efficacy levels, the more positive training-related outcome expectations one has—and subsequently the stronger the intention to participate in training. The full central mediational chain proposed in our model was not supported by the findings, as attitudes toward learning were unrelated to the intention to participate in training. This is contrary to the findings reported, for example, in Maurer et al. (2003) as well as the postulations of the theory of planned behavior (Ajzen, 1991), according to which attitudes toward a certain behavior are assumed to predict behavioral intentions. A possible explanation for the absence of a significant association between attitudes and intention in the present study may be the fact that the measure used to tap the attitude component of the model was directed toward learning in general and not specifically toward the attendance of a training program, while it has been argued that measures of attitude and intention should be at the same level of specificity (Ajzen, 1991, 2011).

With respect to the antecedents in our model, age was found to have both a direct and an indirect (via learning self-efficacy) negative relationship with the intention to participate in training. These results suggest that older workers' images of themselves as learners tend to be poor and that age (even

among those who are 40+) is an important factor to consider by practitioners working with the unemployed in the promotion of their motivation for training. Future research would benefit from exploring factors and psychological mechanisms underlying the negative association between age and learning self-efficacy (see Maurer, 2001). For example, Van Vianen, Dalhoeven, and Pater (2011) have called for an examination of the extent to which prevailing age stereotypes influence self-efficacy beliefs and subsequent training motivation, about which little is known. Furthermore, the perceived absence of job opportunities for older persons due to age discrimination may have a wide impact upon the older unemployed person, who may become discouraged, feeling that one is *too old for work, notwithstanding being too young for retirement* (Sousa-Ribeiro, 2013). Research has shown that lower expectations for reemployment are associated with a greater psychological deterioration among middle-aged unemployed people (e.g., Broomhall & Winefield, 1990). Future research could also investigate the extent to which feelings of hopelessness or depression affect older unemployed people's willingness to engage in training activities directly and via self-efficacy.

Negative associations between age and training-related outcome expectations, as well as age and attitudes toward learning, were also plausible and have been found in research conducted in work settings (e.g. Guerrero & Sire, 2001). However, we decided to keep the model parsimonious and focused on (1) the direct associations between the predictors and the outcome and (2) indirect associations between the predictors and the outcome via the hypothesized mediational chain. Therefore, all other possible relationships were left out of the model.

Research on the antecedents of training participation has provided extensive evidence relating higher education levels to higher motivation to participate in training (e.g., Vansteenkiste, De Witte, & Lens, 2006), a stronger intention to participate in training (e.g., Kyndt et al., 2014) and higher rates of actual participation in training (e.g., Cedefop, 2014). The results of the present study suggest that the association between education and training intentions is mediated by learning self-efficacy, with less educated individuals showing a weaker intention to participate in training via reduced levels of learning self-efficacy. For a person with less education, a lack of confidence in one's own learning abilities may derive from previous poor and unfulfilling school experiences (Imaginário, 2004), which may have led to early school dropout and the development of an attitude of hostility, mistrust, and even aversion toward formal education (Illeris, 2006).

We similarly found no direct association between proactivity and the intention to participate in training. In the absence of previous research evidence on training intentions, this hypothesis has been supported in earlier studies that found direct links between proactivity and several types of proactive behaviors performed in organizational contexts, such as job performance, career-related outcomes, organizational innovation, and entrepreneurship (see Crant, 2000, for a review). Rather, the effect of proactivity on the intention to participate in training was found to be indirect, operating through learning self-efficacy. No studies were found to have investigated this mediational hypothesis in the prediction of unemployed people's training intentions, and the present study therefore extends previous research that has found proactivity to exert an indirect influence on job search behavior through self-efficacy (Brown et al., 2006).

In sum, the present results suggest that, in general, factors that have been found in the literature to be relevant for explaining training motivation and attendance in employed populations also play a role in explaining the intention of older unemployed people to participate in a training program. Moreover, the findings suggest that age, education, and proactivity lead to learning self-efficacy, that self-efficacy leads to positive training-related outcome expectations, and that these expectations in turn contribute to unemployed individuals' training intentions. The exploration of mediated effects allowed for the recognition of relevant motivational processes that would have remained overlooked if only direct relationships were tested.

Limitations and Suggestions for Future Research

This study has a number of shortcomings that future studies may overcome. The first limitation relates to the cross-sectional nature of the data. Although the mediational model is theoretically well sustained, cross-sectional designs do not allow for causal inferences from the results and limit the possibilities of refuting reverse-causation interpretations of the findings. A longitudinal design, with each step of the mediational chain being assessed in consecutive time points, would have been the ideal, although the operationalization and implementation of this type of approach in field studies such as the present one may be difficult.

