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Do Atypical Individuals Make Atypical Choices? Examining How Gender Patterns in Personality Relate to Occupational Choice and Wages Among Five Professions in Sweden

Anne Grönlund¹  · Charlotta Magnusson²

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Abstract The article provides a close-up picture of gender and personality in relation to the gender composition of occupation and the gender wage gap. Using a survey of newly graduated highly educated men and women in five occupations in Sweden (engineers, lawyers, police officers, social workers and psychologists, $n \approx 2400$), we examine (a) if personality traits—measured as Big Five traits, risk-taking and self-esteem—differ between men and women (b) if differences in personality traits are systematically related to the gender composition of the occupation, (c) if individuals who have chosen an occupation dominated by the other gender are gender-atypical in their personalities and, (d) how personality traits are related to wages and the gender wage gap. The results show significant gender differences in agreeableness, emotional stability and perceived risk-taking. The male-dominated occupations score higher on risk-taking than those dominated by females, but the pattern for agreeableness is less clear and the scores on emotional stability are no higher in these occupations. Further we find that individuals who have chosen a gender-atypical occupation tend to display gender atypical personality traits. In line with previous research, we find that risk-taking and self-esteem are positively related to wages but these associations do not account for gender differences in wages. The valuation of personality traits does not vary systematically with the gender composition of the occupations but being agreeable has a more negative wage effect for women than for men.

Keywords Gender · Personality · Self-esteem · Occupation · Wages

✉ Anne Grönlund
Anne.Gronlund@umu.se

¹ Department of Social Work, Umeå University, Umeå, Sweden

² Swedish Institute for Social Research (SOFI), Stockholm University, Stockholm, Sweden

Introduction

Gender differences in personality traits is a topic that attracts great interest in societal debates. Such differences have also been focussed in research studies, both in psychology and in labor market research. Here, we bring these research fields together in a close-up study of personality, gender, occupational choice and wages.

In labor market research, there is a growing recognition that personality traits affect both preferences and productivity [26]. Empirically, several studies have shown that personality traits affect job performance and wages [5, 28], while others point to links between personality and occupational choice [4, 27]. However, to our knowledge no study has yet explored how gender differences in personality relate to the choice of male- or female-dominated occupations.

Occupational gender segregation is a persistent yet insufficiently understood phenomenon. Despite the dramatic increase in female labor force participation and educational investments, men and women still tend to work in different occupations and such segregation has been identified as an important driver behind gender inequalities in the labor market [10, 34]. However, although gender segregation may seem stable at the aggregate level, several occupations undergo rapid changes in their gender mix. This is particularly clear in high-skilled occupations, as women enter previously male-dominated professions through tertiary education [10, 17]. Nevertheless, the mechanisms behind segregation and de-segregation are not well understood and here, personality is a factor worth exploring.

In this article, we argue that perceptions of personality traits could constitute a link between the gendering of jobs and gendered self-perceptions. Underlying the gendered division of labor found in all societies are widely held ‘gender beliefs’ or stereotypes [[42] p. 511, [47] cf. 8]. These stereotypes define the distinguishing characteristics of men and women. Gender differences in personality traits can reflect cultural stereotypes because men and women are treated differently, ascribed different roles and because they internalize ‘gender beliefs’ as part of their self-concept [19]. Meanwhile, members in all societies also ‘gender’ work by associating specific tasks and occupations with one gender [9]. Presumably, then, occupations dominated by men or women are likely to be stereotyped as demanding ‘male’ or ‘female’ personality traits. At the same time, however, stereotypical notions of gender and work are increasingly challenged as women commit to paid work, acquire university degrees and enter new occupational tracks. In this complex situation of stability and change, empirical studies are needed to explore the connections between personality and occupational (de)segregation.

The aim of the article is to examine (a) if personality traits differ between men and women, (b) if differences in personality traits are systematically related to the gender composition of occupations, (c) if individuals who have chosen an occupation dominated by the other gender are gender-atypical in their personalities and, (d) how personality traits are related to wages and the gender wage gap. The analysis is based on a new dataset ($n \approx 2400$) comprising Swedish men and women who recently graduated from five higher educational programs which lead to occupations with different gender composition (civil engineers, police officers,

lawyers, psychologists and social workers). The sample was stratified such that an equal number of men and women were sampled from each occupation. The design allows us to explore, first, whether gender differences in personality reported in previous research appear also in this sample of young professionals, brought up in a Sweden—a country where both welfare state policies and widespread social norms encourage gender equality [e.g. 15, 32]. Second, we can expose the impact of gender by comparing men and women under conditions of maximum similarity (same education, occupation, cohort and career stage) and by studying men and women in both gender-typical and gender-atypical occupations. With this sampling strategy, the study provides a strong test of the notion that personality differences provide a mechanism sustaining occupational segregation and gender wage gaps in the modern, dual-earner society.

Previous Research and Our Contribution

Personality traits can be understood as the relatively enduring patterns of thoughts, feelings, motives and behaviors that individuals exhibit across situations [37]. At an early stage, a large number of often overlapping traits were discussed by personality psychologists, but for the past three decades there has been a broad consensus that the Five-Factor Model (FFM), often labeled the Big Five provides an adequate taxonomy of personality traits [37]. The model, which draws on trait descriptors used in natural language and in personality questionnaires, categorizes traits into five broad dimensions—extraversion, agreeableness, conscientiousness, emotional stability and openness.

Extraversion reflects the extent to which a person is outgoing, talkative, energetic, enthusiastic, active and assertive. Highly extraverted individuals tend to seek excitement and possess an optimistic view of reality, while individuals with a low level of extraversion tend to be withdrawn, passive, sober and self-dependent. *Agreeableness* describes the propensity to be soft-hearted, trusting, generous, acquiescent, compassionate and warm. Individuals who score high on agreeableness tend to be cooperative and trustworthy and think highly of others. As a contrast, those who score low tend to be stingy, suspicious, critical and antagonistic. They often have a cynical view of life and experience difficulties in cooperating with others. However, less agreeable individuals are also regarded as assertive and tough negotiators. *Conscientiousness* captures the tendency to be organized, reliable, responsible, thorough and efficient. Highly conscientious individuals are self-disciplined, hardworking and dutiful, while less conscientious individuals tend to be negligent, unreliable and less ambitious. *Emotional stability* (neuroticism reversed) reflects the propensity to be calm, relaxed and satisfied with oneself. Individuals scoring high on emotional stability are generally confident and composed while low scorers tend to be anxious, self-conscious, emotional and touchy. *Openness* measures the degree to which a person is curious, imaginative, insightful and receptive to new experiences. Individuals who score high are usually creative, curious and inquisitive and accepting of new ideas and alternative viewpoints, while those who score low are down-to-earth, conventional and prefer routine to variety.

