

Jirjahn, Uwe; Ottenbacher, Martha

Working Paper

Big Five Personality Traits and Sex

IZA Discussion Papers, No. 13894

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: Jirjahn, Uwe; Ottenbacher, Martha (2020) : Big Five Personality Traits and Sex, IZA Discussion Papers, No. 13894, Institute of Labor Economics (IZA), Bonn

This Version is available at:

<https://hdl.handle.net/10419/232646>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

DISCUSSION PAPER SERIES

IZA DP No. 13894

Big Five Personality Traits and Sex

Uwe Jirjahn
Martha Ottenbacher

NOVEMBER 2020

DISCUSSION PAPER SERIES

IZA DP No. 13894

Big Five Personality Traits and Sex

Uwe Jirjahn

University of Trier and IZA

Martha Ottenbacher

University of Trier

NOVEMBER 2020

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Big Five Personality Traits and Sex

Sexual well-being plays an important role in the quality of life. Against this background, we provide an economics-based approach to the relationship between the Big Five personality traits and various dimensions of sexuality. From a theoretical viewpoint, personality influences sexual well-being not only by how a person feels about sex, but also by how the person behaves in a sexual relationship. Personality shapes information sharing about sexual preferences, the way dissonant sexual preferences of the partners are handled, and the extent to which the person is committed to promises made to the partner. Using a large representative dataset from Germany, we find that personality traits play a role in a person's own sexual satisfaction, in (the self-assessment of) fulfilling the partner's sexual needs and desires, in sexual communication, in actual and desired frequency of sex, and in extradyadic affairs.

JEL Classification: D10, D91, J10, J12

Keywords: Big Five Personality Traits, sexual satisfaction, frequency of intercourse, sexual infidelity, sexual communication, family economics

Corresponding author:

Uwe Jirjahn
Universität Trier
Lehrstuhl für Arbeitsmarktökonomik
Universitätsring 15
54286 Trier
Germany
E-mail: jirjahn@uni-trier.de

1. Introduction

Sex is an essential component of romantic relationships and quality of life. As suggested by a time diary study conducted by Kahneman et al. (2004), sex is the highest ranked activity in terms of net positive emotional affect even though it occupies a relatively small fraction of total time. Sexual well-being is associated with relational satisfaction, relationship stability and happiness in general (Blanchflower and Oswald 2004, Cheng and Smyth 2015, Laumann et al. 2006, Rainer and Smith 2012, Schmiedeberg et al. 2017, Sprecher 2002). Sexual well-being is also of high political interest. The World Health Organization (2006) emphasizes that improving sexual health (i.e., a state of physical, emotional, and social well-being in relation to sexuality) remains a public health priority across the globe.

The importance of sex for quality of life gives rise to the question of which factors influence sexual well-being. Our analysis addresses this question by examining the influence of personality traits on various aspects of sexuality. We focus on the Big Five model, the most widely accepted model of personality trait structure (John et al. 2008, McCrae and Costa 2008). The Big Five personality traits are extraversion, openness to experience, conscientiousness, agreeableness and neuroticism. We examine the role of these personality traits in a person's own sexual satisfaction. Moreover, in order to obtain insights into possible transmission channels through which personality shapes sexuality, we also analyze the influence of the Big Five personality traits on sexual fulfillment of the partner, sexual communication, actual and desired frequency of intercourse, and extradyadic affairs.

Our study contributes in several ways to the economic literature. While economists have been increasingly interested in the determinants of people's well-being (see Frey 2008 and Frey and Stutzer 2002 for surveys), sex has remained an under-researched topic in economics. A few economic studies have examined the link between sex and happiness (Blanchflower and Oswald 2004, Cheng and Smyth 2015, Loewenstein et al. 2015, Rainer and Smith 2012). Those studies have not considered the role of personality traits in sexual well-being. Our study emphasizes the importance of personality for sexual well-being and provides broader insights into various dimensions of sexuality.

