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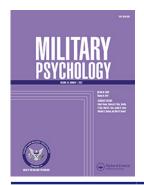
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### Personality trait and subjective work experience fit (*P*-SWE fit) as an explanation for voluntary turnover

Anne Congard na, Alice Delicourt, Bruno Dauvier, and Frédérique Grosd

<sup>a</sup>Laboratoire de Psychologie des Pays de la Loire, Nantes University, LPPL, Nantes, France; <sup>b</sup>Université Toulouse Jean-Jaurès, Toulouse Cedex 9, France; <sup>c</sup>Center for Research on the Psychology of Cognition, Langage and Emotion, PsyCLE EA 3273, Aix-Marseille University, Aix-en-Provence, France; <sup>d</sup>Section d'Etudes et de Recherche des Applications de la Psychologie, Saint-Mandrier, France

#### **ABSTRACT**

The aim of the present study was to show that examining the interactions between personality traits and subjective work experience (SWE) can be an interesting approach to understanding turnover. During the months following their enlistment, 186 resigning and 77 nonresigning military personnel were questioned about six SWE dimensions. During the recruitment process, they had undergone a Big Five personality test. Logistic regression analyses were conducted to study the effects of personality and SWE on turnover. Binomial generalized linear models enabled us to identify interaction effects between personality traits and SWE. These showed that open individuals who feel a high level of specialty satisfaction are less likely to quit. Similarly, individuals with high levels of neuroticism or conscientiousness are more inclined to resign if the environment is perceived to be stressful. The same applies to agreeable individuals who have negative perceptions of their interpersonal relationships. This study highlights the complexity of voluntary turnover and the need to investigate the transactions between personality and contextual characteristics with nonlinear models.

#### **ARTICLE HISTORY**

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#### **KEYWORDS**

Turnover; personorganization fit; person-job fit; Big Five

What is the public significance of this article?—This study shows that turnover can be explained by PSE-fit. Original statistical treatments allow a better understanding of these interactions, and highlight our results: high levels of neuroticism and perceived stress lead to a higher risk of turnover; high agreeableness, associated with poor work relationships, encourages turnover and high levels of conscientiousness and perceived stress increase turnover. This study shows the interest of differential and interactionist analysis during recruitment.

Voluntary turnover is a topic that has intrigued researchers and practitioners for over a century, and which has received growing interest over the past 20 years (Hom, Lee, Shaw, & Hausknecht, 2017). It refers to a situation where a person who has been receiving compensation for participating in an organization voluntarily stops being a member of that organization (Hom & Griffeth, 1995), even though the latter would like to retain him/her.

Most research has looked for contextual and/or individual explanations for turnover. The aim of the present study was to analyze the interaction between personality traits and aspects of subjective work experience (SWE), in order to comprehend voluntary turnover. Generalized additive binominal models were used to study these links. SWE concerns the subjective relationships between individuals and organizational culture, and covers different areas (organization, job and group), according to Lewin (1935)'s conceptualization. We looked at several aspects of SWE, including satisfaction with interpersonal relationships, perceived stress, and difficulty withstanding affective distance from supportive family and friends.

Since the French Armed Forces moved from conscripts to professionals in 1996, the French Navy has had to recruit more people to fill the posts previously held by conscripts. It must therefore attract, enlist and retain people in its ranks, but about 10% of its new recruits resign within a year of enlistment. This type of breach of contract is costly for the institution, in terms of training, recruitment, clothing, housing, and so on, as it is for organizations in general (Griffeth, Hom, & Gaertner, 2000). Managing and reducing attrition during the first term of enlistment is thus an important challenge for the military (White, Rumsey, Mullins, Nye, & LaPort, 2014).

#### Person-organization fit

We have known for a long time that human behavior lies at the intersection between the individual and his/her environment (Lewin, 1935), and turnover is no exception. Several patterns of turnover have been identified, based on the hypothesis that individual factors interact with contextual ones (Zimmerman, 2008). The personorganization fit (P-O fit; Kristof (1996) appears to be a good predictor of both SWE (Lyons & O'Brien, 2006; Piasentin & Chapman, 2007) and turnover intentions (Cable & Judge, 1996; Holtom, Smith, Lindsay, & 2014; Kristof, 1996; Kristof-Brown, Burton, Zimmerman, & Johnson, 2005; Lauver & Kristof-Brown, 2001). P-O fit refers to the compatibility between a worker's personal characteristics and the situational characteristics of the work, and the degree to which these two dimensions are congruent and paired (Schneider, 2001). In organizational psychology, the study of P-O fit has become increasingly important, and appears to be an interesting method for increasing the incremental validity of the selection process in the military (Sørlie, Hetland, Dysvik, Fosse, & Martinsen, 2020).

The most important *P*-O fit theories are the theory of work adjustment (Dawis & Lofquist, 1984) and attraction-selection-attrition theory (Schneider, Goldstein, & Smith, 1995). According to both theories, the fit between individuals and their professional environment is positively correlated with several job performance dimensions. The most popular theoretical approach to P-O fit is the theory of work adjustment, where adjustment is conceptualized as a continuous and dynamic process of reciprocal relationships, in which individuals and their work environment are mutually sensitive. There is therefore a congruence between employees' needs and opportunities in the job context (Edwards, 1991). Attraction-selection-attrition theory introduces the idea that if people's characteristics do not fit those of their organization, then they will leave it. Holland (1985)'s theory of vocational choices postulates that people look for work environments that are consistent with their personality. When the job is congruent with the individual's vocational interests, the risk of attrition is reduced (Kirkendall et al., 2020).

According to Edwards, Cable, Williamson, Lambert, and Shipp (2006), there are three ways of studying perceived P-O fit: a) atomistic, where the perceptions of the individual and environment are studied as separated entities; b) molecular, which concerns the perceived comparison between individuals and their environment; and c) molar, which emphasizes the perceived similarity between individuals and their environment. Although these approaches are considered to be interchangeable, our research adopted the third one. Moreover, most studies of P-O fit have so far focused on the congruence between individual and organizational needs and values (Kristof-Brown et al., 2005), and few have looked for links between personality and effective turnover as we did in the present study.

