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Big Five Personality Factors Among Men With a Sexual Interest in Children

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ABSTRACT

Men with a sexual interest in children or adolescents have been described as less extraverted, conscientious, and emotionally stable than controls. Yet, such studies have mostly been conducted in forensic institutions. To test whether such findings generalize to community samples, we assessed personality profiles of 123 German-speaking men with and 89 men without pedohebephilia online, using the Big Five Inventory-25. Our results indicate that men with pedophilia or hebephilia are less emotionally stable and extraverted but more conscientious than controls. We discuss study limitations and potential causes for differences in personality among community samples of men with and without pedohebephilia.

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Introduction

Past findings on the personality profiles of people with pedohebephilia (i.e., a sexual interest directed at sexually immature children before or in the early stages of puberty; Bailey, Hsu, & Bernhard, 2016) seem to coalesce around the notion that these interests are associated with increased introversion, neuroticism, and, in some studies, impulsivity or decreased conscientiousness (Tenbergen et al., 2015), which is sometimes interpreted as indicating “a causal relationship between abnormal brain functioning and pedophilia” (Kruger & Schiffer, 2011, p. 1651). In most cases, these observations are based on samples of sexual offenders against children (Cohen et al., 2002; Kruger & Schiffer, 2011; Langevin, Paitich, Freeman, Mann, & Handy, 1978). For instance, on the Revised NEO Personality Inventory, child sexual offenders emerged as generally low on extraversion and conscientiousness and high on neuroticism compared to nonoffenders (Dennison, Stough, & Birgden, 2001). Yet, only about 50% of child sexual offenders are assumed to have corresponding sexual interests

in minors (Seto, 2007), whereas many people with a sexual interest in children find ways of managing their sexual desires without breaking the law (Cantor & McPhail, 2016). Hence, studies reporting personality differences associated with pedohebephilia are tainted by an overreliance on correctional samples of child sex offenders (who might or might not have a sexual interest in children; Cohen et al., 2019; Feelgood & Hoyer, 2008).

To the best of our knowledge, only one other study has comprehensively assessed personality factors among a nonforensic and nonclinical sample of men who are sexually attracted to children. In 1983, Wilson and Cox found pedophilic men to have elevated scores on the neuroticism and psychoticism scale of the Eysenck Personality Questionnaire. The most drastic differences were found for extraversion, where pedophilic men emerged as markedly introverted (Wilson & Cox, 1983). In addition, in a recent study by Gerwinn et al. (2018), a community sample of pedophilic men emerged as less self-controlled than nonpedohebephilic controls on some measures (e.g.,

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more ADHD symptoms) but not others (e.g., nonplanning impulsiveness, which relates to careful planning and enjoyment of complex tasks).

In the present research, we will assess and compare personality profiles among a nonforensic online sample of pedohebephilic men and nonpedohebephilic controls using the Big Five framework. With its domains agreeableness, neuroticism, extraversion, conscientiousness, and openness, the Big Five model represents a widely used paradigm for the systematic description of personality. The five dimensions appear to be relatively stable across the life-span, at least for older children and adolescents (Borghuis et al., 2017; McCrae et al., 2000) and to be cross-culturally valid (Schmitt, Allik, McCrae, & Benet-Martínez, 2007). Based on these merits, Big Five inventories have been translated into numerous languages and are popular among researchers across the globe (Schmitt et al., 2007). Big Five personality traits have been associated with various important life outcomes, such as mental health (Malouff, Thorsteinsson, & Schutte, 2005), mortality, academic success, professional satisfaction and performance (Barrick & Mount, 1991), and sexual offending (Becerra-García, García-León, Muela-Martínez, & Egan, 2013; Dennison et al., 2001).

In the present research, we will test whether past findings regarding the personality profiles of men with a sexual interest in children generalize to nonforensic settings. Based on these past findings, we expect to observe higher levels of neuroticism and introversion, and reduced levels of conscientiousness among pedohebephilic men but will also explore differences regarding the three other personality factors (i.e., agreeableness and openness to experience).

