Schult, Johannes; Sparfeldt, Jörn R.

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Compulsory military service and personality development

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Compulsory Military Service and Personality Development

Johannes Schult and Jörn R. Sparfeldt
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German Socio-Economic Panel Study (SOEP)
DIW Berlin
Mohrenstrasse 58
10117 Berlin, Germany

Contact: Uta Rahmann | soeppapers@diw.de
Compulsory Military Service and Personality Development

Johannes Schult* and Jörn R. Sparfeldt

Saarland University

Author Note

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*Corresponding author: Johannes Schult, Bildungswissenschaften, Campus A5 4, Zi. 3.26, Saarland University, D-66123 Saarbrücken, Germany. Phone: ++49 681 302 57482. Email: j.schult@mx.uni-saarland.de
Abstract

Compulsory military service is a uniformed life event disrupting the lives of young men (and sometimes women) in countries with conscription. Consequently, the development of personality and subjective well-being during service was investigated using representative population data from the German Socio-Economic Panel. In line with previous findings, men who chose military service revealed descriptively lower agreeableness than those who did civil service ($d = –0.33$). Contrasting previous research, agreeableness ratings remained stable in both groups. Conscientiousness increased in both groups ($\eta^2 = .067$). The potentially disruptive nature of conscription is not reflected in the present longitudinal results. Overall, personality traits and life satisfaction appear to remain remarkably stable despite the substantial changes of living environments and daily routines associated with military service.

*Keywords:* personality development, Big Five, subjective well-being, life event, draft, military conscription

*SOEPlit keywords:* attitudes, values and personality
Compulsory Military Service and Personality Development

Introduction

Military service can be regarded as a uniform and intervention-like life event that occurs predictably when male adolescents attain full age in countries with conscription. The army experience can shape draftees’ personality development (Jackson, Thoemmes, Jonkman, Lüdtke, & Trautwein, 2012). Therefore, the present study investigated the development of personality and subjective well-being (SWB) during mandatory military service in Germany.

Personality, Subjective Well-Being, and Life Events

A widely accepted structure model of personality is the well-known Big Five model (cf. John, Naumann, & Soto, 2008), which postulates five orthogonal personality traits: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. SWB is a positive cognitive and emotional state that encompasses positive affect, life satisfaction, and happiness (cf. Lucas & Diener, 2008). Extraversion, neuroticism, and to a lesser degree agreeableness have been repeatedly linked to SWB (cf. Lucas & Diener, 2008). Correlations between extraversion and positive affect and between neuroticism and negative affect tend to be of small to moderate size (adhering to Cohen, 1988). Correlations with agreeableness are usually small, but positive (cf. Steel, Schmidt, & Shultz, 2008).

Personality traits and SWB tend to predict the occurrence of life events: Extraversion is associated with subsequent positive life events (e.g., job promotion) whereas neuroticism is a valid predictor for negative life events (e.g., job loss) (Magnus, Diener, Fujita, & Pavot, 1993). High levels of life satisfaction are associated with a decreased likelihood of unemployment, starting a new job, and relocating (Luhmann, Lucas, Eid, & Diener, 2013). This is, however, just one side of the story. Life events might in turn shape personality development.
Life event-related socialization can effect personality changes, for example, after marriage (extraversion and openness decrease), child birth and retirement (conscientiousness decreases), and first job (conscientiousness increases) (Specht, Egloff, & Schmukle, 2011). Additionally, personality traits change systematically across the life span. Mean levels of the Big Five tend to increase during adolescence and young adulthood (Lüdtke, Roberts, Trautwein, & Nagy, 2011; Specht et al., 2011). SWB is thought to remain relatively stable across the life span, both in terms of mean levels and rank order. Still, it is prone to temporary ups and downs in connection with specific life events (cf. Lucas & Diener, 2008). A transactional perspective regards personality and SWB as both predictors (i.e., selection effects) and outcomes (i.e., socialization effects) of life events (cf. Baltes, Lindenberger, & Staudinger, 2006; Specht et al., 2011).

Military Service and Personality Development

Unlike many other life events, military service is compulsory in various countries (e.g., Russia, Turkey, Brazil, Mexico, Israel) and has been mandatory in many others including the United States (until 1973), the United Kingdom (until 1957), and Germany (until 2011). In the previous five decades, almost all (West) German men aged 18 to 25 had to serve; basically, only men with severe mental or physical illness were exempted. Military service lasted between 18 (in the late 1960s) and six months (in the 2010s; before conscription was suspended on July 1, 2011). Military service was the default setting, but men who had fundamental conscientious objections to serve with a weapon in military service could do compulsory civil service instead after a complex administrative procedure.

