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Person-Organization Fit in a military selection context

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ABSTRACT

The goal of personnel selection is to find predictors that, together, maximize the explained variance in important job outcomes such as Task Performance or Work Engagement. Common predictors include Intelligence and Big Five Personality. Using Person-Organization Fit (*P-O Fit*) for selection purposes has been discussed, but, beyond Intelligence and Personality, evidence of the incremental predictive validity of *P-O Fit* in relation to task performance and work engagement is scarce. This study examines the practical utility of indirectly measured *P-O Fit* as a selection tool in a military setting. Measures of objective *P-O Fit* were obtained from actual applicants in a military selection setting and combined with self-report measures of Work Engagement upon organizational entry, and supervisor-rated Task Performance approximately two weeks later. *P-O Fit* predicted both Task Performance ($R^2 = .041$) and Work Engagement ($R^2 = .038$). More importantly, *P-O Fit* yielded incremental predictive validity in relation to both outcomes, also after controlling for intelligence and personality traits. While our initial models (including age, gender, intelligence, and personality) explained 25.1% and 5.8% of the variance in work engagement and task performance, respectively, this increased to 26.3% and 6.3%, respectively, after the inclusion of *P-O Fit*. Implications for practical use in selection systems are discussed.

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PHRASES: Person-Organization Fit; selection; incremental predictive validity; work engagement; task performance

What is the public significance of this article?—This study suggests that Person-Organization Fit, a measure of how similar a person's values are to those of an organization, might be used in practice for personnel selection. Person-Organization Fit may be objectively assessed for a large number of applicants without prior knowledge of the organization, and the measure contributed to the prediction of both work engagement and task performance, beyond the contributions of both intelligence and personality.

Identifying valid performance predictors for personnel selection has always been an important challenge for military organizations (Fosse, Buch, Säfvenbom, & Martinussen, 2015). The purpose of personnel selection is to predict work-related outcomes, such as job performance, work engagement, or retention, before a hiring decision is made. The most common predictors include Intelligence (General Mental Ability – GMA), and more recent research into the Big Five framework of personality has supplemented this, showing that the personality factor Conscientiousness yields incremental validity beyond that of GMA (Schmidt & Hunter, 1998). The best selection systems combine

several different predictors mechanically to arrive at a final score (Kuncel, Klieger, Connelly, & Ones, 2013).

However, finding supplementary predictors that contribute incremental predictive validity becomes increasingly difficult as the list of existing predictors gets longer. Person-Organization Fit (*P-O Fit*) may be one such promising predictor, as it is concerned with compatibility between individuals and their organizations, and is therefore conceptually different from both GMA and personality. Since military organizations typically recruit upwards from within the organization, and career paths therefore tend to stay within the organization, a newly selected cadet at a military academy is in reality not selected for one specific position, but, over time, for a range of different positions at different levels in the same organization. *P-O Fit* could therefore be particularly relevant for military organizations to assess, since it concerns compatibility between an individual and the organization as a whole, not the set of knowledge, skills, and abilities required for one particular position (Kristof, 1996).

Drawing on two theoretical frameworks, the Attraction-Selection-Attrition (ASA) framework (Schneider, 1987; Schneider, Goldstein, & Smith, 1995) and Self-Concordance Theory (Sheldon & Elliot, 1999), the present

study aims to contribute to both the *P-O Fit* literature and the personnel selection literature in several important ways. First, it aims to expand on the military selection literature by providing a *P-O Fit* personnel selection study of an actual applicant sample from a military selection setting. Second, it aims to contribute to the study of *P-O Fit* as a practical tool for personnel selection in general by using applicant *P-O Fit* data to predict both work engagement and supervisor-rated task performance within an organization, something that is currently lacking (Barrick & Parks-Leduc, 2019). Third, and also relevant to personnel selection in general, the study aims to examine the predictive validity of indirect measures of objective *P-O Fit*, after controlling for both GMA and Big Five measures of personality. To our knowledge, this is the first study to include measures of work engagement, second-source rated performance outcomes, indirect measures of objective *P-O Fit*, and both GMA and Big Five personality measures as control variables.