On a broader scale, we also address a general research gap in family economics. Apart from some notable exceptions (Averett et al. 2020, Boxho et al. 2020, Dupuy and Galichon 2014, Flinn et al. 2018, Lundberg 2011, 2012), studies in family economics have paid little attention to the personality of partners as a determinant of the surplus of romantic relationships. This contrasts with studies in labor economics where a rapidly increasing body of research has examined the influence of personality traits on human capital formation and labor market outcomes (Almlund et al. 2011, Borghans et al. 2008). This development in labor market research has been identified as 'one of the most exciting developments in labor economics over the past decade' (Cobb-Clark 2015: p. 1). Our study suggests that considering personality traits may lead to a similarly exciting development in family economics.

The link between personality and sex is a topic typically examined by psychologists (Allen 2019, Allen and Walter 2018). Against this background, our study follows a trend in economics to expand its scope of inquiry to topics traditionally addressed by other scientific disciplines. Of course, expanding the boundaries of economics into other social

sciences by using larger and representative datasets or examining explanatory variables with greater statistical sophistication would be of limited value if it does not yield additional theoretical insights. A successful expansion of the scope of inquiry into nontraditional topics requires incorporating the new topics into economic thinking (Lazear 2000). Thus, to guide our empirical analysis, we provide an informal theoretical background discussion that integrates the psychological topic into the analytical framework of economics and, particularly, relates the topic to family economics.

Considering the dual role of personality, we argue that personality is not only a parameter shaping a person's sexual preferences. Personality is also a parameter shaping the person's behavior in a sexual relationship. Therefore, personality influences sexual well-being through how the person behaves in the sexual relationship. First, it shapes communication and information sharing about sexual preferences. Communication helps reduce partners' incomplete information about each other's sexual preferences so they can coordinate on their preferences and realize a win-win situation. Second, personality influences how dissonant preferences of the partners are handled. If partners have partially dissonant sexual preferences, there are different ways of handling these dissonant preferences. On the one hand, altruism may reduce the degree of disagreement. On the other hand, partners may bargain over their sexual activities. Personality shapes a person's altruistic behavior, bargaining tactics and bargaining power. Third, personality influences how commitment problems are solved. A person may promise to be faithful to the partner or to practice or relinquish specific sexual practices, but later may be tempted to break the promise. The person's commitment to the promise depends on his or her self-control, fair-

mindedness, inclination to comply with norms, and willingness to reciprocate the partner's cooperative behavior.

Our empirical analysis uses the pairfam (Panel Analysis of Intimate Relationships and Family Dynamics), a large representative dataset from Germany, to examine the link between the Big Five personality traits and sexuality. The results provide evidence that the Big Five personality traits play an important role in the sex life of people. Our estimations show that personality traits have an influence on a person's own sexual satisfaction. Moreover, conforming to the notion that personality shapes the behavior in a sexual relationship, our results suggest that personality traits also play a role in the sexual fulfillment of the partner. Thus, personality not only influences a person's own sexual well-being, but also the sexual well-being of the partner. Examining possible transmission channels through which personality has an impact on people's sexual well-being, we show that personality traits are associated with frequency of sex, sexual communication and extradyadic affairs.

Our estimations show that neuroticism (emotional instability) is detrimental to people's sex life. Neuroticism has a negative influence on own sexual satisfaction, sexual fulfillment of the partner, and frequency of sex. Poor sexual communication appears to be one transmission channel. Furthermore, neuroticism is associated with a higher likelihood of extradyadic affairs suggesting that lower self-control and a higher discounting of the future entail more severe commitment problems.

By contrast, a person's conscientiousness appears to help realize a win-win situation within a sexual relationship. Conscientiousness is positively associated with own sexual satisfaction in general, satisfaction with the actual frequency of sex, and sexual

fulfillment of the partner. The findings conform to the notion that conscientiousness contributes to a more balanced style of sexual communication, a more cooperative handling of dissonant sexual preferences, and a higher commitment to promises made to the partner. Indeed, our results confirm that conscientiousness is positively associated with better sexual communication and a lower probability of extradyadic affairs.

Extraversion and openness to experience are also positively linked to own sexual satisfaction, sexual fulfillment of the partner and better sexual communication. However, we find no evidence that these two personality traits have a commitment value. Quite the contrary, extraversion is associated with a higher likelihood of having extradyadic affairs. This indicates that an extroverted person has better outside options. Better outside options may not only entail more severe commitment problems. They may also imply an increased bargaining power of the person within the sexual relationship.