Military training was often considered to be a life-changing experience by recruits (Elder, Gimbel, & Ivie, 1991). The physical demands of basic training and the daily routine can clash with individual habits (Dar & Kimhi, 2001). Military service provides an explicit set of desirable
norms and behaviors. Obedience to these rules is rewarded but at the same time former behavioral habits can become obsolete and some of them may even be punished. This socialization process can facilitate changes in personality (Jackson et al., 2012).

In a recent study, Jackson et al. (2012) investigated selection and socialization effects associated with military service by tracking changes in personality traits in a German sample of college-bound high school students. Young men who joined the army tended to score lower on agreeableness, neuroticism, and openness to experience than young men who went through the burdensome procedure of choosing civil service ($d_{\text{agreeableness}} = -0.29; d_{\text{neuroticism}} = -0.14; d_{\text{openness}} = -0.15$). Socialization effects were limited to an increase in levels of agreeableness, which was smaller for those who did military service compared to a matched civil service group. In summary, there were at most small a priori personality differences between the groups and little differential change. It is noteworthy that the sample of Jackson et al. (2012) consisted only of highly educated men, who might have different experiences during military service compared to less educated men. In Germany, men with an upper secondary school degree were more likely to refuse military service and do civil service instead (Schneider, 2003). Findings regarding the effects of military service on SWB appear to be inconsistent (Schnurr, Rosenberg, & Friedman, 1993; Teachman, 2013). In Germany, doing compulsory service is associated with a small drop in life satisfaction (Bartolini, Bilancini, & Sarracino, 2012), but there has been no comparison of military and civil service, so far.

**Research Questions**

The present study attempted to revisit and extend the findings of Jackson et al. (2012) using longitudinal panel data from a representative sample of German adults. We estimated selection effects descriptively. Previous research on selection effects (Jackson et al., 2012)
suggested that men are more likely to choose military service (instead of civil service) when they score lower on agreeableness, neuroticism, and openness to experience. Regarding socialization effects, we expected that agreeableness scores increased during service, especially for the civil service group. The scope of this study was broadened by additionally exploring SWB. Young men from all major school tracks were included in the present sample in order to investigate whether previous findings (Jackson et al., 2012) can be generalized beyond college-bound upper secondary school students. The personality constructs of interest were the Big Five personality traits (cf. John et al., 2008) and life satisfaction was used as an indicator for SWB (cf. Lucas & Diener, 2008).

**Method**

**Sample and Study Design**

The data were collected within the scope of the German Socio-Economic Panel (SOEP, data for years 1984-2012, version 29, 2013, doi:10.5684/soep.v29), which started in 1984 and provides longitudinal profiles from representative population samples comprised of individuals aged 16 and older (cf. Wagner, Frick, & Schupp, 2007). The assessment of psychological constructs has only been implemented in recent years, more specifically: Personality measures were introduced in 2005 and measured again in 2009. Our sample consists of all men who responded to the personality items in 2005 and 2009 and who did either military or civil service between these two points of measurement ($n = 129$; mean age in 2005 = 21.4 years; $SD = 1.7$ years). These individuals differed in their educational attainment at the time of service. The “highest high school diploma” distinguished four levels: secondary general school degree (Hauptschulabschluss; $n = 11$), intermediate school degree (Realschulabschluss; $n = 27$),
technical school degree (Fachhochschulreife; $n = 10$), upper secondary school degree (Abitur; $n = 57$). One person dropped out of school without any degree and 23 persons did not provide an answer.

**Instruments**

Personality traits were assessed by the Big Five Inventory (BFI-S; Gerlitz & Schupp, 2005) with three statements per scale that were averaged to obtain a score for each Big Five factor. Responses were given on a seven-point scale from 1 (*does not apply to me at all*) to 7 (*applies to me perfectly*). Evidence for the instrument’s reliability and validity has been demonstrated recently with, for example, $.50 \leq \alpha \leq .73$ (Gerlitz & Schupp, 2005; Hahn, Gottschling, & Spinath, 2012). Additionally, Hahn et al. (2012, p. 358) reported the following 18 month-test-retest correlations for these scales: $.74$ – neuroticism, $.80$ – extraversion, $.72$ – openness, $.57$ – agreeableness, and $.67$ – conscientiousness.

Life satisfaction was assessed with one item scaled from 0 (*completely dissatisfied*) to 10 (*completely satisfied*). Single-item measures have shown sufficient reliability in SWB research (cf. Pavot & Diener, 1993).