P-O Fit and selection

The Attraction-Selection-Attrition (ASA) framework (Schneider, 1987; Schneider et al., 1995) has provided the theoretical basis for much of the research on *P-O Fit*. In broad terms, the ASA framework states that people are attracted to organizations that are similar to them, that organizations tend to select people who are similar to the organization, and that people who are part of an organization they are not very similar to will eventually leave as a result of attrition. Through this ASA cycle, organizations will over time tend to consist of people who share many of the same characteristics.

Person-Organization Fit has been defined as “the congruence between the norms and values of organizations and the values of persons” (Chatman, 1989, p. 339). Research on *P-O Fit* arose from interactional psychology (Arthur, Bell, Villado, & Doverspike, 2006), and *P-O Fit* measures, which are measures of value congruence, are not a property of the individual him/herself, but rather a measure of a relationship. However, *P-O Fit* must not be taken for cross-level research (Kristof, 1996) and, for selection purposes, the measures obtained must be treated like individual differences measures and weighted together with other predictor variables in a way that maximizes their overall predictive validity.

Several meta-studies show that *P-O Fit* is linked to work attitudes, including job satisfaction, organizational commitment, and turnover intention (Arthur et al., 2006; Kristof-Brown, Zimmerman, & Johnson, 2005; Oh et al., 2014; Verquer, Beehr, & Wagner, 2003). In addition, *P-O Fit* is positively related to job performance, including both task performance and contextual performance

(Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005). Moreover, as predicted by ASA theory, *P-O Fit* predicts turnover (Arthur et al., 2006; Hoffman & Woehr, 2006).

Despite their invaluable contributions, these meta-studies have some important limitations in terms of assessing *P-O Fit* as a practical selection tool. Only two of them both include behavioral outcomes and evaluate objective *P-O Fit* separately from other types of *P-O Fit*. This is important as objective *P-O Fit* is most practical for selection purposes. Most importantly, none of these meta-analyses control for other selection variables, which is necessary given that modern selection systems tend to combine several methods. Furthermore, as noted by Arthur et al. (2006), there is a lack of studies on the relationship between *P-O Fit* and organizational behavior based on applicant or candidate data. Indeed, all the data in their meta-analytic review were based on incumbent participants, and this situation does not appear to have improved in the past decade. This is particularly critical seen in light of the ASA cycle, because we can expect incumbents to exhibit a restricted range of *P-O Fit* since they have already been attracted to, selected by, and experienced attrition in the same organization (Arthur et al., 2006; Schneider, 1987).

In addition to these meta-analyses, two studies have specifically assessed the utility of *P-O Fit* measures for practical selection purposes by examining their predictive validity after controlling for popular selection methods. These studies have shown *P-O Fit* to be positively related to employee retention and job satisfaction beyond the contribution of cognitive ability (McCulloch & Turban, 2007) and to organizational citizenship behavior, organizational commitment, and supervisory commitment beyond the contribution of personality (Tsai, Chen, & Chen, 2012).

However, to our knowledge, no study to date has provided evidence of such predictive validity controlled for both GMA and personality, and no study has controlled for GMA when using *P-O Fit* to predict task performance. Since modern selection systems often combine measures of intelligence and personality to rank applicants, this must be considered a limitation of the current state of the *P-O Fit* literature.

P-O Fit and work engagement

Work Engagement has been conceptualized as the varying degree to which employees invest their physical, cognitive, and emotional selves in their work roles (Kahn, 1990), commit personal energy, and experience an emotional connection with their work (Christian, Garza, & Slaughter, 2011). Engagement is commonly defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli,

Salanova, González-romá, & Bakker, 2002, p. 74). Measures of work engagement obtained during a selection process are important in this context, since they can be regarded as a proxy for the initial motivation the candidates experience when they enter the organization.