In psychological research, gender differences in personality traits have been examined in studies from several countries. Overall, the results suggest that differences in Big Five personality traits are small to moderate [12, 35, 46]. The largest and most consistent gender differences are reported for agreeableness and emotional stability. For agreeableness, and related measures such as tender-mindedness, women score higher than men [12, 19, 35, 46]. For emotional stability, they score lower (therefore, higher on neuroticism and related indices of anxiety). Gender differences in the other Big Five traits—extraversion, openness and conscientiousness—are smaller and not always significant but when they are, women tend to score higher than men [12, 19, 35, 46]. It should be noted that the Big Five is a hierarchical structure where many specific traits or facets are grouped together within the higher-order factors and therefore, there can be gender differences in specific traits which run in opposite directions and cancel each other out at the Big Five level. Weisberg et al. [47] demonstrate that, for extraversion, openness and conscientiousness, this is indeed the case [21]. Their study, which systematizes and confirms results from previous studies of gender differences in personality at the facet level [12, 19] suggests that gender differences may be larger if traits are studied in more detail.

Apart from the Big Five measures, our analysis also comprises indicators of self-esteem and risk-taking. Gender differences in these aspects of personality, or non-cognitive skills, have attracted considerable attention because they are potentially relevant for understanding labor market orientations and outcomes. Risk-taking, or risk aversion, is a term used in several disciplines with different measurement practices. Despite this variation, most studies show that women tend to be less willing than men to take risks [6, see 13 for a review]. For self-esteem, there is a wide-spread notion that women score substantially lower than men; however, research findings have been inconclusive. Two meta-analyses from the 1990s [19, 31] report that men score higher on global measures of self-esteem but the magnitude of the difference was rather small. More recently, a meta-analysis of domain-specific self-esteem [21] has shown that men have higher self-esteem in some areas (e.g., physical appearance) while women score higher in other areas (e.g., behavioural conduct) and report no gender difference in academic self-esteem.

In these quantitative research traditions, gender differences are discussed in terms of average trait scores although it is recognized that there is a large degree of overlap between the distributions of men and women. Such approaches can be controversial as some argue that a focus on differences will endorse societal stereotypes. At the same time, however, empirical studies including direct measures of personality are essential for scrutinizing the relevance of theoretical assumptions based on traditional stereotypes. Clearly, there is strong need to understand how gender inequalities persist despite the rather dramatic changes in both attitudes and behavior and here, personality traits are discussed as one potential mechanism. As mentioned, personality traits have been related to both preferences and skills and it can be argued that even modest mean differences will have large long-term consequences if they set men and women off on different tracks, that is, if they contribute to gendered educational and occupational choices which entail different wage and career trajectories. Exploring how personality relates to occupational

choice and to what extent occupational gender segregation involves a sorting by personality thus seems pertinent. Such studies can shed new light on the mechanisms behind segregation and the prerequisites for desegregation. Ultimately, they could also further our understanding of gendered wage gaps and other labor market outcomes [33, 38].

As mentioned, personality traits could constitute a link between the stereotypical notions of gender on the one hand and jobs and occupations on the other. According to Feingold, three sociocultural models can help explain gender differences in personality traits [19]. The *social role model* posits that gender differences in social behaviour reflect gender roles which prescribe appropriate behaviours for men and women and these behaviours help shape personalities. The *expectancy model* contends that men and women are treated differently due to cultural gender stereotypes and that they internalize these beliefs as part of their self-concept, thus conforming to expectations. Finally, the *artifact model* argues that, due to gender stereotyping, men and women value the importance of possessing various traits differently and that these differences bias self-reports of personality characteristics. For example, if men believe that they should be assertive they may over-report their level of assertiveness. Meanwhile, if agreeableness is considered a ‘feminine’ trait, women may describe themselves as more agreeable than they are.¹ These models can also be relevant for understanding gendered occupational choices.

In general, the gendered division of labor in society is based on widely shared stereotypes in which men and women are attributed with different types of behaviour, skills and characteristics [cf. 42, 47]. Specifically, Charles and Grusky [10] argue that occupational gender segregation can be explained by two main mechanisms: gender essentialism and male primacy [cf. 8, 41]. Male primacy refers to the tendency to regard male characteristics and activities as more status worthy, while gender essentialism captures the notion that women and men are competent in different domains and is relevant for understanding the gendered sorting into different jobs and occupations.² Because cultural stereotypes depict men and women as different in skills and interests they can be viewed—by themselves and employer—as suitable for different jobs [10]. Thus, occupational choices can be shaped by gender-role socialization both before and during adulthood [16, 47], and such choices are further influenced by anticipation of employer’s attitudes and potential discrimination practices [18]. However, gender stereotypes also form our perceptions of work itself. Members in societies ‘gender’ work by associating specific tasks with one gender [1, 9] and the perception of ‘male’ and ‘female’ characteristics is closely related to the perception of occupational characteristics—for example, regarding the requirements of physical, analytical and interactional skills [cf. 10, 34].

Based on this reasoning, we argue that because personality traits are constructed as typically ‘male’ or ‘female’, occupations dominated by men or women are likely

¹ The sociocultural model does not exclude the possibility that there may also be biological explanations for gender differences [19].

² Presumably, these mechanisms are also linked together as a separation of men’s and women’s work is a prerequisite for a difference in valuation [16].

to be stereotyped as demanding certain traits. For example, agreeableness—a trait more often associated with women—may be seen as important in female-dominated care occupations while male-dominated occupations could be perceived as demanding more assertiveness and risk-taking. Thus, perceptions of personality traits could constitute a mechanism through which occupational segregation is reproduced. If this is the case, individuals that make gender-atypical occupational choices may face a complex situation of both challenging and acknowledging culturally prescribed gender stereotypes [40].