In contrast to extraversion, agreeableness has a negative influence on the likelihood of extradyadic affairs. Thus, similar to conscientiousness, agreeableness has a commitment value. However, agreeableness does not appear to contribute to better sexual communication. Quite the contrary, the estimations provide some evidence that agreeableness is negatively associated with expressing preferences during sex. A stronger desire for harmony and a higher degree of altruism may imply that an agreeable person to some extent sacrifices his or her personal needs. Nonetheless agreeableness is positively associated with a person's own sexual satisfaction. More altruism and humility may imply that an agreeable person gains sexual satisfaction even if he or she sacrifices some of his or her needs.

While many of the results hold for both women and men, our analysis also provides evidence of some interesting gender differences in the relationship between personality and sexuality. We argue that asymmetric gender roles and a sexual double standard to some extent play a moderating role in the relationship between personality and sex.

The rest of the paper is organized as follows. Section 2 provides the theoretical background discussion. Section 3 describes the data and variables. Section 4 presents the empirical results. Section 5 discusses the results in light of our theoretical considerations. Section 6 concludes.

2. Background Discussion

In what follows, we set the stage by providing a brief introduction into the Big Five model. We proceed with a theoretical discussion on the transmission channels through which the Big Five personality traits can influence sexuality. Developing an economics-based approach, we first describe general transmission channels and then relate the Big Five personality traits to these channels.

2.1 The Big Five Personality Traits

Psychologists view personality as enduring patterns of feelings, thoughts and behaviors (Roberts 2009). Personality reflects the tendency of a person to respond in certain ways under certain circumstances. The most widely shared taxonomy of personality traits in psychology is the Big Five model (John et al. 2008, McCrae and Costa 2008). The Big Five model originated in Allport and Odbert's (1936) lexical approach positing that individual differences in personality are encoded in language. Analyzing personality-describing words, psychologists concluded that personality traits can be organized into five

dimensions. Since Goldberg (1981), the five dimensions of personality have been known as the Big Five. The Big Five personality traits are extraversion, openness to experience, conscientiousness, agreeableness, and neuroticism. These personality traits have high predictive power for a series of important life outcomes such as educational achievement, job performance, health, mortality, criminality, and divorce (Almlund et al. 2011, Borghans et al. 2008, Roberts et al. 2007).

Extraversion reflects the degree to which a person orients his or her interests and energies toward the outer world of people; i.e., toward social attention and social interaction. Persons with a higher degree of extraversion tend to be characterized by warmth, sociability, assertiveness, activity, excitement seeking, and positive affect.

Openness to experience reflects the degree to which a person is open to change, variety, intellectual stimulation, and new cultural experiences. Persons with a higher degree of openness tend to be characterized by fantasy, aesthetics, and ideas.

Conscientiousness reflects the degree to which a person is willing to comply with conventional rules, standards and norms. Persons with a higher degree of conscientiousness tend to be characterized by order, dutifulness, achievement striving, self-discipline, and deliberation.

Agreeableness reflects the degree to which a person needs pleasant and harmonious relations with others. Persons with a higher degree of agreeableness tend to be characterized by trust, straight-forwardness, cooperativeness, altruism, compliance, modesty, and tender-mindedness.

Neuroticism (emotional instability) reflects the degree to which a person experiences the world as threatening and beyond his or her control. Persons with a higher

degree of neuroticism tend to be characterized by anxiety, angry hostility, psychological distress, self-consciousness, impulsiveness, and vulnerability.

It is important to note that the Big Five not only influence how a person, in general, feels about the world. The Big Five are also dispositional traits influencing the overall style of the person's adjustment to and engagement of the social world (Buss 1996, Goldberg 1981, McAdams and Pals 2006, Nettle 2006). These traits describe the degree in which the person is able to solve social adaptive problems through communication, cooperation, trust, stability, and dominance.

Similarly, economists emphasize that personality traits play dual roles (Borghans et al. 2008). On the one hand, they can be a source of pleasure; i.e., they influence the utility a person derives from social relationships. On the other hand, personality traits can be viewed as capacities and constraints in the choices the person makes. These choices, in turn, have consequences for the quality of social relationships.