The self-concordance model states that individuals are more likely to put sustained effort into pursuing goals if the goals are consistent with their core interests and values (Parker, Bindl, & Strauss, 2010; Sheldon & Elliot, 1999). Entering an organization with which you experience a substantial overlap of values (i.e., high *P-O Fit*) would form a good basis for such self-concordant goals, and therefore sustained effort. A similar argument has been made by Macey and Schneider (2008), who argue that a good fit between personal values and organizational values leads to higher levels of identification with the organization, and therefore engagement. To our knowledge, only two studies have empirically examined the relationship between *P-O Fit* and Work Engagement, both of which found a significant positive relationship (Alfes, Shantz, & Alahakone, 2016; Memon et al., 2018). In light of this, it seems reasonable to expect that entering an organization with which you have a high degree of *P-O Fit* will lead to higher levels of work engagement, or specifically:

Hypothesis 1: P-O Fit is positively related to work engagement upon organizational entry

P-O Fit and task performance

There is considerably more empirical evidence of the relationship between *P-O Fit* and task performance, with three separate meta-studies that report a positive relationship (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005), as do several more recent empirical studies (Chi & Pan, 2011; Kim, Aryee, Loi, & Kim, 2013; Lee, Kim, Kim, & Kim, 2017). Despite the considerable empirical evidence, the theoretical reasoning for this relationship does not seem to be consistent across studies. One common argument is the mediating role of attitudinal variables, such as job satisfaction or organizational commitment, or a lack of stressors such as role ambiguity (Arthur et al., 2006). However, the self-concordance model could also provide a clearer and simpler explanation of how *P-O Fit* affects performance. People who experience a high degree of congruence between their own values and the organization's values will find that pursuing organizational goals is more in concordance with their own values, leading to greater sustained effort and performance. Thus, we hypothesize:

Hypothesis 2: P-O Fit is positively related to task performance

P-O Fit, GMA, personality and incremental predictive validity

Although GMA is considered to be a very strong predictor of behavior outcomes like performance, it is generally not regarded as a strong predictor of more attitudinal outcomes, such as work engagement. Personality, in particular conscientiousness, is known to predict engagement, because more conscientious people are more responsible and will more easily become involved in the job (Christian et al., 2011). *P-O Fit* has already been found to also predict attitudinal outcomes. However, a person's measure of a personality factor is an individual difference that is considered to be stable across organizational settings. A person's measure of *P-O Fit*, on the other hand, also depends on the organization, and the same person can have a high *P-O Fit* with one organization and a low (or negative) *P-O Fit* with another organization. Personality and *P-O Fit* are fundamentally different concepts, and we therefore expect them to explain different parts of the variance in work engagement:

Hypothesis 3a: P-O Fit adds incremental validity beyond that of personality measures and GMA in terms of predicting work engagement upon organizational entry

Although the predictive validity of both personality and GMA in relation to task performance is considered to be well established (Schmidt & Hunter, 1998), they work through different mechanisms. That is also why they are often used together and why they provide incremental validity beyond that of each other. While GMA works through more rapid assimilation, learning, and adaptation to new tasks, the mechanism behind personality is largely motivational. As discussed above, *P-O Fit* is conceptually different from both GMA and personality in that it is not an inherent individual difference that remains stable across organizations. And since we expect *P-O Fit* to predict task performance, as explained by the self-concordance model, we therefore specifically expect *P-O Fit* to explain a different part of the variance in task performance than both GMA and personality. Indeed, McCulloch and Turban (2007) found no relationship between *P-O Fit* and cognitive ability, and Tsai et al. (2012) found only moderate correlations between *P-O Fit* and personality measures. Therefore:

Hypothesis 3b: P-O Fit adds incremental validity beyond that of personality measures and GMA in terms of predicting task performance

Method

Sample and procedures

Applicants for educational programs in the Norwegian Armed Forces apply through the same selection system, regardless of which college or branch they apply to. Applicants must be over the age of 18, Norwegian citizens, and have completed high school. As part of the compulsory conscript evaluation process, they have already completed a battery of tests designed to measure GMA. As the final part of the on-site selection system, candidates are divided into teams of eight to ten members. They are issued field uniforms and some basic military equipment. They then participate in a field exercise in which they take turns leading their team and dealing with a set of different cases. Each team is followed and monitored by an experienced officer or noncommissioned officer (NCO), who, over the course of several days, evaluates each candidate on five different competences that the organization assumes to be indicative of good leadership. To ensure fairness in this evaluation process, the officers and NCOs carrying out the evaluation follow structured evaluation guides where each of the competences is exemplified in observable behavior. They are also encouraged to discuss example candidates across teams with other evaluators in the same platoon. Dedicated officers perform the same function across platoons to ensure the fairness of the evaluations within the company.