Materials and methods

Procedure

Data were collected online between January and March 2016. Only adult men were included as pedohebephilia is considered to be rare among women (Bailey, 2009). We provided two separate links for men with and without pedohebephilia as the original assessment sets differed in length (see Jahnke, Schmitt, & Malón, 2018, for more

details on all measures used within this study), redirecting participants to the other questionnaire set if their sexual interests did not match inclusion criteria for the current one. To obtain informed consent, we provided information about the study, followed by an anonymous online consent form. The study was greenlighted by our institutional review board. Although results derived from the same set of data have already been published elsewhere (Jahnke, Schmitt, & Malón, 2018) the present data represent a novel contribution to the literature, as findings based on personality domains were not included in the former article.

Participants

To determine appropriate sample sizes, we performed calculations with G*Power, setting $\alpha = .05$ and $\beta = .20$. Results revealed a required sample size of 200 participants to detect small to medium sized differences between the group with and without pedophilia ($d = .40$), whereas 123 pedophilic participants would be required to detect small to medium-sized associations ($r = .25$). Hence, 123 self-rated pedohebephilic men were recruited via respective forums (all acting on a strict legal basis, meaning that, for instance, any illegal content like sexually explicit images or stories involving children, requests for such content, as well as attempts to contact minors for sexual purposes are prohibited: www.jungsforum.net, www.krumme13.org, www.schicksal-und-herausforderung.de). Among these, 86% reported to never have been convicted for child pornography offenses or child sexual abuse, whereas 14% reported prior convictions. A control sample of 89 self-rated nonpedohebephilic men was recruited via psychology-related websites, Facebook groups and online newspapers offering free advertisements (www.psychologie-heute.de, www.xing.com, www.sz-pinnwand.de, www.quoka.de, www.ebay-kleinanzeigen.de, www.caz-lesen.de). Table 1 summarizes some descriptive values of the two groups.

Measures

Self-reported sexual interests

We assessed sexual interest in bodies with “no secondary sex characteristics” (i.e., pedophilia),

Table 1. Sample Description.

Variable	Pedohehebphilic Group	Nonpedohehebphilic controls
Sample size	123	89
Age	35.2 (11.8)	30.7 (9.5)
Married	10.6%	16.9%
Education (Abitur) ^a	63.4%	77.5%
Parental status ^b	13.0%	23.9%
Nonheterosexual attraction ^c	92.7%	30.3%

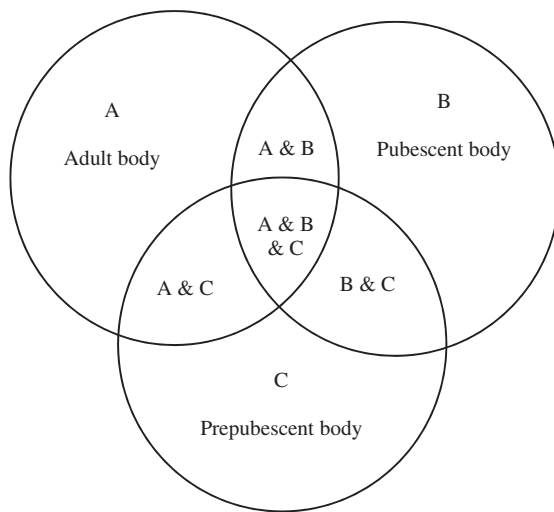
^aUniversity entry level.^bReporting to have at least one child.^cReporting at least some attraction to same-sex children (only among pedohehebphilic men) or same-sex adults (only among teleiophilic men).

Figure 1. Assessment of sexual age orientation. Note that participants were instructed to indicate which of the seven fields displays best their sexual interest, whereby ‘adult body’ refers to a body with fully formed secondary sex characteristics, ‘pubescent body’ to a body with partly developed secondary sex characteristics with a more childlike than adult figure and ‘prepubescent body’ to a body with no secondary sex characteristics.

“partly developed secondary sex characteristics with a more childlike than adult figure” (i.e., hebephilia), or “with fully formed secondary sex characteristics” (i.e., teleiophilia) or overlapping sections of these interests by asking participants to position themselves in a Venn-diagram based on Baier et al.’s (2015) Berlin Classification (see Figure 1).