**Data Analysis**

Selection effects were reported descriptively given the sample size. Socialization effects were probed with $2 \times 2$ ANOVAs with the within-subject factor time (2005, 2009) and the between-subject factor service (military, civil). Dependent variables were the Big Five personality scales and life satisfaction. Predictors were entered simultaneously in all models. The significance level was $\alpha = .05$ for all analyses. Effect sizes $d$ (with pooled standard deviations) and $\eta^2$ were reported for mean differences (cf. Cohen, 1988).
Results

Descriptive Statistics

The descriptive statistics and correlations for the first measurement point (2005) are listed in Table 1 along with mean differences between the military and civil service subsamples. Whereas most effect sizes for mean differences were practically negligible (|d| < 0.2), one was moderately large (|d| > 0.3): Men choosing military service were less agreeable.

Table 1

Descriptive statistics: Intercorrelations, means and standard deviations of personality, and life satisfaction for men choosing military service (n = 55; upper diagonal; p < .05 for |r| > .27) and civil service (n = 74; lower diagonal; p < .05 for |r| > .23) prior to service start; positive d's indicate higher mean values for men choosing military service.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
<th>d</th>
<th>d*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Neuroticism</td>
<td>–</td>
<td>–.21</td>
<td>.09</td>
<td>–.18</td>
<td>–.22</td>
<td>–.19</td>
<td>3.56</td>
<td>1.08</td>
<td>0.13</td>
<td>–0.14</td>
</tr>
<tr>
<td>2. Extraversion</td>
<td>–.23</td>
<td>–</td>
<td>.30</td>
<td>–.14</td>
<td>.13</td>
<td>.08</td>
<td>4.86</td>
<td>1.12</td>
<td>0.05</td>
<td>0.03</td>
</tr>
<tr>
<td>3. Openness</td>
<td>–.15</td>
<td>.39</td>
<td>–</td>
<td>.06</td>
<td>.04</td>
<td>.17</td>
<td>4.70</td>
<td>0.97</td>
<td>0.00</td>
<td>–0.15</td>
</tr>
<tr>
<td>4. Agreeableness</td>
<td>–.08</td>
<td>–.10</td>
<td>.02</td>
<td>–</td>
<td>.34</td>
<td>.22</td>
<td>5.08</td>
<td>0.92</td>
<td>–0.33</td>
<td>–0.29</td>
</tr>
<tr>
<td>5. Conscientiousness</td>
<td>–.14</td>
<td>–.06</td>
<td>.05</td>
<td>.30</td>
<td>–</td>
<td>.05</td>
<td>4.94</td>
<td>1.02</td>
<td>–0.04</td>
<td>0.13</td>
</tr>
<tr>
<td>6. Life satisfaction</td>
<td>–.35</td>
<td>.17</td>
<td>–.05</td>
<td>.16</td>
<td>–.11</td>
<td>–</td>
<td>7.42</td>
<td>1.29</td>
<td>–0.06</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.41</td>
<td>4.80</td>
<td>4.70</td>
<td>5.38</td>
<td>4.98</td>
<td>7.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1.16</td>
<td>1.08</td>
<td>1.17</td>
<td>0.93</td>
<td>0.99</td>
<td>1.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Effect sizes reported by Jackson et al. (2012, p. 273)
Development over Time

Repeated-measurement-ANOVAs were performed to test for differential development of personality across time. Effect sizes for each outcome (i.e., each personality construct and life satisfaction) are listed in Table 2 along with descriptive statistics. Life satisfaction ratings showed no differential development. Regarding the Big Five, conscientiousness increased across time regardless of service type. The remaining main effects of time and type of service, as well as the interaction effects of both factors, failed to reach statistical significance.

Table 2

Pre- and post-service means (and standard deviations) by subgroups (left side) and repeated-measurement ANOVA effect sizes $\eta^2$ (right side)