Data for this study were collected through the Leadership Candidate Study conducted by the Norwegian Defence University College, as part of which each of the candidates completed a questionnaire during the first stage of the selection process. Completion of the questionnaire was voluntary, and all candidates were informed that the questionnaire was for research purposes only and would not affect how they fared in the selection process, or have any other impact on their future service, should they be selected. Data from the questionnaire were then coupled with GMA measures and task performance data collected as part of the selection process. Thus, data were collected independently at several different times: GMA well in advance (from days to months) of the selection, Work Engagement, Big Five Personality measures, and *P-O Fit* candidate profiles at day 1 or 2 of the selection process, and Task Performance approximately two weeks later. This was done in summer 2016, and repeated in summer 2017. A *P-O Fit* organizational reference profile for the armed forces was collected independently of the selection system during the winter between these two summers. The total number of participants was 2264, with 23.8% female and

76.2% male candidates. The mean age was 20.43 years ($SD = 2.25$) with 18 as the minimum age and 35 as the maximum.

Measures

P-O Fit

For this study, we used the Organizational Culture Profile (OCP – O'Reilly, Chatman, & Caldwell, 1991), one of the most common methods for measuring objective *P-O Fit* (Kristof-Brown & Guay, 2011). Specifically, we used Cable and Judge's reduced 40-item version of the OCP (Cable & Judge, 1997), which we translated into Norwegian and verified using back translation (Brislin, 1970). Since we were interested in the utility of *P-O Fit* in the selection context, the OCP fitted our purposes for two important reasons. First, it is practical that the measure can be used to assess fit without the applicant having any knowledge of the culture of the organization in question. Second, *P-O Fit* measured using OCP has been shown to yield stronger relationships with some relevant outcomes than non-OCP *P-O Fit* measures (Verquer et al., 2003).

Two sets of data are needed to calculate *P-O Fit* measures using the OCP: one for the candidates' values and one for the organization's. The "organization" part of *P-O Fit*, the organizational reference profile, was obtained by asking 600 experienced officers and NCOs from across the armed forces to complete the measure and thereby describe the values of their organization. Inclusion criteria for this group included a minimum of three years' service, while the exclusion criteria included having served anywhere other than their present branch of the armed forces. The response rate was 21.83%, or 131 responses. We then calculated the means of the 131 responses for each of the 40 items. These 40 mean values constituted the armed forces' reference profile. For the "person" part of *P-O Fit*, the candidates were asked to complete the OCP as part of the survey during the selection process, with the important difference that they were asked to let it reflect their own personal values, not the organization's.

To obtain *P-O Fit* measures for each candidate, the final step was to obtain an individual Pearson's r correlation coefficient for each candidate, between the candidate's response to the 40 items in the OCP and the corresponding mean values for the 40 items of the organizational reference profile. The resulting correlation coefficient was attributed to the candidate as a measure of *P-O Fit* with the organization. This was repeated for all candidates. We are aware that Kendall's

tau-b is used in some cases since the items of the OCP are on ordinal scale (Tsai et al., 2012). However, since the scores in our reference profile were mean values, and therefore no longer on a nine-point scale, we found Pearson's r to be more appropriate.

In some cases, candidates had either not completed the OCP or completed it incorrectly, making it impossible to compute a correlation. After this final step, we had P -O Fit measures for 1376 candidates, a response rate of 60.8%.

General mental ability

The Norwegian Armed Forces uses its own measure ("Alminnelig Evnenivå", which translates as "General Ability Level") for selection and classification (Sundet, Barlaug, & Torjussen, 2004). It consists of three subtests: word similarities, arithmetic and a Raven-like progressive matrices test. These are averaged and measured on a standard nine scale. The measure has been found to have a high correlation with WAIS (Sundet, Tambs, Magnus, & Berg, 1988). However, since a score of five or more is generally required to apply for educational programs in the armed forces, the scores in our sample were already limited to the range 5–9. Reliability was fair ($\omega = .65$, 95% CI [.60, .70]).