#### SWE moderation of relationship between Big Five personality traits and turnover

#### Personality traits: Big Five consensus

The Big Five is currently the dominant model of personality traits in the psychology literature. According to this model, personality has five dimensions (McCrae & Costa, 1987): neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness.

Neuroticism is defined as the chronic experience of negative emotions, whatever the objective level of the threat posed by the situation (Watson & Clark, 1984). McCrae and Costa (1987) associated extraversion with dynamism, activity, energy, and sociability. Openness to experience is linked to intellectual curiosity, openness to culture, knowledge and new experiences, and artistic creativity (Feist, 1998). Agreeableness refers to the quality of interpersonal relationships (McCrae & Costa, 1987), on a continuum running from compassion to antagonism. In its positive aspect, this factor to warmth, kindness, and sympathy. Conscientiousness refers to organization, punctuality, care given to things, perseverance, ambition, and righteousness (Costa Jr. & McCrae, 1997), but also to the meticulousness and obedience behaviors valued by military institutions.

The French military administers personality tests to applicants wishing to join its ranks. The Big Five has been the subject of many meta-analyses (e.g., Salgado, 2002; Zimmerman, 2008) that have highlighted its links to turnover. Lee, McCreary, and Villeneuve (2011) observed that high levels of neuroticism and agreeableness are linked to attrition during military training, and personality tests focusing on specific dimensions could therefore help to reduce attrition among army recruits (Niebuhr et al., 2013).

#### Personality traits and satisfaction at work and in the army

Incompatibilities between employees' personality traits and their working environment could be a direct antecedent of turnover (Bosman, Rothmann, & Buitendach, 2005).

In the workplace, neuroticism manifests itself in negative SWE (Maertz & Griffeth, 2004). Individuals with a high level of neuroticism have a less stable career path (Boudreau, Boswell, & Judge, 2001), feel less able to perform tasks successfully (Judge & Ilies, 2002), and experience particular stress when they are faced with fresh demands or a new job (Judge & Ilies, 2002; Watson & Hubbard, 1996). They are also more likely to experience conflict and difficulties with interpersonal relationships (Organ, 1994), which then increases their perceived stress and their intention to quit the organization (Spector & Jex, 1998). Bakker, Hetland, Olsen, and Espevik (2019) found that naval cadets with a low level of neuroticism and a high level of extraversion used their strength better on a daily basis, which in turn had a positive effect on their wellbeing and their commitment to work. If negative events combined with minor personal difficulties seem to predict turnover (Purl, Hall, & Griffeth, 2016), we can assume that individuals with a high level of neuroticism are more sensitive to stressful situations and difficulty with interpersonal relationships, and are therefore more prone to want to leave the institution.

Extraversion is linked to greater SWE, as extraverts focus on the positive aspects of their work environment (Brief, Butcher, & Roberson, 1995). Extraverts tend to perceive themselves and their entourage more positively, and their relationships in the workplace are more affective (Meyer & Allen, 1997; Thoresen, Kaplan, Barsky, Warren, & De Chermont, 2003). Wilmot, Wanberg, Kammeyer-Mueller, and Ones (2019)'s meta-analysis showed that extraversion is an advantage at work, in terms of motivation, emotion, interpersonal relations. and performance. Furthermore, in the army, trainees with a low level of extraversion have poorer academic achievement (Brar, 1976; Darr, Ebel-Lam, & Doucet, 2018). Judge and Cable (1997) indicated that extroverts are more inclined to prefer an organizational culture that revolves around teams, probably because of their preference for interactions. A deterioration in their interpersonal relations could be a decisive factor in their decision to resign.

Open individuals relish change and new experiences, but dislike routine, and can be imaginative enough to find ways of changing their habits, thus leading them to change jobs several times in their career (Lyons, Schweitzer, & Ng, 2015). They may therefore be more liable to resign (Barrick & Mount, 1991). The military institution leads young recruits to move far away from home to be trained or deployed, and this places a considerable burden on nonopen individuals, as well as greater perceived hardship in terms of affective distance. Gardner, Reithel, Cogliser, Walumbwa, and Foley (2012) showed that less open individuals are better adjusted to a hierarchical culture, such as that of a military institution. For openness, a negative perception of fit values could exacerbate turnover intention.

Agreeable individuals understand and become accustomed to the ties of their occupational environment, enjoy good relationships with their colleagues (Organ & Lingl, 1995), and seldom question the demands of the hierarchy. They are more motivated to stay in the organization (Maertz & Griffeth, 2004; Meyer & Allen, 1997), and Judge and Cable (1997) concluded that agreeableness is positively linked to a preference for facilitation and positive organizational culture, and negatively linked to an aggressive organizational culture. For individuals with a high level of agreeableness, P-O fit is higher when their jobs are perceived to require positive interactions, notably helping and supporting others (Ehrhart, 2006). Thus, agreeable individuals who perceive interactions in their professional environment to be negative are more likely to want to leave the institution.

Maertz and Campion (2004) showed that resignations by conscientious individuals are affected by contract stability, and by the organization's moral and ethical values. These individuals attach importance to being treated fairly and given organizational support (Eisenberg & Morris, 2001). Gardner et al. (2012) show that more conscientious individuals are better suited to a clear hierarchical culture. Conscientious individuals seem to have a better SWE (Huang, Ryan, Zabel, & Palmer, 2014), as well as a preference for controllable environments. As explained by Holland (1985)'s theory of vocational choices, conscientious individuals probably choose a military environment because it is perceived to be more structured and to fit their way of living. This idealization of structure may trigger stress and induce turnover, if the reality does not match up to expectations, as may the loss of control.