At the same time, however, the stability of gender segregation should not be overestimated. In fact, the gender composition of occupations—particularly high-skilled occupations—is in flux. Thus, the link between personality, gender and occupational choice is not fully determined by traditional gender socialization and empirical studies can uncover possibilities for change and intervention. According to Borghans et al. [5], personality is more malleable than cognitive ability (IQ) and although many psychologists argue that personality traits are relatively stable in adulthood, this view has been contested. Moreover, even frequent defenders of the stability perspective concede that personality traits do not stabilize until age 30 and that ‘from the perspective of the trait psychologist, adulthood begins at that point’ [37, p. 11]. In fact, a meta-analysis of longitudinal studies finds that the greatest mean-level change in personality traits takes place between age 20 and 40 [45]. Taken together, these findings suggest that gender differences in personality are formed through socialization process that continues from childhood through higher education and early work life experiences. Thus, occupational choices and personality traits may develop in close connection and experiences from gender-typical versus gender-atypical work contexts may strengthen or modify the internalization of cultural stereotypes in our self-concepts. Such causal processes will not be explored in this study, which is based on cross-sectional data. However, gender differences in personality can also be modified by social contexts and here, we will scrutinize traditional stereotypes by utilizing a particular sample. The study focusses on younger individuals brought up in Sweden. In Sweden, state policies promoting gender equality and a dual-earner/dual-care family model have been in place since the early 1970s [32, 44] and ever since that time, levels of female and maternal employment have been high by international standards [24]. Thus, younger Swedish generations (such as our respondents) have grown up in families where both spouses work. Comparative studies further show that attitudes supporting a gender equal sharing of paid and unpaid work are stronger in Sweden than in many other countries [15]. With the choice of the Swedish context and the construction of our sample (see method section), we intended to minimize gender differences to put theoretical assumptions to a strong test. The idea is that if the proposed relationships appear in this sample, gender differences in personality can be regarded as a relevant mechanism reproducing gendered choices and rewards even in the modern, dual-earner society. Because our study comprises only five occupations, such a conclusion would need to be corroborated by broader studies including also other generations and occupations, as well as other social contexts. However, we agree with Mueller and Plug [38, p. 2] claiming that ‘given that research on personality traits is still in its infancy, there is ample room for exploratory studies’ and, as

explained below, the issue of personality and gendered occupational choice is an empirically understudied topic.

In labor market research, there is a growing interest in studying the effects of personality traits on job performance and wages. Several studies show that personality differences have a significant albeit modest impact on the gender wage gap [7, 38]. However, the labor market returns to personality traits may differ across occupations, presumably because different work tasks require different dispositions. Moreover, men and women can be differently rewarded for the same personality trait. For example, Mueller and Plug [38] find that all Big Five traits have an effect on earnings, but that men are rewarded for other traits than women. Of the five traits, agreeableness was most consequential for the gender gap in earnings in this study, both because men scored considerably lower on the agreeableness scale and because only men were rewarded for their lack of agreeableness (or, their assertiveness). Self-esteem has proved to be important for several labor market outcomes [26, 44]. Both Heckman et al. [26] and Borghans et al. [5] find empirical evidence of a causal relation between self-esteem and earnings. Individuals with high self-esteem and positive self-evaluations tend to have higher aspirations [28] and are more likely to apply for high-paying jobs [26] as well as more challenging jobs [28]. Finally, Keller et al. [30] report that self-esteem is important for obtaining high quality jobs but only for women, suggesting that self-esteem is particularly pertinent to women's labor market opportunities. In sum, studies show that personality traits can explain part of the gender wage gap, but also that the valuation of certain traits can vary with both occupation and gender.

The link between personality and occupational choice has been focused by researchers arguing that because different personality traits are important in different jobs, some individuals are more likely than others to end up in a particular occupation. Already in the 1980s, Filer [20] showed that conscientiousness and emotional stability were important for obtaining a white-collar occupation. These findings were supported in a more recent study by Ham et al. [25], which also showed that emotional stability was important for men's probability of ending up in white-collar occupations. Other studies show that social or extroverted individuals tend to choose jobs which involve more interpersonal interactions [33]. Jackson [27] further finds that withdrawn individuals are less likely to enter higher managerial positions, suggesting that extraversion is important in such positions. Studies of job performance also provide some support to the notion that different occupations require different personalities. In a study of five occupational groups, Barrick and Mount [4] showed that conscientiousness was related to job performance in all groups while extraversion was particularly important among managers and in sales.

To date, however, studies that explore the importance of personality for gendered occupational choice are few. A study by Grazier and Sloane [23] suggests that women, due to their tendency to be more risk averse, are more likely than men to be employed in safer jobs or in jobs with lower earnings risk. Meanwhile, Antecol and Cobb-Clark [3] find that relationships between and occupational attainment are modified by gender as men and women with the same non-cognitive skills tend to obtain different occupations. As mentioned above, however, the relationship

between personality traits and the gender composition of occupations has not been studied directly.

To address these gaps, we will explore the issue of personality, gender, occupational choice and wages. The study contributes to research in several ways. By focusing on younger individuals brought up in a context where gender equality is a strong ideal and comparing men and women who are similar in terms of education, occupation and career stage, we can assess the contemporary relevance of traditional accounts of gender and personality. Moreover, we can study the personality traits of men and women in occupations with different gender composition to understand the links between gendered self-conceptions and the gendering of occupations. We expect that ‘male’ personality traits—that is, traits where men tend to score higher—are more common in male-dominated occupations (here: civil engineers, police officers) while ‘female’ traits—those where women tend to score higher—are more common in female-dominated occupations (here: psychologists and social workers) even after controlling for individual gender. Meanwhile, the dominance of either ‘male’ or ‘female’ traits should be less pronounced in a gender-integrated occupation which is less clearly stereotyped (here: lawyers). Additionally, we expect that individuals who have made a gender-atypical occupational choice—that is, those who work in an occupation numerically dominated by the other gender—should be more similar to the opposite gender in their personalities than same-sex individuals working in a gender-typical occupation. However, because individuals who make atypical choices will find themselves in a minority position which may entail several challenges [cf. 29], this gender-logic may be modified by a norm-breaking logic. In general, individuals in gender-atypical occupations may need to have more self-esteem and be more risk-taking and empirically, this can affect occupational patterns differently for men and women (see below). Finally, we explore relationships between gender, occupational choice and wages.

Hypotheses

We propose the following hypotheses:

H1 In line with previous research, we expect women to score lower than men on emotional stability, risk-taking and self-esteem and higher than men on agreeableness. We predict no significant gender differences in openness, conscientiousness or extraversion.

H2 We expect individuals working in the male-dominated occupations of civil engineer and police to score lower on agreeableness and higher on emotional stability than individuals in the female-dominated occupations of social worker and psychologist. Also, they are expected to be more risk-taking and have higher self-esteem. For all these traits, lawyers are expected to score in-between the male- and female-dominated occupations. For openness, conscientiousness and extraversion no occupational difference is expected.