Personality

The Norwegian version of the 240-item NEO-PI-3 (NEO) was used to measure personality traits (Costa & McCrae, 1992; Martinsen, Nordvik, & Østbø, 2011). For our purposes, we used the five main factors: Neuroticism (e.g., "Sometimes I feel completely worthless", $\omega = .85$, 95% CI [.84, .86]), Extraversion (e.g., "I really enjoy talking to people", $\omega = .79$, 95% CI [.78, .81]), Openness to experience (e.g., "I often enjoy playing with theories and abstract ideas", $\omega = .72$, 95% CI [.70, .74]), Agreeableness (e.g., "I generally try to be thoughtful and considerate", $\omega = .75$, 95% CI [.73, .78]) and Conscientiousness (e.g., "When I make a commitment, I can always be counted on to follow through", $\omega = .86$, 95% CI [.84, .87]).

Work engagement

The Utrecht Work Engagement Scale (Schaufeli et al., 2002) measures three sub-scales of Work Engagement: absorption (e.g., "When I am working, I forget everything else around me"), vigor (e.g., "At my work, I feel bursting with energy"), and determination (e.g., "I find the work that I do full of meaning and purpose"). However, using the overall score has been suggested (Schaufeli & Bakker, 2004). In this study, we used the overall score for the 9-item Norwegian short version

of UWES (Schaufeli, Bakker, & Salanova, 2006). Coefficient omega suggested good reliability ($\omega = .88$, 95% CI [.86, .90]).

Task performance

For task performance, we used the evaluation of each candidate after completion of the field exercise. This is the actual evaluation on the basis of which candidates compete in the selection process. Candidates are evaluated on five different competences, each of which the organization assumes to be indicative of good leadership: Role Model, Task Focus, Mental Robustness, Cooperation, and Development. Based on these five scores, a formative score is calculated. This is a second-source rated evaluation of the degree to which the candidates efficiently led their team when solving a range of tasks, which is very representative of the training and work they are being selected for. Moreover, the evaluation is carried out by experienced officers and NCOs, who are assumed to have expert knowledge of these activities, using structured evaluation guides. We therefore consider this a relevant and good measure of task performance ($\omega = .95$, 95% CI [.95, .96]).

Control variables

The following control variables were included in our analyses: age (number of years, no decimals) and gender (coded as male = 1 and female = 0). Both variables were taken from the HRM computer system of the Norwegian Armed Forces, together with GMA.

Strategy of analysis

Data were analyzed using R (R Core Team, 2019) and SPSS 24. In line with recommendations concerning reliability estimates (e.g., Cortina, 1993; Dunn, Baguley, & Brunnsden, 2014; Morera & Stokes, 2016; Sijsma, 2009), we used the R package MBESS (Kelley, 2007) to calculate coefficient omega reliability estimates, including 95% confidence intervals.

Due to the hierarchical nature of the data, with candidates nested within teams where task performance evaluations were carried out, we assessed the need for multilevel modeling following the recommendations by Field, Miles, and Field (2012), using the R package lme4 (Bates, Mächler, Bolker, & Walker, 2015). Accordingly, we specified a fixed intercept only model and a random intercept model for task performance, and compared them. Since we found no variation at group level ($\Delta\chi^2 = .00$, $\Delta df = 1$, $p = .99$), we found further multilevel modeling to be unwarranted. We therefore proceeded with multiple hierarchical regressions for our analyses, using SPSS.

Table 1. Means, standard deviations, reliability and correlations.

	M	SD	1	2	3	4	5	6	7	8	9
1. GMA	5.94	1.32	.646								
2. Neuroticism	62.81	19.84	-.100**	.853							
3. Extraversion	130.36	18.04	-.120**	-.314**	.791						
4. Openness	117.29	18.11	.147**	-.135**	.350**	.722					
5. Agreeableness	125.33	16.73	-.103**	-.266**	.213**	.108**	.754				
6. Conscientiousness	140.00	17.86	-.036	-.507**	.292**	.131**	.370**	.856			
7. P-O Fit	.221	.155	-.117**	-.083**	.111**	-.003	.255**	.166**	-		
8. Work Engagement	17.13	2.39	-.084**	-.240**	.345**	.153**	.184**	.441**	.193**	.880	
9. Task Performance	5.62	1.84	-.059*	-.027	.125**	-.046	-.003	.060	.140**	.057	.954

Reliability estimates (coefficient omega) in bold on the diagonal, where appropriate.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

For the first two hypotheses, we conducted multiple regressions that included control variables. For Hypotheses 3a and 3b, we performed two separate multiple hierarchical regressions in order to investigate the incremental predictive validity of P-O Fit in relation to each of our two outcome variables. For each hierarchical regression, we used two models; one that included control variables (gender and age) as well as commonly used predictors (GMA and personality measures). In the second model, we included P-O Fit.