At issue is how personality traits influence sexuality. In what follows, we first provide a general discussion on the transmission mechanisms through which personality may have an effect on sexuality. The discussion is developed within an economics-based approach to integrate this psychological topic into the analytical framework of economics and, in particular, to relate it to family economics. Building from that discussion, we derive specific implications for the link between the Big Five personality traits and sexuality.

2.2 An Economics-Based Approach to Personality and Sex

The dual role of personality also applies to sexuality. On the one hand, personality can influence how much a person enjoys sex. Thus, from the viewpoint of economics, personality has an influence on the utility a person derives from sex. Personality can be

seen as a parameter that shapes the utility functions of people.¹ To the extent people differ in their personality, they will have heterogeneous preferences for sex. Depending on personality, sex will be of higher utility for some people than for others.

On the other hand, personality is a parameter shaping a person's behavior in a sexual relationship. This behavior has an influence on the quantity and quality of sex and, hence, on the extent of sexual fulfillment in the relationship. Thus, personality influences the utility from sex through how the person behaves in the sexual relationship. The person's behavior in the sexual relationship is important for at least three reasons. First, it influences communication and information sharing about sexual preferences. Second, it influences how dissonant preferences of the partners are handled. Third, it influences how commitment problems are solved.

Sexual relationships can suffer from information asymmetries (Rainer and Smith 2012). If partners have incomplete information about each other's needs and desires, they may fail to coordinate on their preferences resulting in a suboptimal sex life. Communication helps partners reduce incomplete information about their sexual preferences. By talking and listening, partners can share information about each other's preferences for sexual practices, frequency of intercourse, or timing of orgasm. This may allow them to find sexual activities working best for them and, hence, resulting in higher mutual sexual satisfaction. However, successful sexual communication requires communication skills. Personality can play a role in sexual communication. Personality influences a person's willingness to talk about own preferences and to listen to the partner. Moreover, it has an influence on whether the style of communication is characterized by warmth and empathy or by hostility and impulsiveness.

At best, partners have compatible preferences for sex so couples with strong communicative skills can realize a sex life that is more satisfying to both of them. But when partners have partially dissonant preferences (e.g. for oral sex, anal sex, timing of orgasm, frequency of intercourse, or pornography consumption), the question arises as to how they handle these dissonant preferences. One possibility is that altruism reduces the degree of disagreement. Altruism can be modeled as an interdependency of utility functions (see Bergstrom 1997 and Weiss 1997 for surveys). If a person not only cares about his or her own sexual enjoyment, but also about the partner's enjoyment, he or she will take the partner's preferences for sexual activities into account. This can be seen as a gift given to the partner. On the one hand, an altruistic person to some extent sacrifices his or her utility by forgoing some preferred sexual activities or engaging in activities only preferred by the partner. On the other hand, the altruistic person derives utility from the partner's sexual enjoyment. Moreover, if altruism leads to reciprocal gift exchange, a couple may realize higher mutual sexual satisfaction. Of course, people can differ in the degree of altruistic behavior and personality has an influence on that degree. Thus, it depends on the partners' personalities whether altruism can solve the problem of dissonant sexual preferences.

It appears to be reasonable to assume that, in general, people are not completely altruistic, but to a greater or lesser extent also exhibit self-interest and care about their own sexual enjoyment. Family economics assumes that dissonant preferences of self-interested household members lead to an intra-household bargaining situation (see Agarwal 1997 and Lundberg and Pollak 1996 for surveys). This approach can also be applied to sexual preferences. Partners may solve the problem of dissonant sexual preferences by bargaining over their sexual activities. Personality has an influence on a person's bargaining strength

and, hence, on whether he or she can achieve a favorable bargaining outcome. Assertiveness is likely to be associated with a more favorable bargaining outcome for the person while a high willingness to compromise may rather result in a less favorable outcome. In particular, personality may have an influence on the person's threat point. A more sociable person with better communication skills may have better opportunities to find a new partner in case of a disagreement. Better outside options increase the person's bargaining position in the current relationship and help get through his or her preferred sexual activities.