#### SWE and turnover: A multifactor concept and military specificities

Factors that can explain turnover have been the subject of numerous studies. SWE is an important predictor of turnover (Griffeth et al., 2000) and turnover intentions (Peterson, McGillis Hall, O'Brien-Pallas, & Cockerill, 2011), including in the armed forces (Holtom et al., 2014; Sanchez, Bray, Vincus, & Bann, 2004). Like the attainment of values and positive mood, SWE moderates the relationship between job satisfaction and turnover



(George & Jones, 1996). Furthermore, job characteristics are related to turnover intentions in the military (Österberg & Rydstedt, 2018).

In the military context, SWE is defined as the set of variables that influence the satisfaction and integration of new recruits. For the purpose of the present study, we measured six dimensions: perceived fit with values, specialty satisfaction, satisfaction with interpersonal relationships, and more specifically satisfaction with supervisory staff, difficulty withstanding affective distance, and perceived stress.

#### **Dimension 1: Perceived fit with values**

In a military environment, important aspects of SWE include the perceived match between the individual's values and organizational values and practices, as this appears to predict turnover (O'Reilly, Chatman, & Caldwell, 1991; Westerman & Cyr, 2004). Many studies have found a link between perceived fit and turnover intentions (Holtom, Burton, & Crossley, 2012; Van Vianen, De Pater, & Van Dijk, 2007), while Yang, Wu, Chang, and Chien (2015) showed that overall SWE and identification with the organization are closely linked in the military.

#### **Dimension 2: Specialty satisfaction**

Many young recruits have an idealized vision of military status, and therefore an erroneous perception of the job they will have to do. Moreover, choosing a specialty is complex because it can be specific to the army or navy. That is why specialty satisfaction is an important aspect of SWE. In the military context, disappointed expectations about job characteristics have an impact on job satisfaction, and thus on resignation from initial training programs (Van De Ven, 2003). Moreover, employees' turnover intentions are linked to adaptation to the job (Holtom et al., 2012).

#### Satisfaction with interpersonal relationships (Dimension 3), and more specifically with supervisory staff (Dimension 4)

The support of supervisors and colleagues has a positive effect on work satisfaction (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007), while cohesion perception has a positive effect on turnover (Kristof-Brown et al., 2005). This aspect of SWE is important because employees' turnover intentions are linked to the feeling of having found a place within the group (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001).

#### **Dimension 5: Difficulty withstanding affective** distance

Wellbeing in the workplace cannot be considered without taking account of life outside work (Panaccio & Vandenberghe, 2009). In the military context, the geographical distance created when personnel serve abroad is an important contributor to work-family conflict. Hom and Kinicki (2001) showed that role conflict (workfamily) affects both SWE and turnover cognitions.

#### **Dimension 6: Perceived stress**

Occupational stress is an employee's way of reacting to the demands of the situation when he or she has insufficient resources to meet them (Hansez, 2008). It is therefore an important aspect of SWE. Mental toughness predicts job attitude and is a factor for turnover (Godlewski & Kline, 2012). Turnover intentions are strongly linked to morale in the military (Ivey, Blanc, & Mantler, 2015).

Some researchers have concentrated on SWE factors linked to dissatisfaction, and others on professional integration, emphasizing factors that make people more likely to stay at work (Kiazad, Holtom, Hom, & Newman, 2015; Ramesh & Gelfand, 2010). As explained above, turnover is not based solely on environmental or individual factors, and is more likely to be the result of the interaction between these two variables.

#### Study aims and hypotheses

The aim of the present study was to analyze the effect of the interaction between personality traits and SWE on turnover. A good match between personality and SWE is generally assumed to reduce voluntary turnover. However, we operationalized P-O fit in a very different way from previous studies.

#### Simple effects of personality traits and SWE on turnover

#### Hypothesis 1: Personality and SWE.

We hypothesized that conscientiousness, extraversion and openness are positively linked to SWE dimensions, whereas neuroticism is negatively linked to them.

#### Hypothesis 2: Personality and turnover

We hypothesized that conscientiousness and agreeableness are negatively linked to turnover, whereas neuroticism and openness are positively linked to it (Barrick & Mount, 1991).



#### Effects of interaction between personality traits and SWE on turnover

#### Hypothesis 3.

We hypothesized that there is an interaction between perceived stress and neuroticism, with perceived stress reinforcing the relationship between neuroticism and turnover.

#### Hypothesis 4.

We hypothesized that there is an interaction between interpersonal relationships and neuroticism, where poorly perceived interpersonal relationships strengthen the relationship between neuroticism and turnover.

#### Hypothesis 5.

We hypothesized that there is an interaction between interpersonal relationships and extraversion. More specifically, a deterioration in interpersonal relationships at work reinforces the relationship between extraversion and turnover.

#### Hypothesis 6.

We hypothesized that during the first 6 months in a military institution, openness is a strength, promoting adaptation to the new environment, despite literature results indicating that open individuals tend to quit organizations. Difficulty withstanding affective distance interacts with the negative relationship between openness and turnover, such that this relationship is stronger when difficulty withstanding affective distance worsens.

#### Hypothesis 7.

We hypothesized that dissatisfaction with interpersonal relationships at work influences the relationship between agreeableness and turnover, such that this relationship is stronger when interpersonal relationships are negatively perceived.

#### Hypothesis 8.

We hypothesized that dissatisfaction with supervisors or military values interacts with conscientiousness. Dissatisfaction with either influences the relationship between conscientiousness and turnover, such that this relationship is stronger when there is a high level of dissatisfaction with managers or military values.

#### Hypothesis 9.

We hypothesized that highly conscientious recruits are more likely to quit if they also experience high levels of stress.

#### Method

#### **Participants**

Our sample comprised 186 individuals (153 men and 33 women), including 77 volunteer resigners, aged 18-25 years (M = 20.7, SD = 2.1). They were interviewed about reasons for resigning in the offices of the French Navy's psychology department after completing a study questionnaire. Members of a comparison group completed the questionnaire during their military training. We ensured that all participants completed the surveys at around the same time. A second assessment took place 131-178 days (resigners; M = 156.3, SD = 20.8) or 122–192 days (controls; M = 157.8, SD = 25.4) after the resignation or recruitment process. Results of personality and aptitude tests taken during the recruitment process were collected from the recruiting office.