Results

Means and standard deviations, as well as correlations between our variables, are presented in Table 1. Reliability estimates (coefficient omega) are reported on the diagonal in bold, where appropriate.

In Hypotheses 1 and 2, we hypothesized a positive relationship between P-O Fit and both outcome variables. Two multiple linear regressions were carried out with P-O Fit and the control variables Age and Gender as independent variables, and Task Performance and Work Engagement as dependent variables. This yielded $R^2 = .041$ for Task Performance with P-O Fit $\beta = .116$ ($p < .001$), and $R^2 = .038$ for Work Engagement with P-O Fit $\beta = .185$ ($p < .001$), respectively. Thus, Hypotheses 1 and 2 were both supported.

For Hypotheses 3a and 3b, we expected P-O Fit to add incremental predictive validity beyond that of GMA and personality measures in predicting work engagement and task performance, respectively. For Hypothesis 3a, the results are reported in Table 2. Our initial model, including control variables, GMA, and personality variables, accounts for 25.1% of the variance in work engagement. The only statistically significant variables in the model were Extraversion and Conscientiousness. After adding P-O Fit in Model 2, we account for 26.3%, an increment of 1.2%. In this model, Extraversion and Conscientiousness retain their significance, and P-O Fit is also significant ($\beta =$

Table 2. Hierarchical regression analysis of work engagement.

Variables	Work Engagement			
	Coef.	Std. err.	β	$R^2/\Delta R^2$
Model 1				.251***
Control variables				
Gender ^a	.228	.197	.041	
Age	.013	.036	.012	
GMA	-.088	.064	-.049	
Personality				
Neuroticism	.004	.005	.036	
Extraversion	.031	.005	.231***	
Openness	.005	.005	.037	
Agreeableness	.000	.005	-.001	
Conscientiousness	.052	.005	.390***	
Model 2				.263**/.013
Control variables				
Gender ^a	.317	.197	.057	
Age	-.002	.036	-.002	
GMA	-.079	.063	-.044	
Personality				
Neuroticism	.005	.005	.038	
Extraversion	.030	.005	.225***	
Openness	.006	.005	.043	
Agreeableness	-.003	.005	-.024	
Conscientiousness	.051	.005	.383***	
P-O Fit	1.844	.535	.120**	

^aGender: F = 0, M = 1.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

.120, $p < .01$). Both models are statistically significant as a whole. This supports Hypothesis 3a. For Hypothesis 3b, the results are reported in Table 3. Our initial model, including control variables, GMA, and personality variables, accounts for 5.8% of the variance in task performance. In this model, the only statistically significant variables were Extraversion and Openness to experience (negative), as well as the control variable Age. After adding P-O Fit in Model 2, we account for 6.3% of the variance, an increase of 0.5%. In this model, all prior statistically significant predictors retain their significance, and P-O Fit is also statistically significant ($\beta = .110$, $p < .01$). Both models are statistically significant as a whole, thus supporting Hypothesis 3b.

Discussion

The purpose of this study was to examine the efficacy of P-O Fit as a practical contribution to a personnel selection system in a military context. This was done by examining

Table 3. Hierarchical regression analysis of task performance.

Variables	Task Performance			$R^2/\Delta R^2$
	Coef.	Std. err.	β	
Model 1				.058**
Control variables				
Gender ^a	-.239	.161	-.056	
Age	.137	.029	.169***	
GMA	.018	.052	.013	
Personality				
Neuroticism	.001	.004	.015	
Extraversion	.017	.004	.171***	
Openness	-.010	.004	-.102*	
Agreeableness	-.005	.004	-.048	
Conscientiousness	.004	.004	.038	
Model 2				.069**/.011
Control variables				
Gender ^a	-.176	.162	-.042	
Age	.126	.029	.156***	
GMA	.024	.052	.017	
Personality				
Neuroticism	.002	.004	.016	
Extraversion	.017	.004	.166***	
Openness	-.010	.004	-.096*	
Agreeableness	-.008	.004	-.069	
Conscientiousness	.003	.004	.031	
P-O Fit	1.294	.438	.110**	

^aGender: F = 0, M = 1.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

whether there is a positive relationship between *P-O Fit* and work engagement upon organizational entry and subsequent task performance, respectively, and whether *P-O Fit* can add incremental predictive validity in relation to these outcome variables, beyond that of both GMA and personality. The results show a positive relationship between *P-O Fit* and work engagement and task performance. They also show that indirectly measured objective *P-O Fit* can account for variance in both self-reported work engagement and second-source rated task performance, also after controlling for both of the most popular selection measures, GMA and personality. Thus, all hypotheses are supported.