If partners reach a bargaining agreement on their sexual activities, commitment problems arise. A person may promise to be faithful to the partner or to practice or relinquish specific activities, but later may be tempted to break the promise. Bargaining outcomes on sexual activities cannot be made binding through legal enforcement. Thus, the question is if there are other mechanisms ensuring that promises made to the partner are kept. An agreement may be self-enforcing in a repeated game setting (Lundberg and Pollak 1994). In a repeated game setting, partners reward each other's cooperative behavior and threaten to punish opportunistic behavior by refusing cooperation in the future. However, repeated games do not always work. A person is only deterred from opportunistic behavior if he or she does not discount the future loss of cooperation too much. Moreover, repeated games involve multiple equilibria; i.e., not only mutual cooperative behavior is an equilibrium, but also mutual opportunism. We suggest that personality is a parameter playing an important role in whether or not an agreement on sexual activities is self-enforcing. On the one hand, a person's fair-mindedness, inclination to comply with norms, and willingness to reciprocate the partner's cooperative behavior increases his or her

commitment to the agreement. On the other hand, sociability and communication skills may lead to alternative outside options increasing the temptation to engage in opportunistic behavior.

2.3 Implications for the Link between Big Five Personality Traits and Sex

In our empirical analysis, we examine the link between the Big Five personality traits and sexual satisfaction. Considering the dual role of personality, the Big Five may not only have an impact on sexual satisfaction by shaping a person's utility function; i.e., by influencing the pleasure the person enjoys from sexual activities. The Big Five may also have an impact through the person's behavior in a sexual relationship and, hence, through the sexual activities the couple do together. In order to gain insights into the transmission channels through which the Big Five have an influence on sexual satisfaction, we also examine a series of behavioral outcome variables. We analyze the determinants of sexual communication. This gives us insights into the role of information sharing in sexual relationships. Furthermore, we examine the degree in which a person meets the partner's needs. This provides indications of whether a person can realize a win-win situation within the sexual relationship. Moreover, we consider the actual and the desired frequency of intercourse. Finally, we examine if a person has sex with someone other than the partner. This provides insights into how the Big Five influence commitment problems and the outside options of the person.

Extraversion and openness to experience should be positively associated with sexual satisfaction. One transmission channel through which these personality traits influence sexual satisfaction is better communication with the partner. Better communication enables a more extroverted and open person to express his or her sexual

preferences so that the partner can take into account these preferences. Better communication also implies that the person obtains more information about the partner's preferences so that a win-win situation may be realized. However, greater communication skills make it also easier to get in contact with other potential partners meaning that a more extroverted and open person has better outside options. Better outside options increase the person's bargaining position. While this provides the second transmission channel through which extraversion and openness should result in higher sexual satisfaction, it makes the implications for the partner's sexual fulfillment ambiguous. A more extroverted and open person may get through his or her preferred sexual activities at the expense of the partner's needs and desires. Better outside options may also result in more severe commitment problems. A more extroverted and open person with better outside options may be more tempted to breach an agreement with the partner and to have sex with someone other.

By contrast, conscientiousness can be expected to have a commitment value in a sexual relationship. A higher degree of conscientiousness is associated with greater self-control, sense of responsibility, and dependability. A more conscientious person is rule abiding and has a stronger focus on the long-term relationship. Thus, a more conscientious person should be more likely to resist short-term temptations and to keep promises made to the partner. To the extent this induces a more cooperative behavior of the partner, a higher degree of conscientiousness can also result in increased own sexual satisfaction. Moreover, conscientiousness may contribute to a more balanced style of sexual communication leading to more successful information sharing and mutually beneficial outcomes for the partners.

Agreeableness may also contribute to more successful information sharing. An agreeable person is more empathic and tender-minded and, hence, has a more harmonious communication style allowing partners to realize a mutually beneficial sex life. Furthermore, agreeableness is positively associated with altruism (Becker et al. 2012). Thus, an agreeable person should take the partner's needs and desires to a higher degree into account. To the extent this induces positive reciprocal behavior of the partner and, hence, mutual gift exchange in the sexual relationship, a higher degree of agreeableness can result in higher own sexual satisfaction. However, when bargaining over sexual activities, an agreeable person may compromise too much for the sake of harmony. In particular, a higher degree of altruism can lead an agreeable person to sacrifice his or her sexual needs in favor of the partner's needs. This may suggest that the implications of agreeableness for own sexual satisfaction are ambiguous. Nonetheless, even if an agreeable person to some extent sacrifices his or her sexual needs, this does not necessarily imply a negative influence on sexual satisfaction. Altruism means that a person also derives utility from the partner's sexual fulfillment. Moreover, agreeableness is associated with humility (McCrae and Costa 2008, Van Kampen 2012).² This could imply that an agreeable person gains sexual satisfaction even he or she sacrifices some of his or her needs.