H3 Individuals in gender-atypical occupations display gender-atypical personality traits. In particular, female civil engineers and police officers are expected to

be more risk-taking, less agreeable and more emotionally stable and have higher self-esteem than female psychologists and social workers. For men, patterns may be more complex. We expect male psychologists and social workers are expected to be more agreeable and less emotionally stable than male civil engineers and police officers. However, because gender-atypical occupational choices may require more self-esteem and more risk-taking than conventional choices, it is an open question whether male psychologists and social workers should score lower on these indices than male civil engineers and police officers.

H4a Emotional stability, risk-taking and self-esteem—the traits on which men tend to score higher—are positively related to wages while agreeableness—the trait on which women tend to score higher—is negatively related to wages. Therefore, gender differences personality traits will explain part of the gender wage gap, over and above human capital.

H4b Because the relationship between personality on wages can be moderated by gender and occupation we predict several interaction effects. We expect the positive effect of emotional stability, risk-taking and self-esteem and the negative effect of agreeableness to be stronger in the male-dominated occupations than in the other occupations. The effects of these traits are further expected to be stronger for men than for women. Finally, we expect a three-way interaction showing that the gender difference in the reward to these traits is particularly large in the male-dominated occupations.

Data and Method

The questionnaire was distributed in 2013 to Swedish men and women that had graduated from five higher educational programs: Degree of Master of Science in Engineering (hereafter: engineers), Degree of Master of Laws (lawyers), Degree of Master of Science in Psychology (psychologists), Degree of Bachelor of Science in Social Work (social workers) and the Police Program (police officers). The sample was drawn from the National Register of Higher Education and The Swedish Register of Education and comprised individuals that had obtained a degree from the programs in the years 2007–2010.³ Sampling, distribution and coding was administered by Statistics Sweden. The response rate was 55%. The sample used in the analysis include only those working in these occupations at the time of the questionnaire ($n = 2449$).

The programs were chosen because they lead to a specific occupation and because these occupations differ in their gender-mix. According to the Swedish occupational register, comprising the Swedish labor force aged 16–64, women constitute 26% of the police officers, 20% of the civil engineers, 50% of the lawyers, 72% of the psychologists and 84% of the social workers. Thus, two of the occupations can be classified as male-dominated, two as female-dominated and one as gender-integrated. Clearly, there are also other differences between the programs,

³ The timespan was necessary to fill the quota of the underrepresented gender in all educational programs.

most notably regarding the length. Also, at the time of the questionnaire, the police program did not provide a university degree. Instead, it was post-secondary education, provided by the Swedish National Police Academy. However, these differences are of less relevance to our study, because we focus on the importance of gender and personality rather than on comparing the programs per se.

Finally, the sample was stratified such that 500 men and 500 women were sampled from each educational program. In other words, women and men who have made gender-atypical occupational choices have been oversampled. This sampling strategy allows us to disentangle individual gender from the gender composition of the occupation. Thus, the importance of gender differences in personality can be exposed. Meanwhile, the variable occupation will reflect other characteristics of the occupation than the gender of the workforce, such as the construction of skill requirements.

Below, we first present linear regressions on seven different measures of personality—the Big Five personality traits, perceived self-esteem and risk-taking. Due to the stratification, gender differences can only be presented controlling for occupation. However, for pedagogical reasons, we also present analyses of bivariate, ‘unadjusted’ gender differences by using weights to adjust for the oversampling of individuals in gender-atypical occupations. In these weighted regressions, the share of men and women in each occupation corresponds to actual share in the population (i.e., all individuals graduating from these programs 2007–2010). These regressions put our findings into a broader perspective, which can help us understand how individual gender influences occupational patterns in personality traits.

To measure the Big Five personality traits, we use the 10-item instrument (TIPI) developed by Gosling et al. [22]. This brief measure of the Big Five personality dimensions has been thoroughly validated and shown to reach adequate levels in terms of convergence with more complex instruments regarding self, observer and peer reports, as well as test–retest reliability and patterns of predicted external correlates [22]. In this instrument, each personality trait is assessed by two items representing each pole of the five dimensions. The items measure the degree to which that particular characteristics represent the respondent’s personality, with responses scaled from 1 (low) to 7 (high). In our study, we apply the established items and scales. The *extraversion* index is measured with the two items ‘extraverted, enthusiastic’, and ‘reserved, quiet’ (reversed scored). *Agreeableness* comprises the items: ‘sympathetic, warm’ and ‘critical, quarrelsome’ (reversed scored). *Conscientiousness* includes the items ‘dependable, self-disciplined’ and ‘disorganized, careless’ (reversed scored). *Emotional stability* (neuroticism reversed) contains the items ‘calm, emotionally stable’ and ‘anxious, easily upset’ (reversed scored). *Openness* to experience is measured with the items ‘open to new experiences, complex’ and ‘conventional, uncreative’ (reversed scored).

Self-esteem is captured with the global question ‘How would you describe your self-esteem?’, with a response scale from 1 (very bad) to 5 (very good). Self-esteem is a broad concept that can be defined and measured in many ways, both as a global measurement [c.f. 28] and in terms of domain-specific aspects [e.g. 31]. Global self-esteem refers to the overall value that an individual places on her/himself as a person [c.f. 28]. Thus, global self-esteem reflects our valuation—positive or

negative—of ourselves. Global measures of self-esteem have been widely used in previous research [31]. An individuals' propensity to identify her/himself as a *risk-taker* is measured with the statement 'I am a risk-taker', with a response scale ranging from 1 (low) to 7 (high). In previous research, some studies measure risk preferences with a battery of questions regarding choices in a lottery game while experimental studies let respondents participate in real games [4, 11]. However, Dohmen et al. [14] have shown that risk attitudes are better captured with a direct question of the respondent's willingness to take risks in general, compared with a lottery measure. Furthermore, questions about general risk attitudes tend to predict risky behaviour, are highly correlated with domain-specific measures and tend to predict risky behaviours in several domains.

Finally, we study the extent to which gender differences in personality traits relate to wages can explain gender wage gaps, and also, whether the reward to certain personality traits differs with gender and occupation. In these analyses the logarithm of hourly wage is used. Using a logarithmic dependent variable in an OLS regression, a change by one unit in the independent variable produces a percentage change in the dependent variable [2]. The following estimation is used to calculate percent change: $100(\exp(b)-1)$.

See Table 4 in Appendix for a description of the variables.