While it is acknowledged that it would have been preferable to use previously validated scales, due to the lack of studies in this domain it was necessary to develop new measures or to adapt existing measures to the constructs and sample under study. Confirmatory factor analyses with all the items from the measures used in the study provided a reasonable fit to the data, and the scales presented acceptable reliability coefficients. Future research could make use of the same measures to test for their validity. Furthermore, the primary outcome (training intentions) was assessed with a single item, which may have hampered maximum effect sizes (Warren & Landis, 2007). Nevertheless, we assume that training intentions as assessed in this study (“I am planning to participate in a vocational education and training program in the near future”) is a unidimensional construct that may be considered sufficiently narrow or unambiguous to fulfill the criteria for being investigated by a single-item measure (cf. Wanous, Reichers, & Hudy, 1997). Meta-analyses have indeed shown that, for some constructs (e.g., job satisfaction), single-item measures are as effective as multiple-item measures (Wanous et al., 1997). Moreover, as noted by Courneya (1994), multiple items increase the possibility of a confounded assessment of the intention construct.

Another potential limitation of this research arises from the exclusive reliance on self-reported data, which may bring common method bias into question (e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, for psychological constructs such as proactivity, self-efficacy, and attitudes, the use of self-report assessments is well established and indeed seems the most feasible way to assess these constructs (e.g., Maurer et al., 2003). Furthermore, self-reported data surpass a number of validation tests (Budría, 2012).

Our results should be interpreted with caution, as their generalizability to the unemployed population in general may be hampered by the use of a convenience sample. Additionally, while participation in the general informative sessions was mandatory for unemployed people registered with the IEFPP, it is still possible that self-selection may have been involved such that, for instance, those who were already interested in “doing something about their unemployment situation” may have been more prone to participate in the survey. The relatively small sample size puts further limitations on the present study, for instance, in terms of insufficient power for the analyses to detect small effect sizes. Future research would benefit from making use of nationally representative and larger samples. It would also be relevant to investigate the extent to which the findings generalize to the unemployed in other age-groups.

Finally, it would be interesting to examine whether the individuals who report a stronger intention to participate in training actually engage in such programs, as some factors may hinder or facilitate the translation of intention into behavior, such as the control the person has over the behavior to be performed (e.g., Garofano & Salas, 2005; Sheeran, 2002; cf. Ajzen, 1991). In the case of training attendance, for example, the individual must be given the opportunity to participate in a training program and the program must be accessible.

Implications for Practice

Notwithstanding the aforementioned limitations, the findings of this study have a number of implications for policy making as well as for career guidance and counseling practice, in particular with unemployed people.

The present study made use of a sample of unemployed individuals aged 40+ and found that those who are older and have less education show less inclination to participate in training due to low levels of learning self-efficacy and little confidence in career advancement opportunities deriving from the training. By promoting learning self-efficacy, career counselors can help older and low-qualified individuals overcome fears of not being able to learn and ambivalence and anxiety toward formal learning situations, which may block their engagement in learning projects. The point of departure may be the individuals' accumulated experience and human capital, which are often undervalued by the individual himself or herself.

This study found learning self-efficacy to have an indirect positive effect on the intention to participate in training through training-related outcome expectations. For policy makers and practitioners, this finding highlights the importance of emphasizing the benefits of training participation. Although the perception of extrinsic benefits deriving from training (i.e., perception of greater reemployment chances) was strongly associated with training intentions, the potential benefits of training participation should not be exclusively tied to the subsequent employment opportunities that training potentially generates, as older unemployed people may not perceive the labor market to be receptive to the new skills acquired through training. Indeed, older unemployed people often feel discriminated against in the labor market merely on the grounds of age, and as unemployment has also hit the more qualified segments of the workforce in many countries in the last years, some may question the value of education for employability.

Furthermore, Maurer et al. (2003) demonstrated that employee perceptions of *intrinsic* psychosocial benefits from participation in work-related development activities (such as having a more interesting work, enjoyment or reaching one's full potential, and becoming a better person overall) were more associated with involvement in development activities (i.e., attitudes, intentions, and subsequent participation) than were perceived *extrinsic* benefits (such as better pay or job promotion). These findings are in line with the Self-Determination Theory (SDT; Deci & Ryan, 2000), according to which the pursuit of intrinsic goals (oriented toward personal growth) stimulates self-actualization and leads to more adaptive outcomes than extrinsic goal pursuit, which has an "outward orientation" (Van den Broeck, Vansteenkiste, & De Witte, 2008). In promoting the individuals' openness and willingness to learn, it is therefore important to highlight the personal and social value of engaging in education and training throughout life, rather than to merely emphasize the more extrinsic benefits such as enhancing career development opportunities and improving professional status (Cedefop, 2014).

Conclusions

This study focused on factors and processes that underlie older unemployed individuals' intention to participate in training. It contributes to the literature by not only looking at direct effects but also testing a mediational model to uncover intervening motivational mechanisms relevant for older unemployed individuals' decision-making process regarding engagement in training. Furthermore, the present study focused on the relatively understudied population of older unemployed people, who experience special vulnerability in the labor market and are underrepresented in the education and training participation figures (Cedefop, 2014). The findings of this study suggest that, in the development of effective training policies and career guidance interventions targeted at encouraging participation in training, special attention should be paid to enhancing the self-confidence of older and less educated unemployed individuals in their own learning abilities as well as their perceptions of the personal, social, and professional benefits that may derive from engaging in education and training.

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