Big Five Inventory-25

The Big Five Inventory-25 (BFI-25) is a self-report inventory assessing the Big Five dimensions neuroticism, extraversion, openness, agreeableness, and conscientiousness (Gerlitz &

Schupp, 2005). Participants rate on 25 items how well different characteristics apply to them on a 7-point Likert scale ranging from -3 (*do not agree at all*) to $+3$ (*totally agree*, e.g., “I see myself as someone who is reserved”) with calculation of a mean score for each dimension. Past research indicates low to moderate reliability ($\alpha = .61, .70, .82, .66$, and $.75$ for neuroticism, extraversion, openness, agreeableness, and conscientiousness, respectively; Gerlitz & Schupp, 2005). In the current study, Cronbach’s α scores were consistently higher, yielding values of $\alpha \geq .78$, with the exception of agreeableness, which ranked slightly below the threshold of $\alpha = .70$, see Table 2).

Results

We report exact p values for all significance tests where $p < .15$, and “ $p = \text{n.s.}$ ” otherwise. Results with $p < 0.05$ are considered statistically significant. The pedohehebphilic group was less educated than the nonpedohehebphilic group (63.4% vs. 77.5% with university entry level, $\chi^2(1) = 4.84$, $p = 0.028$, same median education level in both groups) and older (mean difference 4.52 yrs., $t = 2.99$, $p = 0.002$). As personality shows systematic variation depending on age and education (e.g., higher conscientiousness among more educated people), we will use age and education as control variables in the following analyses.

Table 2 compares personality factors for pedohehebphilic men versus controls and provides a p -value for a two-sided significance test against a null hypothesis of no difference between the groups, tested by a likelihood ratio test with one degree of freedom. The difference is calculated after controlling for education on three levels (i.e., not having obtained the Abitur as the qualification needed to enter university, having obtained the Abitur, and having a university degree). Age is controlled linearly. Pedohehebphilic individuals showed lower levels of extraversion (95% confidence interval $[CI] = [-1.21; -0.55]$) and higher levels of neuroticism (95% $CI = [0.18; 0.80]$), but at the same time higher levels of conscientiousness (95% $CI = [-0.04; 0.46]$) and agreeableness (95% $CI = [-0.04; 0.47]$) although both dimensions did not reach significance (however, note that the difference for agreeableness becomes significant when not

Table 2. Big-5 Group Differences between Pedohebephilia Group and Non-Pedohebephilic Controls (including internal consistencies).

Big-5 Factors (Cronbach's α)	diff ^a	CI _{95%} low	CI _{95%} high	Reliability ^b	χ^2_{1df}	p^c
Neuroticism (.78)	0.163	0.18	0.80	0.30	9.50	0.002
Agreeableness (.67)	0.073	−0.04	0.47	0.17	2.83	0.093
Conscientiousness (.78)	0.069	−0.04	0.46	0.16	2.71	0.099
Extraversion (.85)	−0.294	−1.21	−0.55	−0.51	25.6	4.13·10 ^{−7}
Openness (.80)	0.046	−0.15	0.43	0.09	0.208	0.352

^aestimate for group difference (additional scale points from −1 to 1 for pedohebephilic group).

^bCohen's d .

^c p Value against the null hypothesis of no group difference, Likelihood Ratio Test with 1 df .

controlling for education and age). With a flat prior on the difference parameter, the posterior probability for a negative value are $P(\text{diff}_{\text{conscientiousness}} < 0) = 4.9\%$ and $P(\text{diff}_{\text{agreeableness}} < 0) = 4.6\%$, respectively. Both groups differed only slightly in openness (not significant).

Discussion

In line with our expectations, pedohebephilic men in our sample were considerably more likely to be introverted and less emotionally stable compared to nonpedohebephilic controls but not more or less likely to be impulsive, agreeable, or open. As there is a large body of corresponding evidence in samples of sexual offenders (many of whom presumably have pedohebephilia), differing rates of neuroticism and introversion most likely reflect genuine personality difference between pedohebephilic and nonpedohebephilic men. Previous research discovering high rates of depressive symptoms, loneliness, or suicidal ideation in online samples of self-identified pedohebephilic men indirectly confirm these findings (Cohen et al., 2019; Jahnke, Schmidt, Geradt, & Hoyer, 2015), as neuroticism and extraversion show significant correlations with mood disorders (Malouff et al., 2005) and relationship satisfaction (Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010). In a wider sense, our results are also consistent with a recent study that established higher rates of mood and anxiety disorders (particularly social phobia) in nonoffending men with pedohebephilic interests compared to controls without pedohebephilic interests (Gerwinn et al., 2018, noted that all participants in this study have undergone an in-depth clinical examination).