Results

Table 1 displays the gender differences in personality traits, after controlling for the individual's occupation. Because we want to compare five different occupations and because this comparison is explorative in its nature, we use effect coding. This coding practice allows us to simultaneously compare all occupations rather than assigning to one of them the status of reference group (as in dummy coding), thus makes the results more immediately interpretable. With effect coding, the sum of variable values for each independent variable will be zero. Therefore, the intercept can be understood as the average value in the dependent variable across the categorical independent variables.

As the table shows, our predictions in **H1** are supported for every variable. Women describe themselves as less risk-taking than men and report a lower level of self-esteem. Regarding the Big 5 personality traits, women are more agreeable and less emotionally stable than men. Thus, even in this select sample, we find statistically significant gender differences in line with those observed in previous research. For the other Big Five traits, we did not expect gender differences but we find that in this sample women are significantly more extraverted and conscientious than men. For these variables, previous studies do not always show significant coefficients but the direction of the relationship coefficients is generally in line with our results (see above). In terms of z-scores (Tables 5, 6 Appendix) the gender difference amounts to about half a standard-deviation for risk-taking, agreeableness and extraversion and about a quarter of a standard deviation for self-esteem, emotional stability and conscientiousness. Thus, the overall impression is that gender differences appear as clearly in our select sample as in previous research from other countries [9].

Table 1 Personality traits across gender and occupation. OLS regressions

	Risktaking		Self-esteem		Extraversion		Agreeableness		Conscientiousness		Emotional stability		Openness	
	b	SE	b	SE	b	SE	b	SE	B	SE	b	SE	b	SE
Intercept	3.27	0.03	3.95	0.02	5.25	0.02	5.52	0.02	5.51	0.02	5.36	0.02	5.29	0.02
Man	0.28	0.03	0.08	0.02	-0.21	0.03	-0.14	0.02	-0.22	0.02	0.16	0.02	-0.03	0.02
Woman	-0.28	0.03	-0.08	0.02	0.21	0.03	0.14	0.02	0.22	0.02	-0.16	0.02	0.03	0.02
Civil engineer	0.15	0.06	-0.04	0.03	-0.25	0.05	-0.22	0.04	-0.02	0.05	-0.19	0.05	0.03	0.04
Lawyer	-0.14	0.06	0.04	0.03	0.10	0.05	-0.04	0.04	-0.00	0.05	-0.10	0.05	-0.26	0.04
Psychologist	-0.29	0.06	-0.02	0.03	-0.22	0.05	0.11	0.04	-0.21	0.04	-0.11	0.04	-0.00	0.04
Social worker	-0.07	0.06	-0.04	0.03	0.07	0.05	0.17	0.04	-0.02	0.04	0.13	0.05	0.14	0.04
Police	0.35	0.06	0.06	0.03	0.29	0.05	-0.02	0.04	0.25	0.05	0.27	0.05	0.09	0.04
R ² %	5.5		1.6		5.4		4.1		5.4		3.8		1.8	

Cell entries are unstandardized regression coefficients (b) and standard errors (SE)

Bold coefficients = significantly different from zero ($p < 0.05$)

To put the results from our stratified sample in a broader perspective, we have conducted regressions with weights which ‘undo’ the stratification such that the share of men and women in each occupation correspond to that in the population. In these regressions (Tables 5, 6 Appendix), the gender differences in agreeableness and risk-taking are larger than in our stratified sample. For the other variables, the difference is marginal, except for conscientiousness where the gender difference is larger in the stratified sample. These findings suggest that although part of the gender effect is explained by occupational choice, significant gender differences remain even after accounting for occupation.

Regarding our second hypothesis, Table 1 shows that for risk-taking, the coefficients for civil engineers and police are positive and significantly different from zero while the coefficients for psychologists and social workers are negative. For social workers, the coefficient is not significantly different from zero, that is the mean value across groups. However, a closer examination shows that confidence intervals for social workers do not overlap with those for the male-dominated occupations (confidence intervals not displayed, available upon requests). For agreeableness, the coefficients for psychologists and social workers are positive and significant, while those for civil engineers and police officers are negative. For police officers the coefficient is not statistically different from zero but non-overlapping confidence intervals suggest that police officers are less agreeable than social workers but not less agreeable than psychologists.

For self-esteem, the coefficient for police officers is significant and positive. The coefficients for the female-dominated occupations are all negative but non-significant. This is the case also for civil engineers and closer examinations show that confidence intervals overlap for all occupations. Regarding emotional stability, the significant regression coefficients pointing in different directions and the non-overlapping confidence intervals suggest that police officers and social workers are more emotionally stable than civil engineers and psychologists.

Thus, in support of **H2** we find that individuals working in the male-dominated occupations are more risk-taking and tend to be more agreeable than individuals working in the female-dominated occupations. Contrary to the hypothesis, individuals in the male-dominated occupations do not report higher levels of self-esteem or emotional stability. As expected we do not find any clear pattern relating to ‘male’ or ‘female’ traits for the gender-integrated occupation of lawyers. For example, lawyers are similar to psychologists and social workers in terms of risk-taking, but lower in agreeableness. For the other personality traits—extraversion, conscientiousness and openness—the lack of any pattern reflecting the gender composition of the occupations is in line with our predictions.

In weighted regressions, the differences between male- and female-dominated occupations becomes somewhat clearer (see Table 7, Appendix). Now the coefficient for social workers is significant and negative for both risk-taking and self-esteem and confidence intervals for self-esteem no longer overlap with police officers. For agreeableness, the coefficient for police officers is now significant and negative and confidence intervals show no overlap with psychologists. For emotional stability, occupational patterns are closer to our predictions as the positive coefficient for social workers and the negative for civil engineers are no

longer significant. Nevertheless, the fact that the occupational patterns emerge even in our stratified sample show that these patterns are not a simple reflection of the gender composition of the occupations. This finding also suggests that the personalities of individuals working in ‘gender-atypical’ occupations may resemble those of the opposite sex, as proposed in H3.

To examine this proposition, we have conducted gender-separate regressions and the results for women are reported in Table 2. Here we note that, regarding risk-taking, the coefficients for female civil engineers and police officers are significant and positive while that of female psychologists is negative. For female social workers, the coefficient is negative but non-significant; however, confidence intervals suggest that this group is less risk-taking than female police officers. Regarding agreeableness, female social workers and psychologists display significant positive coefficients while the coefficient for female civil engineers is significant and negative. For female police officers the coefficient is negative but non-significant. Still, confidence intervals show that female police officers are less agreeable than female social workers. For emotional stability, we find no clear occupational pattern. Significance levels and confidence intervals show that both female police officers and female social workers are more emotionally stable than women in the other occupations and that female psychologists are more stable than female civil engineers. Levels of self-esteem do not vary significantly across occupations for women.