#### **Procedure**

Individuals who had resigned were interviewed by a psychologist after they had completed the questionnaire. Instructions were "You will meet a psychologist to validate your resignation. Before that, you must complete a questionnaire. It will be used by the psychologist for your interview, as well as for psychological research on resignation." Completion of the questionnaire was a compulsory part of the resignation process. Nonresigners (noncommissioned officers) were given the following instructions: "The French Navy invites you to take part in a survey on satisfaction among new recruits. The information you give will only be used for this study and will remain confidential." These questionnaires were administered during a training program. They were anonymous, and participation was voluntary. It should be noted that recruits are free to resign during the first few months following enlistment (2-6 months, depending on the contract), and do not have to complete a tour.

#### **Measures**

#### **SWE**

Attrition has been the subject of a long series of studies aimed at linking theory to practical modeling of turnover in the military (Putka, McCloy, Van Iddekinge, & Le, 2019). A multidimensional SWE questionnaire was constructed and validated in the French Navy. The purpose of this Military Subjective Work Experience questionnaire is to shed light on French Navy turnover, in order to adapt institutional measures. It comprises specific subscales, selected and chosen after a 2-year experiment (based on 68 interviews with resigners), and the finalized items were validated with 1213 resigning and 1229 nonresigning participants. Item loadings are specified thereafter in the scale description. The confirmatory factor analysis indicators for these subscales are satisfactory:  $\chi^2 = 1,140.304$ , df = 237, p < .001, RMSEA = 0.0636, NFI = 0.912, CFI = 0.93, GFI = 0.908.

This French-language questionnaire measures five dimensions of SWE, which are reversed where relevant to facilitate interpretation, and a sixth validated subscale measures perceived stress.

Perceived fit with military values measures identification with the values of the French Navy (i.e., match between individual and institution). There are five items: "Military discipline seems too harsh for me" (reversed item; loading: .48); "I identify with the navy's values" (loading: .67); "I am not cut out for military discipline" (reversed item; loading: .58); "I have difficulty enduring regulatory constraints (punctuality, wearing a uniform, etc.)" (reversed item; loading: .59); and "Being in the military does not make me especially proud" ((reversed item: loading: .51). Cronbach's alpha is .78.

Specialty satisfaction is measured with three items: "Are you satisfied with your specialty?" (loading: .85); "My specialty hasn't matched up to my expectations" (loading: .81); and "I have been disappointed by my specialty" (reversed item; loading: .81). Cronbach's alpha is .78.

Satisfaction with supervisory staff is measured with three items: "I haven't felt supported by my supervisor" (reversed item; loading: .50); "I haven't appreciated some of the comments made by my supervisors" (reversed item; loading: .55); and "Supervisors are rarely there to answer my questions" (reversed item; loading: .52). Cronbach's alpha is .74.

Satisfaction with interpersonal relationships explores whether respondents are satisfied with their relationship with their colleagues, and whether they have difficult relationships with them. There are four items: "I haven't been getting along with some of my colleagues" (reversed item; loading: .78); "I can't bear the behavior of some of my colleagues any longer" (reversed item; loading: .78); "My relationships with my colleagues are good" (loading: .74); and "The colleagues I'm working with have made hurtful comments to me" (reversed item; loading: .61). Cronbach's alpha is .75.

Difficulty withstanding affective distance measures whether individuals find it hard being far away from home, family and friends, and the efforts they have to

make in order to give or receive any emotional support that is needed. The items are: "My close ones need me to be near them" (loading: .78); "I spend a great deal of time and money going home" (loading: .72); "My family or my partner finds it hard to cope with my absence" (loading: .76); "Being far from home is hard for me" (loading: .73); and "I miss my family" (loading: .70). Cronbach's alpha

These items are rated on three types of 5-point Likert scales, ranging from Not important at all to Very important, Not satisfied at all to Very satisfied, and totally disagree to Totally agree. The mean of each dimension is calculated for the statistical analysis. High scores indicate more positive SWE.

Perceived stress is measured with the Perceived Stress Scale (Bellinghausen, Collange, Botella, Emery, & Albert, 2009). This measures whether individuals feel stress or nervous tension they cannot control. It comprises 10 items, such as "Have you felt nervous and stressed?" and "Have you felt confident about your ability to handle your personal problems." Participants have to answer on a 5-point scale ranging from 1 (Never) to 5 (Really often). Cronbach's alpha is .81.

#### **Personality traits**

Five dimensions of personality were assessed with the Test d'Aptitudes Militaires Initiales - aspect Personnalité (Congard, Antoine, & Gilles, 2012), which is used the French military at all levels of recruitment. This inventory contains 70 items. Respondents have to answer on a 5-point scale ranging from Completely true to Completely false. This test is designed to assess the Big Five dimensions of personality, and makes it possible to identify two facets of each factor: anxiety/depressive symptoms (Cronbach's alpha: .85) and anger/impulsivity (Cronbach's alpha: .75) for neuroticism (Cronbach's alpha: .85); warmness (Cronbach's alpha: .77) and trust (Cronbach's alpha: .83) for agreeableness (Cronbach's alpha: .84); organization (Cronbach's alpha: .75) and perseverance (Cronbach's alpha: .79) for conscientiousness (Cronbach's alpha: .80); competitive spirit (Cronbach's alpha: .84) and leadership (Cronbach's alpha: .80) for extraversion (Cronbach's alpha: .84); and openness to change (Cronbach's alpha: .70) and openness to intellect and imagination (Cronbach's alpha: .86) for openness (Cronbach's alpha: .85).