Our results indicate that candidates with a higher *P-O Fit* tend to feel more engaged upon organizational entry, as well as performing slightly better on relevant tasks, also when controlled for the most popular selection methods. The results for Hypotheses 1 and 2 are in line with most research on *P-O Fit*, in that *P-O Fit* can be used to predict both work attitudes and behavior (Arthur et al., 2006; Tsai et al., 2012). In light of the selection and attrition aspects of ASA theory, we maintain that it is especially the use of applicant *P-O Fit* data and second-source (supervisor) rated task performance that makes the positive relationship with task performance an important contribution to the growing body of *P-O Fit* research.

Lastly, this study also brings something new to the field in that it demonstrates incremental predictive validity in relation to both work engagement and task performance after controlling for GMA and

personality, which are commonly used together in selection systems. Further, by using indirect measures of objective *P-O Fit*, we demonstrate that it can be applied to a selection process where applicants have no prior knowledge of the organizational culture.

Personality is normally considered a stable predictor of task performance, and this study also found strong relationships between personality and task performance. However, whereas one would normally expect Conscientiousness to be the strongest predictor of task performance among the personality factors, Extraversion is the stronger predictor in our study. One possible explanation for this is that evaluators' perceptions of candidates' task performance were biased by candidates' personality, particularly their level of extraversion. While we cannot rule out this possibility, the effect should at least have been attenuated by the previously discussed mechanisms to ensure the fairness of the evaluation, especially the structured evaluation guides. Another possibility is that our measure of task performance is organization-specific and, by nature, very leadership-oriented, and that, of the personality factors, Extraversion has been found to be the strongest predictor of leadership emergence and effectiveness (Judge, Bono, Ilies, & Gerhardt, 2002). Moreover, when testing a person-situation interaction model in relation to predicting the validity of the personality-job performance relationship, Judge and Zapata (2015) found Extraversion to be a stronger predictor of job performance in occupations that required strong social skills, as well as in occupations that required a strong level of competition, both of which are aptly descriptive of the aforementioned field exercise.

The UWES scale we used to measure work engagement is self-reported, and data were collected at the beginning of the selection process, well before the field exercise from which task performance measures were obtained. This limits the extent to which we can interpret these results. However, despite being a highly relevant work outcome, no other study that we are aware of has discussed the relationship between *P-O Fit* and work engagement in a personnel selection setting. From the present study, we can say that indirectly measured objective *P-O Fit* seems to indicate a higher level of work engagement when candidates enter the organization. This, in turn, might lead to more positive outcomes, given what we already know about Work Engagement.

The theoretical implications of this study include contributions to knowledge about the relationship between *P-O Fit*, task performance, work engagement, GMA, and personality. This study lends support to the notion that people's values actually differ and that congruence with organizational values is actually important to both the level of engagement employees experience upon entering

the organization and how well they subsequently perform relevant tasks. The practical implications of this are easily identified. In the search for incremental predictive validity in personnel selection, an organization that already utilizes intelligence and personality might have something to gain from examining *P-O Fit*. This seems particularly relevant to military organizations or other organizations where career paths are predominantly within the organization, and where it makes sense to add a selection variable that pertains to the organization as a whole, and not to a specific position. However, care should be taken to examine these relationships in the organization first, since there could well be differences across organizations in how well *P-O Fit* performs as a predictor. Moreover, studies reporting on the development of *P-O Fit* over time seem to be lacking, with regard to both the stability of individuals' measures of *P-O Fit* and the stability of organizational reference profiles.