Among all personality domains, introversion and neuroticism are also the ones that are most

likely to be affected by stigma. In other words, it remains highly speculative whether participants in our study are attracted to children because of neurodevelopmental deficits determining both sexual interests and personality, or whether their introversion and neuroticism “is a result of the isolation engendered by their preference” (Wilson & Cox, 1983, p. 324). Also, although neuroticism is generally found to be high among minor-attracted men, gay men also score higher on this trait than their heterosexual counterparts (Zietsch, Verweij, Bailey, Wright, & Martin, 2011). High neuroticism seems to be related to any sexual interests deviating from the heterosexual norm, the reasons for which we can only speculate about at this point: The association might either be due to shared underlying (e.g., genetic) causes or due to stressful experiences associated with having these interests in a hostile society (note that pedohebephilic men are despised even when they do not condone adult-child sex and are consistently able to control their sexual impulses toward children, Jahnke, 2018). To further investigate these supposed relationships between personality factors (especially neuroticism) and pedohebephilia in the context of negative evaluation of this sexual interest, future studies should consider assessing stigma-related variables (such as whether or not participants accept their sexual interests or not) alongside measures of sexual interests and personality. Future studies should also seek to control for nonheterosexual interests in adults among pedohebephilic men.

A link between reduced emotional stability and pedophilia may also exist because of childhood sexual abuse, which is more common among pedophilic men than among the general population (Freund & Kuban, 1994). People who have been sexually abused in their childhood often

show increased neuroticism and associated mental disorders like depression (Gamble et al., 2006). Clearly, more research is needed to investigate associations between personality factors and third variables (e.g., childhood sexual abuse, psychopathology) in community samples of males with pedohebephilic interests.

Contradicting prior research in forensic settings (as reported in Dennison et al., 2001), pedohebephilic participants from the current study scored higher on conscientiousness than controls, which indicates that some of these previous findings might be attributed to problems that are unrelated to sexual interests (Tenbergen et al., 2015), such as impaired impulse control leading to incarceration. It is also probable that conflicting results in this area result from different concepts, study settings, and recruitment methodologies. Although the Big Five conscientiousness subscale correlates with other (clinical) phenomena (see, e.g., Parker, Majeski, & Collin, 2004) such as ADHD symptoms and impulsivity, as assessed in Gerwinn et al. (2018), the underlying approaches (lexical vs. based on clinical models) are obviously different. Hence, more research is needed to understand if pedohebephilia is associated with decreased conscientiousness and associated facets or clinical symptoms.

As the study was conducted online, our results are completely reliant on self-report and participants' willingness and ability to give honest and correct responses. Because of the comparatively high level of perceived (and actual) anonymity in online surveys and the finding that similar samples of pedohebephilic men did not show a noticeable social desirability bias (Jahnke et al., 2015) results are not likely to be tainted by this type of reporting bias. Nevertheless, more objective data or information based on more sources than self-report (e.g., reports from family members or observational data) would have been helpful to judge participants' personality with a higher degree of certainty. Yet, despite the limitations of online sampling, it probably represents the only feasible way of studying an attribute as rare and as stigmatized as a sexual interest in children without relying on correctional samples (which would introduce other types of biases and increase the risk of falsely attributing personality differences to

sexual interests instead of, e.g., behavioral problems that have led to incarceration).

Outlook

In the general population, there still exists an image of pedophilic men as highly unstable, impulsive, unpleasant, and antisocial (McCartan, 2010). This image is linked to stigmatizing assumptions like the idea that pedophilic men are monsters unable and unwilling to control their sexual urges (Houtepen, Sijtsema, & Bogaerts, 2016; Jahnke, 2018). Therefore, it is of high importance to rigorously test such expectations, and, if disproven, correct them. As shown in this article, although some naïve assumptions are substantiated, others are contradicted, revealing a manifold picture that cannot be put in simple boxes. Beyond this practically relevant aspect, our data might provoke challenging research questions, namely of how personality traits are (causally) related to relatively stable traits, in this case sexual interests, which would need to be examined in subsequent studies. Although we have included some suggestions regarding the causal nature of these associations in the current article, an elaborated conceptual framework that delineates why pedophilic interests should relate to personality variables like introversion or extraversion is currently missing and should be the focus of future work in this field.

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