Neuroticism can have a negative impact on sexuality for several reasons. As emphasized by Eysenck (1971, 1976), a person with a higher score on neuroticism tends to have more fears about sexuality and may be more disgusted about some aspects of sexuality. This suggests that a person with a higher score on neuroticism derives less utility from sex than someone with a lower score. Moreover, neuroticism can have a negative impact on sexual satisfaction through the person's behavior in a sexual relationship.

Emotional instability tends to entail inadequate and hostile sexual communication (Velten and Margraf 2017). For example, a neurotic person may overreact to criticism triggering negative responses from the partner. This results in poor information sharing and makes it difficult to realize a mutually beneficial sex life. Furthermore, negative emotions are associated with low self-control and a high discounting of the future (Loewenstein 2000). This aggravates commitment problems. A neurotic person is more likely to feel neglect or rejection from the partner; i.e., the person believes that he or she is no longer loved. This can increase the person's propensity to seek an extradyadic sexual relationship (Josephs and Shimberg 2010).

3. Data and Variables

3.1 The Data Set

Our empirical analysis is based on data from the pairfam (Brüderl et al. 2018, Huinink et al. 2011). A handful of studies used the data to examine some aspects of sexuality (Hajek 2019, Kislev 2020, Morgan et al. 2018, Rainer and Smith 2012, Schmiedeberg et al. 2017, Schmiedeberg and Schröder 2016, Schröder and Schmiedberg 2015). However, these studies did not consider the influence of personality traits on sexuality.

Pairfam is a nationally representative panel study for Germany funded by the German Research Foundation (DFG). The focus of the pairfam study is on intimate relationships and family relations. A nucleus of themes is addressed annually. Different additional topics are sampled in consecutive waves. The survey includes both a personal interview by a professional interviewer and a self-administered questionnaire for intimate questions. The self-administered questionnaire is completed during the interview using the

official survey laptop. In order to avoid interviewer effects and reporting bias, all questions on sexuality are asked in the self-administered questionnaire.³

The first wave of interviews was conducted in the year 2008 for three birth cohorts: adolescents born between 1991 and 1993, young adults between 1981 and 1983, and middle-aged adults born between 1971 and 1973. Addresses were randomly drawn from the local population registers of 343 randomly chosen municipalities. More than 12,000 persons participated in the first wave. The sample of the first wave has been used as the basis for the following waves. Nonresponse patterns are similar to other panel studies based on voluntary participation. Bias due to panel attrition does not appear to be a large issue (Müller and Castiglioni 2015).

For our empirical analysis, we use data from waves 2008–2017. We limit our sample to heterosexual persons who are at least 18 years old and have a partner in the respective year of observation.

3.2 Dependent Variables

Table 1 shows the definitions of the dependent variables and their descriptive statistics. The table also reports the years for which information on the various dependent variables is available.

An ordered variable for sexual satisfaction captures the utility a person derives from sex. The eleven-point Likert scale of the variable ranges from 0 ‘very dissatisfied’ to 10 ‘very satisfied’. The variable is available for the years 2008–2017.

The survey also provides information on the transmission channels through which a person’s personality traits may influence sexual satisfaction. Two ordered variables for expressing preferences during sex and expressing sexual needs and desires in general

capture sexual communication. Furthermore, in order to examine the influence of personality traits on the partner's sexual fulfillment, we consider two ordered variables for the self-assessment of whether the interviewee perceives his- or herself as being a good sex partner and being able to fulfill the partner's needs and desires. The five-point Likert scale of the variables for sexual communication and self-esteem ranges from 1 'not at all' to 5 'absolutely'. The variables are available for the years 2009, 2010, 2012, 2014 and 2016.

Information on frequency of intercourse is available for the years 2009–2017. Frequency of intercourse during the past three months is measured on a seven-point interval scale: Never/not in the past three months, once per month or less, 2–3 days per month, once per week, 2–3 days per week, more than 3 days per week, daily. Building from Schröder and Schmiedeberg (2015), we recode the variable to indicate frequency per month: 0, 0.67, 2.5, 4, 10, 20 and 30 days per month. This allows to apply linear regression analysis.