In Table 3, regression results for men are displayed. As shown, the coefficient for risk-taking is positive and significant for male police officers while the coefficient for male psychologists is significant and negative effect. However, a non-significant coefficient and overlapping confidence intervals show that male civil engineers are not more risk-taking than male psychologists and social workers. For agreeableness, the coefficients for male psychologists and social workers are positive and significant, while that of male civil engineers is negative and significant. For police officers, however, it is non-significant. For self-esteem and emotional stability, the coefficient for male police officers is significant and positive but confidence intervals overlap with those of male social workers and psychologists. Thus, although patterns are not clear-cut, we find some support for H3 for both men and women. In particular, women working in the male-dominated occupations tend to be more risk-taking and less agreeable than women in the female-dominated occupations, while men in female-dominated occupations tend to be more agreeable and less risk-taking than men in male-dominated occupations. The notion that a norm-breaking logic would overrule the gender logic for men is not supported.

Finally, we investigate the relationships between personality, gender and wages. Here, personality is studied both as a mediating variable, potentially explaining gender wage gaps, and as a moderating factor, interacting with gender and occupation. The results, displayed in Table 8 in Appendix, show, first of all, a significant gender wage gap of approx. 3–4% (Table 8, model 1). When the personality variables are added, in model 2, we find that self-esteem and risk-taking are positively related to wages. This is in line with previous research and also with our prediction in H4a stating that traits on which men tend to score higher would be positively related to wages. Contrary to our predictions, however, we do not find a

Table 2 Differences in personality traits across five occupations, Women. OLS regressions

	Risktaking		Self-esteem		Extraversion		Agreeableness		Conscientiousness		Emotional stability		Openness	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Intercept	2.99	0.04	3.86	0.02	5.47	0.04	5.67	0.03	5.72	0.03	5.20	0.03	5.32	0.03
Civil engineer	0.26	0.07	-0.03	0.04	-0.14	0.06	-0.27	0.05	-0.15	0.06	-0.33	0.06	-0.02	0.06
Lawyer	-0.29	0.08	0.06	0.04	0.11	0.07	-0.04	0.05	0.02	0.06	-0.33	0.07	-0.25	0.06
Psychologist	-0.33	0.08	-0.03	0.04	-0.29	0.06	0.10	0.05	-0.03	0.05	-0.04	0.06	-0.08	0.06
Social worker	-0.01	0.08	-0.03	0.04	0.01	0.06	0.21	0.05	-0.03	0.06	0.24	0.06	0.17	0.06
Police	0.36	0.08	0.03	0.04	0.31	0.07	-0.01	0.05	0.19	0.06	0.28	0.07	0.17	0.06
R ² %	3.5		0.2		2.9		3.1		1.0		3.6		2.2	

See Table 1

Table 3 Differences in personality traits across five occupations. Men. OLS regressions

	Risktaking		Self-esteem		Extraversion		Agreeableness		Conscientiousness		Emotional stability		Openness	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Intercept	3.55	0.04	4.03	0.02	5.03	0.04	5.38	0.03	5.30	0.03	5.53	0.04	5.25	0.03
Civil engineer	0.01	0.09	-0.05	0.05	-0.39	0.08	-0.16	0.06	0.14	0.07	-0.01	0.07	0.10	0.07
Lawyer	0.02	0.09	0.01	0.05	0.09	0.08	-0.05	0.06	-0.02	0.07	-0.05	0.07	-0.28	0.07
Psychologist	-0.22	0.06	-0.02	0.04	-0.14	0.07	0.12	0.06	-0.43	0.07	-0.20	0.07	0.08	0.06
Social worker	-0.14	0.09	-0.05	0.04	0.16	0.08	0.12	0.06	-0.01	0.07	0.01	0.07	0.11	0.06
Police	0.34	0.09	0.10	0.05	0.28	0.08	-0.03	0.06	0.32	0.07	0.25	0.07	-0.00	0.07
R ² %	1.6		0.5		3.1		1.2		4.7		1.6		1.8	

See Table 1

significant negative effect of agreeableness, the trait on which women score higher and which is interpreted in labor market research as a lack of assertiveness. Furthermore, the gender wage gap is almost unaffected by the inclusion of personality indicators. In other words, gender wage differences in this sample cannot be ascribed to gender differences in traits and all in all, the support for **H4a** is relatively weak.

In models M3a to M3g, we include multiplicative interaction terms between occupation and personality to determine whether the wage effect of certain personality traits is particularly strong in male-dominated occupations. Because of the formulation of the hypothesis, we use civil engineers—the most male-dominated occupation—as the reference category against which other occupations are compared. To corroborate our findings, we have also carried out additional analyses using police as reference category and these will be included in our comments below (results available upon request). We find that agreeableness is more negatively related to wages among lawyers than among civil engineers and police officers. Self-esteem and risk-taking are not more highly valued among civil engineers than among the female-dominated occupations or the gender-integrated occupation of lawyers. Meanwhile, we note that these traits are less valued among police officers than among both civil engineers and lawyers. As shown in the table, emotional stability is not more highly valued among civil engineers than among other occupations and our additional analysis shows that this trait is less valued among police officers than among psychologists. To summarize, we find no systematic pattern suggesting that ‘male’ traits would be highly valued and ‘female’ traits less valued in the male-dominated occupations than in the other occupations. For the other traits, we find no clear pattern.

To explore the possibility that men and women are differently rewarded for the same trait and that such differences could mask occupational patterns in this stratified sample we conducted wage regressions with gender and personality interaction terms, as well as three ways-interactions between occupation, gender and personality (not displayed). Significant interactions were found for gender and agreeableness. Here, the results show that being agreeable has a significant negative effect on women’s wages and a positive but non-significant effect for men. The other traits, interactions between gender and personality, were not statistically significant at conventional levels and neither were the three-way interactions. Thus, **H4b** receives only weak support.

In sum, we find empirical support for **H1**, **H2** and **H3** but weak support for **H4a** and **H4b**.

Discussion

The main thrust of this article was to explore the relationship between gender, gendered occupational choice and personality. To this end, we utilized a new data material focusing on five occupations and designed to expose the impact of gender in a modern dual-earner context.