Though statistically significant, the effect sizes of *P-O Fit* in both our hierarchical regressions are arguably small. Whether they are large enough to warrant including *P-O Fit* in a selection system test battery would depend not so much on the effect size itself, but rather on the expected utility of the contribution, in which the effect size is only one factor (Cascio & Boudreau, 2011). However, the only factor that detracts from the total expected utility (using the Brogden-Cronbach-Gleser model of estimation – BCG) is the actual cost of including the OCP in an applicant test battery. Since the OCP is easy and cheap to administer to many applicants simultaneously, and all other factors of the BCG-model are multiplied, this would probably be well worth the effort in most cases.

Methodological considerations

In this study, we used second-source rated task performance. The ratings were performed by subject-matter experts relevant to the task, and the raters had no other involvement in any of the other measures used. This is one of the strengths of our design since it should minimize the effect of common method biases (Podsakoff, MacKenzie, & Podsakoff, 2012). Another strength in this respect lies in the time interval of the design: *P-O Fit* measures were obtained at the very beginning of the selection process, with the candidates having no prior knowledge of the OCP organization reference profiles. Task performance measures were obtained approximately two weeks later, when the subjects were in the process of being acclimated to the organization. This is a strength in two respects. First, it is a methodological strength, as it should contribute to reducing the effect of common method variance. However, from a practical personnel

selection perspective, it also maximizes the relevance of the data, since a valid predictor for selection purposes should be measurable before organizational entry and performance data should be obtained subsequently and within the organization. This also answers the call by Arthur et al. (2006), who regretted the lack of applicant *P-O Fit* data in reported studies.

One concern, however, is that the raters themselves are experienced members of the organization. According to the ASA framework, they should themselves exhibit a good fit with their organization. We can therefore question whether their task performance ratings are biased by the degree of perceived *P-O Fit* they see in the candidates, or even the degree to which they think the candidates are similar to themselves. In this light, an even more objective measure of task performance would be preferable.

We find it likely that there will be differences between organizational reference profiles measured using the OCP for different sub-units and levels of the organization. At what level of the organization should *P-O Fit* be measured, then? In the present study, we used an overarching “Armed Forces” OCP reference profile, since the selection process and measure of task performance was not branch-specific, but identical for candidates across the armed forces. We cannot say that different OCP reference profiles for the respective branches would yield stronger relationships if the measure of task performance were more branch-specific. However, research seems to be currently lacking on differences in *P-O Fit* across different levels or units of the same organization, and such a finding would not be entirely implausible.

As regards the generalizability of this study, the military-specific task performance and military population could obviously reduce it. On the other hand, the fact that we use applicant *P-O Fit* data for a young population not yet socialized into the armed forces might remedy this somewhat. Moreover, though the task performance setting (leading a team of soldiers on a field exercise) is undeniably military, four of the five competences by which we measured task performance are based on the balanced leadership model, with theoretical roots in transformational leadership (Martinsen, Fosse, Johansen, & Venemyr, 2018). Although the measure used by the organization is not validated, these competences are considered to be indicative of good leadership across domains, a point that might make these results applicable beyond a military setting.

Contrary to most research on intelligence, the contribution of our GMA measure in terms of adding statistically significant incremental validity to any of

the outcome variables was modest or not present at all. In this setting, however, the applicants have already been screened on this variable (with very few exceptions, they all score 5 or better on a standard nine scale), which means that our GMA data suffer from restriction of range. This might account for the small effect sizes, or lack of any effect whatsoever. It would of course be preferable if our sample was not screened on this variable before we obtained outcome data. However, as GMA instruments are a cheap and efficient way to screen large numbers of applicants, it is quite common to do this before more expensive selection methods are applied, like the described field exercise. Obtaining such full range data from an actual selection process would therefore probably be quite unrealistic.

Conclusions

The current study examined the efficacy of *P-O* Fit as a practical predictor for use in a personnel selection context. We did this by examining the relationship between indirect measures of objective *P-O* Fit for an applicant sample with second-source rated task performance and self-reported measures of work engagement upon organizational entry. Expanding on this, we also examined the incremental predictive validity of *P-O* Fit measures in relation to these two outcome variables, after controlling for both GMA and five factor personality measures, both of which are commonly used in personnel selection. Our evidence supports considering *P-O* Fit for inclusion in actual multi-predictor selection systems.

Disclosure statement

No potential conflict of interest was reported by the authors.

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