Information on the desired frequency of intercourse is contained in waves 2014–2017. Interviewees answer the question on whether they prefer to have less or more sex than they had during the past three months. The categories for the answers are: Much less often, somewhat less often, just as often, somewhat more often, and much more often. We define two dummy variables. The first dummy equals 1 if the person prefers to have sex somewhat less often or much less often. The second dummy equals 1 if the person prefers to have sex somewhat more often or much more often.

Finally, we consider extradyadic sexual relationships. The survey provides four categories on extradyadic affairs during the past two years: No extradyadic affairs of both partners, extradyadic affair of the partner only, extradyadic affair of the interviewee only, extradyadic affairs of both partners. We define a dummy equal to 1 if the interviewee only

or both partners had an extradyadic affair during the past two years. We use information provided in waves 2010, 2012, 2014 and 2016.⁴

3.3 Key Explanatory Variables: Big Five Personality Traits

Table 2 shows the definitions and descriptive statistics of the variables for the Big Five personality traits. As usual in large surveys (Rammstedt and John 2005, 2007, Soto and John 2017), personality is measured in the pairfam using a short version of the Big Five inventory. Extraversion, conscientiousness, agreeableness and neuroticism are assessed with four items, respectively. Openness to experience is assessed with five items. The items are measured on a five-point Likert scale ranging from 1 ‘strongly disagree’ to 5 ‘strongly agree’. For each of the five personality traits, we add up the respective items and divide the sum by the number of items.

Information on the Big Five is available in the waves 2009, 2013 and 2017. Considering a four-year window, Cobb-Clark and Schurer (2012) have shown that Big Five personality traits change only very modestly, that intra-individual changes are generally unrelated to adverse life events and that changes are not economically meaningful. Against this background, we match the information on the Big Five to the other waves of our sample. Information from wave 2009 is matched to the years 2008, 2010, 2011 and 2012. Information from 2013 is matched to the years 2014, 2015 and 2016.

3.4 Control Variables

Appendix Table A1 provides the definitions and descriptive statistics of the control variables. We control for the economic situation by including variables for the years of schooling and the person’s labor market status. Demographic characteristics are captured

by variables for the number of children in the household and for the person's gender, health, religious affiliation, migration background and age. In order to account for a nonlinear influence of age on sexuality, we also include a quadratic age variable. The type of relationship is controlled for by variables for relationship duration and being married to the partner. For persons not married to the partner, we take into account whether or not the couple lives together in the same dwelling. Moreover, as East Germans appear to have more equal gender roles than West Germans (Jirjahn and Chadi 2020), we also include a dummy for residing in East Germany. Finally, wave and cohort dummies are included in the regressions.

4. Empirical Analysis

4.1 Sexual Satisfaction

Table 3 shows the key results on sexual satisfaction.⁵ The determinants of sexual satisfaction are estimated by using the random effects ordered logit model.⁶ The random effects model accounts for cross-period correlation of individual-specific error terms. Furthermore, we cluster the standard errors at the individual level using the Huber-White sandwich estimator. In order to provide a quantitative assessment the table does not only provide coefficients, but also marginal effects on the probability of answering one of the three highest categories of the eleven-point Likert scale for sexual satisfaction.

Column (1) presents the regression results for the combined sample of men and women. Four out of the five variables for personality traits take significant coefficients. Extraversion, conscientiousness and agreeableness are significantly positive determinants of sexual satisfaction while neuroticism is a significantly negative determinant. The

combined sample of men and women shows no significant influence of openness to experience.

Considering the magnitudes of the associations, conscientiousness has the strongest influence on sexual satisfaction. An additional point on the one to five point scale of conscientiousness is associated with a 6 percentage point higher likelihood of reporting one of the three highest satisfaction categories. Given that we have 44 percent of observations in these categories, this implies an increase in the likelihood by 14 percent. Neuroticism has the second strongest influence. An additional point on the scale of neuroticism is associated with a 5 percentage point lower likelihood of reporting one of the three highest categories of sexual satisfaction. Taking again into account that there are 44 percent of observations in these categories, this entails a decrease in the likelihood by 11 percent. Agreeableness has the third strongest influence with 4 percentage points and extraversion the fourth strongest influence with 2 percentage points.