#### Statistical procedure

Descriptive statistics were calculated for all the variables, and means comparisons were conducted between resigners and nonresigners (Table 1). Logistic regression analyses were run to identify simple effects of individual factors on turnover. To study the interaction effects between personality and SWE, we calculated generalized binomial models (gams function of the mgcv package in R; Wood, 2016). GAM analyses are perfectly suited to exploring the interaction between two variables (e.g., *P*-O fit). They are adapted for binomial variables (e.g., fact of resigning or not) and can able to grasp the nonlinear dimension of the variables (e.g., when resignation is the dependent variable). It is easier to analyze nonlinear interactions between numerical explanatory variables with the spline function than with polynomial transformations in generalized linear models (Marx &

**Table 1.** Descriptive analysis and means comparisons of resigning and nonresigning participants.

	Resigning Nonresigning					
	Μ	SD	Μ	SD	t	α
Openness	2.87	.42	2.94	.46	1.09	.81
Conscientiousness	3.48	.44	3.43	.50	67	.86
Extraversion	3.10	.46	3.01	.47	-1.22	.84
Agreeableness	3.13	.32	3.13	.45	06	.84
Emotional stability (vs. Neuroticism)	3.30	.46	3.22	.61	-1.10	.86
Satisfaction with specialty	3.65	.63	4.06	.65	4.62**	.78
Perceived fit with military values	3.02	.65	3.08	.28	.82	.78
Satisfaction with supervisory staff	3.64	.54	3.68	.33	.56	.74
Satisfaction with interpersonal relationships	2.14	.74	2.40	.67	2.51*	.75
Difficulty withstanding affective distance	3.12	.62	2.48	.59	<b>-7.02</b> **	.81
Perceived stress	2.14	.60	1.89	.38	-3.19*	.81

<sup>\*</sup>p < .05. \*\* p < .01.

Eilers, 1998; Wood & Augustin, 2010). Numerous recent turnover studies have looked for linear links, but we can assume that the links between SWE and turnover are nonlinear (De Winne, Marescaux, Sels, Van Beveren, & Vanormelingen, 2019).

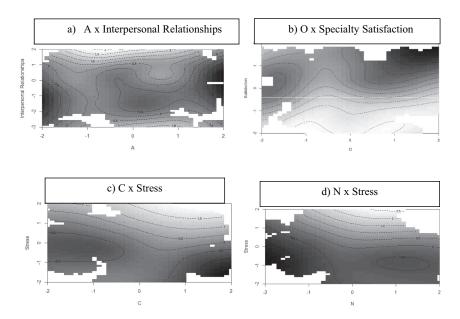
Another advantage of GAMs is that during the estimation process, the various possible models are automatically compared, in order to directly find the one that best fits the data. To indicate the nature of the relations, the predictions are calculated and shown in graph form, making it easier to visualize curvilinear relations. The GAMs are estimated from standardized data, making it possible to graphically estimate effect sizes. GAMs therefore provide the flexibility needed to describe nonlinear changes in interactions (see graphs in Figure 1).

These innovative models are not yet widely used in organizational psychology or military psychology, but are becoming increasingly popular among psychologists (Wood, 2016).

#### Results

#### **Descriptive statistics**

Table 1 sets out the descriptive statistics. All the measures had satisfactory indicators (means and standard deviations). The scores on the dimensions are the mean scores of all the relevant items, with some item scores being reversed where necessary.



**Figure 1.** Interactions between personality traits and subjective work experience (*P*-SWE fit): (a) Agreeableness (A) x Interpersonal Relationships; (b) Openness (O) x Specialty Satisfaction; (c) Conscientiousness (C) x Stress; and (d) Neuroticism (N) x Stress. The lighter the color, the higher the turnover is likely to be. The darkest parts are the areas with the fewest resignations.

Resigning and nonresigning respondents did not differ on either sex or personality, but they did differ significantly on four factors: specialty satisfaction, t  $(186) = 4.62, p < .001, \eta^2 = .251$ , satisfaction with interpersonal relationships, t(186) = 2.51, p < .001,  $\eta^2 = .122$ , difficulty withstanding affective distance, t(186) = 7.02, p < .001,  $\eta^2 = .412$ , and perceived stress, t(186) = 3.19, p < .001,  $\eta^2 = .168$ . Resigning individuals scored lower on the SWE indicators, particularly specialty, interpersonal relationships, stress, and affective distance.

#### Correlations between personality traits and SWE

Table 2 sets out the correlations between personality traits and SWE measures.

#### **Personality and SWE**

In accordance with our first hypothesis, conscientiousness was positively correlated with both perceived fit with military values (r = .213, p < .05) and satisfaction with interpersonal relationships (r = .216, p < .05), but extraversion was not linked to any SWE dimension. Neuroticism was negatively linked to SWE dimensions.

The correlation between conscientiousness and perceived stress was significant for resigning individuals (r = -.338, p < .05). The less neurotic respondents were, the more satisfied they were with interpersonal relationships (r = -.311, p < .01), and the less they perceived stress (r = .284, p < .05). Finally, openness was negatively correlated with difficulty withstanding affective distance (r = -.184, p < .05), and positively correlated with satisfaction with supervisory staff (r = .254, p < .05).

To test our second hypothesis, we ran a logistic regression analysis with the Big Five personality traits and SWE as turnover predictors (see Table 3).

In line with our second hypothesis, Table 3 shows that conscientiousness ( $\beta = .47$ , p < .05) and neuroticism  $(\beta = .50, p < .05)$  were the personality traits that best predicted turnover, with neither openness nor agreeableness being directly linked to this variable.

Satisfaction with interpersonal relationships ( $\beta = .34$ , p < .05), difficulty withstanding affective distance  $(\beta = .45, p < .001)$ , and perceived stress  $(\beta = .56,$ p < .01) were the best predictors of turnover.

#### Effects of interactions between personality traits and SWE on turnover

We ran binomial GAM analyses to study the effects of the interactions between personality and SWE on turnover. The objective of these analyses was to study whether there was an Individual \* Situation interaction in the prediction of turnover. Table 4 sets out the estimated parameters of the GAM for each personality trait associated with each SWE dimension. We can see the intercept estimation, the influence of SWE then of personality on turnover, and the interaction between personality and SWE, as well as the explained deviance and AIC for each model.