A main finding is that significant gender differences appear across all personality traits featured in previous studies. As in these studies, women are more agreeable, less emotionally stable and less risk-taking and have lower self-esteem and we also find them to be more extraverted and conscientious and as mentioned, the differences do

not appear to be smaller than in previous studies. Considering the select sample, designed to minimize differences between men and women, this is a notable finding. Here, several interpretations can be offered. An interesting hypothesis is that suppressing factors—notably, women’s higher educational attainments—may obscure gender differences in personality in samples comprising the total population. However, the importance of the Swedish context may also be more complex than assumed. It is often noted that occupational segregation remains strong in Sweden and other Scandinavian countries [e.g. 18, 36]. Charles and Grusky [10] argue that egalitarianism in these countries has been shaped by a ‘different-but-equal’ conception which does not challenge essentialist ideas about masculinity and femininity. Presumably, then, also gender differences in self-perceptions may be reproduced. At the same time, such differences should not be overestimated. For example, our results indicate that they are modified by occupational choice.

Importantly, we find that individuals in male-dominated occupations tend to be more risk-taking and less agreeable than individuals in the female-dominated occupations and in our stratified data, these patterns are not a simple reflection of the gender composition of the occupations but rather a phenomenon at the occupational level. Moreover, individuals working in gender-atypical occupations tend to display personality traits that are more common among the opposite gender. This finding suggests that individuals are sorted by personality in a way that relates to occupational gender segregation. On the surface, this may seem unsurprising. Although gender differences in personality tend to be highlighted both in research and public debate, there is clearly a large within-gender variety and obviously, individuals are inclined to choose occupations that they perceive as fitting their personalities. However, the results presented here suggest that these perceptions too, may be gendered. Moreover, the link between personality and gender is deeply rooted in cultural stereotypes, which construct women as more nurturing or communal, while men are regarded as assertive and instrumental [42, 47]. Presumably, then, occupational choices are connected to our identities as male or female and individuals. However, the fact that individuals working in an occupation dominated by the other sex may display ‘fitting’ personality traits does not mean gender disappears as a background identity. Indeed, gender can become particularly salient in contexts that are gender typed in that the stereotypic traits and abilities of one gender are culturally linked to the activities that are central to the context’ [42 p. 5179]. As a result, individuals in gender-atypical occupations may face complex challenges of both distancing themselves from and conforming to gender stereotypes [40]. However, to the extent that personalities continue to develop in early adulthood, socialization processes could also widen individuals’ perception of themselves when occupational and gendered identities do not converge.

In either case, our results show that perceptions of occupational characteristics have a clear gendered component. First, the occupational pattern is found only for the traits where gender differences are most profound, namely risk-taking and agreeableness, and also, no other obvious occupational pattern appears as clearly as that of gender composition. The exception here is the trait of emotional stability, where police officers and social workers both score higher than civil engineers and lawyers. A possible interpretation is that high-skilled ‘people work’ require more

stability than other occupations concerned. Although psychologists, too, score lower on stability, the gender separate regressions show that this is only true for men. Presumably, this could reflect internal gender segregation in the psychology profession. For self-esteem, we find no clear occupational pattern. Possibly, this result may reflect the fact that the sample comprises only highly educated individuals.

Regarding the relationship between personality and wages we find, in line with previous research, positive wage effects of self-esteem and risk-taking. However, agreeableness and emotional stability have no significant overall effect on wages. Even in this sample, we find a significant gender wage gap, but men's higher wages cannot be ascribed to gender differences in personality. Instead, the results suggest that the valuation of certain traits may vary by gender. In line with a previous study [38], and despite our select sample, we find that agreeableness has a significantly negative wage effect for women but not for men. Thus, although women choosing 'gender-atypical' occupations are to some extent 'gender-atypical' in their personalities they may still be rewarded less than men with similar traits. However, we do not find the valuation of 'male' and 'female' personality traits to vary systematically with the gender composition of the five occupations, either for men or for women.

We should underline that this is an explorative study with several limitations. Obviously, the cross-sectional data does not allow us to make any inferences about causality. Also, as most previous studies, we use self-reported personality measures based on standardized scales. Such measures may be influenced by social stereotypes and social desirability response tendencies [35] and, as discussed above, these patterns may also be gendered [19]. More broadly, the strengths of our approach also constitute its weaknesses and a motivation for further research. With a select sample of Swedish high-skilled individuals in five professions, we aimed to provide a close-up study of gender and occupational choice that would be a strong test of theoretical assumptions of gender differences. However, this sample does not allow for general conclusions about the relationship between occupational gender segregation and personality and by definition, we cannot study how gender intersects with education/class (or other social stratifications such as age or ethnic background).

Nevertheless, our findings point to the relevance of further exploring the subject of personality and gendered occupational choice. This could and should be done in studies with a broader population; however, our results point to the importance of carefully disentangling gender from occupation and other factors such as educational level that may modify or suppress gender effects. In particular, there is a need for longitudinal studies which could indicate whether the relationship between gender, occupation and personality is a question of just sorting individuals according to their preferences and abilities or if personalities are formed in a socialization process that continues through higher education programs and school-to-work transition. If the latter is the case, the tendencies to occupational de-segregation that can be discerned, particularly in prestigious previously male-dominated occupations, may also imply diminishing gender differences in personality. Finally, we note, with Connell, that although "our images of gender are often dichotomous, [—] the reality is not" [11 p. 8]. Therefore, future research should also include mixed-method approaches, where quantitative analyses of gender categories are combined with qualitative studies exploring the processes gendering both occupations and personalities.

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Compliance with Ethical Standards

Conflict of interest The authors declare they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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Appendix

See Tables 4, 5, 6, 7 and 8.