<table>
<thead>
<tr>
<th></th>
<th>Civil service</th>
<th>Military service</th>
<th>ANOVA effect sizes $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n = 74$</td>
<td>$n = 55$</td>
<td>$(n = 129)$</td>
</tr>
<tr>
<td>2005 2009</td>
<td>2005 2009</td>
<td>M   T   M×T</td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>3.41 (1.16)</td>
<td>3.56 (1.08)</td>
<td>.012 .009 .000</td>
</tr>
<tr>
<td></td>
<td>3.31 (1.13)</td>
<td>3.43 (1.02)</td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>4.80 (1.08)</td>
<td>4.86 (1.12)</td>
<td>.004 .001 .000</td>
</tr>
<tr>
<td></td>
<td>4.75 (1.26)</td>
<td>4.84 (1.17)</td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>4.70 (1.17)</td>
<td>4.70 (0.97)</td>
<td>.018 .028 .019</td>
</tr>
<tr>
<td></td>
<td>4.67 (1.01)</td>
<td>4.39 (0.99)</td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>5.38 (0.93)</td>
<td>5.08 (0.92)</td>
<td>.029 .002 .019</td>
</tr>
<tr>
<td></td>
<td>5.20 (0.89)</td>
<td>5.17 (0.91)</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4.98 (0.99)</td>
<td>4.94 (1.02)</td>
<td>.000 .067* .003</td>
</tr>
<tr>
<td></td>
<td>5.19 (1.04)</td>
<td>5.27 (0.91)</td>
<td></td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>7.51 (1.84)</td>
<td>7.42 (1.29)</td>
<td>.005 .023 .000</td>
</tr>
<tr>
<td></td>
<td>7.27 (1.52)</td>
<td>7.11 (1.30)</td>
<td></td>
</tr>
</tbody>
</table>

Note. M = Military service, T = Time, * $p < .05$
Discussion

The starting point of our study was the assumption that personality traits might influence the occurrence of life events, which in turn may lead to changes in personality (Specht et al., 2011). This transactional perspective was analyzed in a sample of young German men who did military or civil service. In the SOEP data, personality traits and life satisfaction remained relatively stable during both types of service. In line with earlier findings (Jackson et al., 2012), personality appears to play only a minor role in the service type selection. Men choosing military service appear to be less agreeable than those choosing civil service. Also, with regard to socialization effects, conscientiousness ratings increased during both types of service.

Conscription and Personality Development

Mandatory military service coincides with early adulthood, which is a time of various transitions (e.g., leaving the parental household, first job). During this period, young people tend to develop more mature personalities (Lüdtke et al., 2011). Young men who join the army appear to be no exception (Lönnqvist, Mäkinen, Paunonen, Henriksson, & Verkasalo, 2008). Our findings suggest that any differential development related to type of service is at best small. We could not confirm the findings reported by Jackson et al. (2012), who reported attenuated agreeableness gains after military service (which persisted five years afterwards). Compared to their sample, the SOEP contains individuals from all 16 federal states (opposed to only one) and from all school types (opposed to just upper secondary school students). Still, the selection effects were almost identical to the results of Jackson et al. (2012; $d_{\text{agreeableness}} \approx -0.3$).

Military service can be seen as an interruption of life, but also as an opportunity for experiencing new social settings and for acquiring skills (Dar & Kimhi, 2001). A substantial reduction of SWB would suit opponents of conscription who argue that the seemingly inevitable
draft constricts personal freedom (cf. Longhurst, 2003). Yet, changes in SWB are not significant and the corresponding effect sizes are small, similar to the changes associated with life events like marriage, divorce, child birth, and retirement (e.g., Specht et al., 2011; Yap, Anusic, & Lucas, 2012). Therefore, additional aspects (e.g., economic and legal considerations) need to be taken into account when lobbying against (or for) compulsory military service.

**Limitations**

The sample size prohibits more complex multivariate analyses. The test power of the ANOVA benefits from the repeated measurement. The lag between measurement points is larger than the mandatory length for military and civil service, which was nine months for individuals analyzed in this study. Further events might have taken place around service, but were not expected to have systematic effects.

The personality scales that were used in the SOEP were short. Still, they provide measurements of sufficient quality (Hahn et al., 2012). Then again, more might be better, because the factor structure of Big Five instruments tends to be less consistent for military samples and for people with low education (Rammstedt, Goldberg, & Borg, 2010). The relative scarceness of the present data also prohibits a closer look on the person-environment fit within the military service subsample, for example with regard to specific activities or subfacets of personality. Possibly, conscription has differential effects on individuals depending on socio-economic, attitudinal, and physiological factors (Schneider, 2003).

**Conclusion**

These findings corroborate a transactional perspective of personality and SWB across lifetime. Personality traits may change in response to military service, yet again, small effects
suggest stability. Of course, conscription may still have an impact, either positive or negative, on individual lives beyond personality.

In the SOEP sample, conscientiousness increased during both types of service. These findings call into question previous results from a larger but less representative sample of highly educated young men (Jackson et al., 2012). The disruptive nature of compulsory service and an insufficient person-environment fit does not reflect in a sizeable reduction of SWB. Concerning personality, military service appears to have no substantial and persistent side effects.
References