Table 3. Logistic regression with big five personality traits and subjective work experience as turnover predictors.

	β	SE	р
Openness	03	.20	.88
Conscientiousness	.47	.23	.04
Extraversion	.16	.20	.42
Agreeableness	.05	.20	.79
Emotional stability (vs. Neuroticism)	.50	.24	.04
Perceived fit with military values	02	.15	.92
Satisfaction with specialty	16	.13	.21
Satisfaction with supervisory staff	04	.11	.69
Satisfaction with interpersonal relationships	.34	.15	.02
Difficulty withstanding affective distance	03	.09	.77
Perceived stress	.45	.15	.001
Satisfaction with specialty	.56	.22	.01

**Table 2.** Correlations between personality traits and subjective work experience.

	Perceived fit with military values	Satisfaction with specialty	Satisfaction with supervisory staff	Satisfaction with inter- personal relationships	Difficulty withstanding affective distance	Perceived stress
Openness	.025	.061	.06	008	184*	082
•	(041,	(.172,	( <b>.254</b> *,	(.048,	( <b>239</b> *,	(073,
	.042)	044)	035)	026)	116)	065)
Conscientiousness	.213**	.11	.126	.216**	.001	136
	(.051,	( <b>.274</b> *,	(.216,	<b>(.400</b> **,	(006,	( <b>338</b> **,
	.303**)	.064)	.094)	.073)	061)	07)
Extraversion	011	.018	074	022	.069	041
	(.073,	(.007,	(.062,	(079,	(.006,	(158,
	031)	.007)	134)	013)	.016)	021)
Agreeableness	096	.028	.068	.112	.032	024
	(03,	(.116,	(.107,	<b>(.249</b> *,	(026,	(153,
	145)	024)	.055)	01)	.084)	.044)
Emotional stability	.077	.047	.105	.311**	07	<b>284</b> **
(vs. Neuroticism)	(.237*,	( <b>.234</b> *,	(.153,	<b>(.394</b> **,	(123,	( <b>452</b> **,
	.036)	01)	.095)	.228*)	144)	268**)

The first correlations are for the whole sample, and the correlations in brackets for the nonresigning and resigning participants. Significant correlations are shown in bold. \* p < .05. \*\*p < .01.



**Table 4.** Generalized additive model estimated parameters for voluntary turnover dependent variable.

		Perceived fit with military values	Specialty Satisfaction	Supervisory staff satisfaction	Inter-personal relationships satisfaction	Difficulty withstanding affective distance	Perceived stress
Openness	SWE	107	177	135	.146	.112*	.115*
	Personality	189	150	184	162	019	035
	Pers.* SWE	099	<b>306</b> **	136	.020	.032	.036
	AIC	257.585	252.688	255.837	257.498	256.524	261.688
Conscientiousness	SWE	063	177	124	124	.524**	.560**
	Personality	.139	.113	.144	.144	.148	.214
	Pers.*SWE	.161	044	.105	.105	.143	.314**
	AIC	257.232	257.204	256.545	256.506	242.852	244.431
Extraversion	SWE	096	169	190	.157	.110*	.106*
	Personality	.194	.191	.183	.201	.031	.044
	Pers.*SWE	159	018	107	013	012	.013
	AIC	256.599	256.381	255.368	257.007	257.154	262.070
Agreeableness	SWE	.003	.004	.006	012	.115*	.101*
3	Personality	025	038	028	.044	.003	.006
	Pers.*SWE	041	017	.007	<b>−.167</b> *	.038	.032
	AIC	272.254	271.912	272.431	256.009	256.671	262.694
Neuroticism (vs. Emotional Stability)	SWE	.041	.040	.041	.029	.116*	.127*
,,	Personality	024	037	034	.030	.049	.067
	Pers.*SWÉ	029	004	.016	006	.024	.145*
	AIC	271.568	270.889	270.896	272.019	255.615	254.710
	AIC	271.568	270.889	270.896	272.019	255.615	254.710

Interactions between personality traits and subjective work experience shown in Figure 1. SWE: subjective work experience; AIC: Akaike information criterion; Pers.: personality

GAMs (Table 4) enabled us to test how far the interactions between the personality traits (rows) and SWE dimensions (columns) explained turnover. We report the the Akaike information criterion (AIC) corresponding to each model. Significant interactions are shown in bold.

Analyses revealed four interaction effects between personality traits and SWE dimensions, consistent with our hypotheses. In accordance with our third hypothesis, results showed an effect of the interaction between neuroticism and perceived stress on turnover ( $\beta$  = .145, p < .05). Thus, individuals who had a high level of neuroticism in an environment they perceived as stressful were more likely to quit the organization. However, contrary to our fourth hypothesis, there was no interaction effect between neuroticism and satisfaction with interpersonal relationships ( $\beta = -.006$ , ns). Our fifth hypothesis about extraversion was also not validated, as extraverted individuals were no more likely to quit than introverts. Neither satisfaction with specialty  $(\beta = -.096, ns)$  nor satisfaction with interpersonal relationships (B = -.013, ns) moderated this effect. Regarding our sixth hypothesis about openness to experience, results showed that open respondents were less likely to quit if they were satisfied with their specialty  $(\beta = -.306, p < .05)$ . Hypothesis 7 was confirmed, but the effect was small. Agreeable individuals were more likely to quit if they felt strongly dissatisfied with interpersonal relationships ( $\beta = -.167$ , p < .05).

Hypothesis 8 was not confirmed, but Hypothesis 9 was validated, as conscientious respondents were more likely to quit if they were stressed ( $\beta = -.314$ , p < .01).

The interaction effects between personality and SWE for each significant variable in Table 4 are shown in graph form in Figure 1, with personality trait along the x-axis, and SWE dimension along the y-axis. These topographic representations make it easier to visualize the nonlinear aspect of each interaction. [vous avez déjà toutes ces infos dans la légende de la figure ci-dessous]

Regarding the interaction between agreeableness and satisfaction with interpersonal relationships (Figure 1a), the lighter areas in the bottom right hand corner of the graph (~ 1 for agreeableness and between -2 and -3 for satisfaction) show that agreeable respondents who perceived their environment to be less favorable in terms of interpersonal relationships were more likely to quit. Another interesting feature of this graph (top lefthand corner) is that less agreeable respondents ( $\sim -1$ ) who perceived their professional environment to be satisfying in terms of interpersonal relationships (1.5–2) were also more likely to quit.