Table 4 Descriptive statistics

	All n (%) / mean (s.d)	Men n (%) / mean (s.d)	Women n (%) / mean (s.d)
<i>Occupations</i>			
Civil engineer	449 (19.6)	196 (18.7)	253 (20.4)
Lawyer	422 (18.4)	192 (18.4)	230 (18.5)
Psychologist	527 (23.0)	244 (23.3)	283 (22.8)
Social worker	473 (20.7)	223 (21.3)	250 (20.1)
Police	418 (18.3)	191 (18.3)	227 (18.3)
<i>Personality</i>			
Agreeableness	5.5 (0.97)	5.4 (1.0)	5.7 (0.9)***
Conscientiousness	5.3 (1.1)	5.3 (1.2)	5.7 (1.0)***
Emotional stability	5.3 (1.2)	5.5 (1.2)	5.2 (1.2)***
Extraversion	5.3 (1.3)	5.0 (1.3)	5.4 (1.2)***
Openness	5.3 (1.1)	5.3 (1.1)	5.3 (1.0)
Risk-taking	3.2 (1.5)	3.5 (1.5)	3.0 (1.5)***
Self-esteem	3.9 (0.7)	4.0 (0.7)	3.9 (0.7)***
<i>Human capital and wages</i>			
Monthly wage	10.3 (0.3)	10.3 (0.3)	10.3 (0.2)***
Year of graduation,	2.5 (1.1)	2.5 (1.1)	2.5 (1.1)
Working time	41.6 (5.6)	41.8 (5.8)	41.5 (5.3)
Work experience	8.1 (6.3)	8.6 (6.2)	7.7 (6.3)***

Significance level of gender differences *** $p < 0.001$

Table 5 Gender difference in personality traits in five occupations. Weighted OLS regressions

	Risktaking		Self-esteem		Extraversion		Agreeableness		Conscientiousness		Emotional stability		Openness	
	b	SE	B	SE	b	SE	B	SE	b	SE	b	SE	b	SE
Intercept	3.31	0.03	3.94	0.02	5.22	0.02	5.51	0.02	5.58	0.02	5.43	0.02	5.32	0.02
Man	0.33	0.03	0.09	0.02	-0.27	0.03	-0.22	0.02	-0.14	0.02	0.16	0.02	-0.05	0.02
Woman	-0.34	0.03	-0.09	0.02	0.27	0.03	0.22	0.02	0.14	0.02	-0.16	0.02	0.05	0.02
R ² %	4.7		1.5		4.2		4.8		1.6		1.8		0.2	

Cell entries are unstandardized regression coefficients (b), standard errors (SE) and z-scores

Bold coefficients = significantly different from zero ($p < 0.05$)

Table 6 z-Score weighted

	Risk-taking	Self-esteem	Extraversion	Agreeableness	Conscientiousness	Emotional stability	Openness
Intercept	0.27	0.13	-0.25	-0.26	-0.07	0.20	-0.03
Women	-0.44	-0.25	0.42	0.45	0.25	-0.26	0.09

Cell entries are unstandardized regression coefficients (b), standard errors (SE) and z-scores

Bold coefficients = significantly different from zero ($p < 0.05$)

Table 7 Occupational differences in personality traits. Weighted OLS regressions

	Risktaking		Self-esteem		Extraversion		Agreeableness		Conscientiousness		Emotional stability		Openness	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Intercept	3.22	0.03	3.93	0.02	5.24	0.03	5.54	0.02	5.58	0.03	5.38	0.03	5.29	0.02
Civil engineer	0.29	0.06	0.02	0.03	-0.47	0.05	-0.30	0.04	-0.11	0.04	0.03	0.04	0.04	0.04
Lawyer	-0.18	0.07	0.02	0.03	0.18	0.06	-0.02	0.04	-0.01	0.05	-0.19	0.05	-0.24	0.05
Psychologist	-0.39	0.10	-0.07	0.05	-0.17	0.08	0.13	0.06	-0.12	0.07	-0.19	0.07	-0.03	0.07
Social worker	-0.19	0.06	-0.09	0.03	0.10	0.05	0.27	0.04	0.07	0.04	0.06	0.04	0.18	0.04
Police	0.47	0.06	0.11	0.03	0.27	0.05	-0.08	0.04	0.16	0.05	0.29	0.05	0.05	0.04
R ² %	3.9		0.9		5.3		4.8		0.8		1.8		1.7	

Cell entries are unstandardized regression coefficients (b) and standard errors (SE)

Bold coefficients = significantly different from zero ($p < 0.05$)

Table 8 Logged monthly wages, gender, occupation, personality and personality \times occupation interactions. OLS regressions

	M1	M2	Personality \times occupation interactions					M3g Risk- taking
			M3a Extraversion	M3b Agreeableness	M3c Emotional stability	M3d Conscientiousness	M3e Openness	M3f Self- esteem
Intercept	9.978***	9.888***	9.799***	9.868***	9.874***	9.868***	9.848***	9.830***
Woman	-0.035***	-0.031***	-0.032***	-0.031***	-0.031***	-0.030***	-0.030***	-0.032***
Occupation (Ref: Civil engineers)								
Police officers	-0.416***	-0.421***	-0.3313***	-0.462***	-0.373***	-0.392***	-0.363***	-0.249***
Lawyers	-0.070***	-0.071***	-0.070a	0.051	0.042	-0.093a	-0.075	-0.034
Psychologists	-0.076***	-0.070***	0.021	-0.047	-0.102*	-0.040	-0.080	-0.031
Social workers	-0.279***	-0.277***	-0.164***	-0.295***	-0.242***	-0.226***	-0.262***	-0.200***
Extraversion	0.005	0.022***	0.005	0.005	0.005	0.005	0.005*	0.005
Agreeableness	-0.002	-0.002	-0.002	0.001	-0.002	-0.002	-0.002	-0.002
Emotional stability	-0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Conscientiousness	0.005	0.006	0.006	0.005	0.005	0.008	0.005	0.005
Openness	-0.010**	-0.009**	-0.009**	-0.010**	-0.010**	-0.010**	-0.002a	-0.010**
Self – esteem	0.020***	0.020***	0.020***	0.021***	0.020***	0.021***	0.020***	0.036***
Risktaking	0.009***	0.008***	0.008***	0.008***	0.009***	0.009***	0.009***	0.014***
[Personality trait] ¹ \times Police officers		-0.018*	-0.018*	-0.007	-0.007	-0.005	-0.011	-0.004**
[Personality trait] ¹ \times Lawyers		-0.028***	-0.028***	-0.022*	-0.022	-0.004	-0.029**	-0.003
[Personality trait] ¹ \times Psychologists		-0.018*	-0.018*	-0.004	-0.004	-0.005	-0.002	-0.010
[Personality trait] ¹ \times Social workers		-0.022**	-0.022**	0.003	0.003	-0.009	-0.003	-0.020
R ² %	52.2	60.4	60.7	60.6	60.5	60.5	60.7	60.4
n	2451	2451	2451	2451	2451	2451	2451	2451

Controls in all models: year of graduation, work experience, working time and all personality traits (extraversion, agreeableness, emotional stability, conscientiousness, openness, self-esteem, risk-taking. Levels of significance: *** <0.001, **0.01; * <0.05 (a <0.10)

¹ Refers to the personality trait mentioned at the top of the column. Other traits are included as controls

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