Darker areas of the graph (top righthand and bottom lefthand corners) indicate the interactions with a lower probability of quitting. The top righthand corner concerns agreeable respondents who worked in an environment where interpersonal relationships were perceived to be agreeable, whereas the bottom lefthand corner corresponds to less agreeable respondents in environments viewed as less satisfying in terms of interpersonal relationships.

Regarding the interaction between openness and specialty satisfaction (Figure 1b), we can see that the lighter area (where participants were more likely to quit) is mainly restricted to the bottom of the graph, showing that specialty satisfaction was an important factor in turnover, but that more open respondents who were satisfied by their specialty were less likely to quit (dark area in top righthand corner).

Results for the interaction between conscientiousness and stress (Figure 1c) show that respondents with a high level of conscientiousness were less likely to quit. However, this was only the case if their stress level remained moderate (darker area in bottom righthand corner). Less conscientious respondents were also less likely to quit if they perceived their environment to be only moderately stressful (darker area in lefthand corner).

The lighter area in the top righthand corner of Figure 1c indicates that individuals with a high level of conscientiousness who perceived their environment to be highly stressful were more likely to quit. Regarding the last significant interaction between neuroticism and stress (Figure 1d), the graph shows that the lower the stress, the less likely respondents were to quit (darker area at bottom of graph). However, the lighter area in the top lefthand corner shows that those with high levels of neuroticism and perceived stress were more likely to quit.

#### Discussion

The aim of the present study was to highlight the effects of the interactions between personality traits and SWE dimensions (P-SWE fit) on military turnover. We postulated that turnover is related not only to poor assessment during recruitment or poor working conditions, but also to a mismatch between personality and work context.

Regarding the simple effects of SWE on turnover, dissatisfaction with specialty and interpersonal relationships, difficulty withstanding affective distance, and perceived stress appear to be major causes of voluntary turnover in the French Navy. The latter therefore needs to take greater account of these factors, in order to prevent turnover. In terms of personality traits, results confirmed the work of Spector and Jex (1998), as they showed that conscientiousness and emotional stability (i.e., low neuroticism) increase the probability of staying in the organization.

The impact of *P*-SWE fit on turnover was partially confirmed. Boudreau et al. (2001), results showed that neuroticism predicted turnover, but turnover probability was even greater when perceived stress was high. As shown in Purl et al. (2016), the accumulation of minor negative events seemed to prompt respondents with a high level of neuroticism to resign. Perceived stress appears to weaken persons who are already vulnerable

(e.g., with high neuroticism) and make them more likely to leave the organization (Necowitz & Roznowski, 1994). Stress level is therefore an important issue when recruits join the navy, and could be one of the levers for reducing turnover. It seems important to support transitions (entry into the organization and first posting) in the military. Stress training is already provided by psychologists during the first 3 weeks in the military, and recruits are given an opportunity to see a psychologist during their training. It might be useful to reassess the scope of this support and to provide it at different points along a military career.

Contrary to our hypothesis, dissatisfaction with interpersonal relationships did not increase the probability of highly neurotic individuals leaving the organization. By the same token, social support from peers or superiors did not reduce perceived stress or turnover. In future studies, it might be useful to examine interpersonal conflict rather than misunderstanding, as this variable may interact with the anger facet of neuroticism.

In line with Zimmerman (2008), extraversion did not predict turnover, and no interaction effect was found. Contrary to Meyer and Allen (1997), extraversion did not make our respondents more motivated to stay in the navy. Judge and Cable (1997) observed that extroverts prefer a team culture, which is perhaps less salient during recruits' first few months in the navy. In the test used in the present study, extraversion is measured through leadership, and not through the expression of contact with others, which could also explain our results. It seems that P-SWE fit regarding interpersonal relationships was more relevant for agreeableness.

Openness to experience did not predict turnover, but its interaction with specialty satisfaction had the effect of limiting resignations. Overall, dissatisfaction with specialty was a factor for turnover, as the more dissatisfied respondents were with their specialty, the more they resigned. Moreover, open people who were satisfied with their specialty were least likely to resign. We can assume that their innate curiosity led them to engage in learning, and that the exploration of a new environment and intellectual stimulation reduced the risk of resigning. As we saw earlier, open individuals find it easier to adapt to new environments and to new jobs, as they appreciate receiving new information, learning new things, and exploring new environments and new experiences. Results clearly show that respondents with low levels of openness and satisfaction were more inclined to resign. In view of the work by Maertz and Griffeth (2004), it could be worthwhile conducting a more fine-grained study of people's feelings about military values and routine activities, which could be more weakening factors for open individuals. Open individuals hold certain values like tolerance and fair treatment (for a review, see McCrae, 1996), so beyond their desire for change, they may also have moral and ethical motivations for resigning (Maertz & Griffeth, 2004). These could be addressed in a future study.

Agreeableness is considered by Griffeth et al. (2000) to be the lowest predictor of turnover, but we also found that the interaction between agreeableness and satisfaction with interpersonal relationships was predictive of voluntary turnover. It seems that if agreeable individuals do not find assistance, support, or even willingness to cooperate in the institution, they will more readily resign (Maertz & Griffeth, 2004; Meyer & Allen, 1997). These individuals presumably have more affective relationships with their colleagues, and are therefore more sensitive to factors such as the working environment or the social climate. The quality of relationships is a source of motivation for us in the workplace (Maertz & Griffeth, 2004). Thus, if agreeable individuals are satisfied with interpersonal relationships, they will stay in the institution. Nonagreeable persons resign less if they are in an environment where interpersonal relationships are unsatisfactory (Ehrhart, 2006). Here, we see a real P-SWE fit, which can shed light on the individual processes involved in turnover.

The present study confirmed Zimmerman (2008)'s finding that conscientiousness is related to staying in an organization, as conscientious individuals are not impulsive, assess the potential consequences of their acts (Maertz & Campion, 2004), and maybe take more time to decide.

It may, however, be offset by the experience of stress. A conscientious person who perceives his or her environment to be stressful will be more likely to leave the organization. While some studies have shown that conscientious people are less vulnerable to stress, if this experience is too intense, it may be a factor for resignation. Consistent with Holland (1985)'s vocational choices theory, conscientious individuals seem to have a preference for controllable environments, and probably choose a military environment because it is perceived to be more highly structured and a closer fit with their personality. Joining the navy may create instability, reduce perceived control, and thus generate stress, resulting in turnover. It would be interesting to undertake a more accurate analysis of the organizational features that promote stress among conscientious people in future studies, by collecting evidence about the difficulty of experiencing dysfunctional organization and precariousness (ofposts and contracts).

One of the limitations of our research is that we used subjective measures, dependent upon perceptions. Morgeson, Mitchell, and Liu (2015) showed

that taking into account events and, more specifically, shocks, allows us to understand how to limit turnover. More specifically, studying shocks (i.e., meaningful events) allows us to understand what leads people to quit (e.g., Holtom, Mitchell, Lee, & Eberly, 2008; Holtom, Mitchell, Lee, & Inderrieden, 2005). The study of turnover trajectories is a new and interesting research approach (Lee, Hom, Eberly, Junchao, & Mitchell, 2017), especially the study of P-SWE fit over time and its impact on resigners. Despite this, turnover theories continue to neglect the potentially dynamic interactions among turnover antecedents.

The originality of the present study lies in its compensation for shortcomings in the exploration of the impact of interactions between personality and professional contextual elements on turnover (Abdalla, Elsetouhi, Negm, & Abdou, 2018). We investigated the interactions between personality traits and SWE in order to understand turnover better (Dole & Schroeder, 2001), focusing on the notions of congruence versus incongruence between individuals' own characteristics and perorganizational characteristics. We partly confirmed the hypothesis that personality traits determine preferences for specific occupational environments, such that the more satisfied these preferences are, the less likely people are to leave the organization. The more closely the work environment is perceived to fit the processes underlying an individual's personality traits, the less likely that individual is to quit the organization. People become attached to organizations that match their personality traits, but quit less congruent environments, judged less fulfilling.

Studying the interaction between two personality traits at the same time is also a promising avenue for future research (Dauvier, Pavani, Le Vigouroux, Kop, & Congard, 2019). Cognitions and behaviors related to employment are influenced by a multitude of variables other than personality (e.g., uncertainty in employment, extent of individuals' personal experience, job security, corporate reputation). Furnham, Petrides, Jackson, and Cotter (2002)'s findings underscored the importance of these factors for job satisfaction. The validity of personality traits as predictors of SWE seems to vary according to the characteristics of the posts that are occupied. Thus, it would be useful to include more contextual factors in future studies, and conduct comparisons with other organizations. Moreover, Cropanzano, James, and Konovsky (1993) showed that people who experience many positive emotions are better suited to the organization and have less of a desire to resign. The experience of positive affects predicts individuals' continued employment because it indicates a better ability

to cope with demands and changes in the organization (Judge, Higgins, Thoresen, & Barrick, 1999). Conversely, individuals who tend to experience a great many negative emotions change jobs more often and tend to have behavior against labor withdrawal (Necowitz & Roznowski, 1994). People with this type of profile do not hesitate to leave their job to try to find another position that matches their expectations more closely, even if that choice is not necessarily favorable to them (Mobley, 1982). The next step in our research will be to incorporate the assessment of this most emotional dimension of SWE.

Our results reveal a need to improve the selection and placement of military recruits, with more explicit and realistic job previews during the recruitment process, and perhaps more team-building during military induction. It would also be interesting to introduce the notion of *P*-O fit to military institutions, to enhance consistency between personality traits and the work environment. Managing stress for newcomers is also important.

Given what we now know about the types of individuals (personality traits) who adapt best to specific environments (organization), it is obviously important to ensure that recruitment psychologists receive appropriate training, so that they can make optimum use of the P-SWE fit during assessments. Clearly informing applicants about this P-O fit could also help them to adjust and dissuade some of them from resigning.

Thus, future studies should confirm this validation and replicate the results with larger samples from the military or other organizations. One limitation of the present study is that we did not check whether the controls remained in service afterward. Other reasons why the resigners resigned may not have been explored in the questionnaire, and in any event we have yet to conduct a qualitative analysis of participants' responses to a series of open questions. One important focus of our future research will be the dynamic relationship between organizational variables and personality, to see how personality accounts for inter- and intraindividual differences in the way that individuals cope with different situations. The present results raise the issue of how to take individuals in an organization better into account. At the managerial level, a better knowledge of individuals' personalities would allow managers to better adjust to their needs. Prevention must also take personality and value expectations into account.

#### Conclusion

This study highlights the complexity of voluntary turnover and the need to investigate the interactions between personality traits and contextual characteristics with nonlinear models. Beyond the links between SWE, personality and

turnover, our results revealed a significant interaction between neuroticism and perceived stress that heightened the risk of turnover, as well as an interaction between agreeableness and poor work relationships that encouraged turnover. Turnover could also be attributed to an interaction between conscientiousness and perceived stress. Reducing stress for new recruits might encourage conscientious individuals and those who are not emotionally stable to remain in the organization. More generally, it is essential to study the P-SWE fit, if we are to gain a more accurate understanding of turnover in different organizational contexts.

#### **Data**

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

#### Compliance with ethical standards

All procedures performed in studies that involved human participants were in accordance with the ethical standards of the national research committee and the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

#### Disclosure statement

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#### **ORCID**

Anne Congard (D) http://orcid.org/0000-0002-0259-2949

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