In order to examine whether there are gender differences in the influence of personality on sexual satisfaction, we provide separate estimations for men and women in columns (2) and (3). While the magnitudes of the influences slightly vary, the separate estimations show a similar pattern of results with respect to conscientiousness, agreeableness and neuroticism. For both men and women, conscientiousness and agreeableness are significantly positive determinants of sexual satisfaction whereas neuroticism is a significantly negative determinant. By contrast, the separate estimations show clear gender differences with respect to extraversion and openness to experience. Extraversion is a significantly positive determinant of sexual satisfaction for men, but not

for women. Openness to experience is a significantly positive determinant for sexual satisfaction for women, but not for men.

4.2 Satisfying the Partner's Sexual Wishes

A person's personality traits may not only influence his or her own sexual satisfaction, but also the partner's sexual satisfaction. In order to examine the influence of a person's personality in the partner's sexual fulfillment, we use interviewees' self-assessments and estimate the determinants of being a good sex partner and fulfilling the partner's sexual needs and desires. Table 4 provides the key results of random effects ordered probit regressions.

The estimations show no significant association between agreeableness and the two indicators of the partner's sexual fulfillment. Extraversion, openness to experience and conscientiousness are significantly positive determinants of being a good sex partner and fulfilling the partner's sexual needs and desires. Neuroticism is a significantly negative determinant. The results hold for the combined sample of men and women and for the separate estimations by gender. The influences are not only statistically significant, but also quantitatively meaningful. Conscientiousness has the strongest influence. In the combined sample of men and women, an additional point on the scale of conscientiousness is associated with a 7 percentage point higher likelihood of reporting one of the two highest categories of the five-point scale for being a good sex partner. Given that we have 55 percent of observations in the two highest categories, this implies an increase in the likelihood by 13 percent.

4.3 Sexual Communication

In order to examine possible transmission channels we now turn to the link between personality traits and sexual communication. Table 5 presents the key results of random effects ordered probit regressions on the determinants of expressing preferences during sex and expressing sexual needs and desires in general.

Extraversion, openness to experience and conscientiousness are positive determinants of the two indicators of sexual communication whereas neuroticism is a negative determinant. The results hold for the combined sample of men and women and for the separate estimations by gender. The influences are not only statistically significant, but also quantitatively meaningful. Extraversion has the strongest influence. In the combined sample of men and women, an additional point on the scale of extraversion is associated with an 8 percentage point higher likelihood of reporting one of the two highest categories of the five-point scale for expressing sexual needs and desires in general. Given that we have 61 percent of observations in the two highest categories, this implies an increase in the likelihood by 13 percent.

While agreeableness does not emerge with significant coefficients in the estimations on expressing sexual needs and desires in general, we find some evidence that it is a negative determinant of expressing preferences during sex. The separate estimations show that this significantly negative association only holds for women, but not for men.

4.4 Frequency of Sex

Previous research has shown that frequency of sex plays a role in happiness (Blanchflower and Oswald 2004, Cheng and Smyth 2015, Schmiedeberg et al. 2017). This gives rise to

the question of how personality traits influence frequency of sex. Table 6 shows the key results of random effects GLS regressions on the determinants of frequency of intercourse per month.

The variables for openness to experience and agreeableness do not emerge with significant coefficients. Extraversion is a significantly positive determinant of frequency of intercourse. This result holds for the combined sample of men and women and for the separate estimations by gender. Considering the estimation with combined sample of men and women, an additional point on the scale of extraversion is associated with an increase in the frequency of intercourse by one-third day. Taking into account that the average frequency of intercourse is 6 days per month, this implies an increase in the frequency by about 6 percent. Conscientiousness is also associated with a higher frequency of intercourse. However, the separate estimations by gender show that this only holds for men. By contrast, neuroticism is associated with a lower frequency of intercourse. The separate estimations by gender indicate that this specifically holds for women.

So far we have considered the actual frequency of sex. We recognize that the desired frequency of sex may differ from the actual one (Loewenstein et al. 2015, Smith et al. 2011). Thus, using the multinomial logit approach, we estimate the determinants of desiring a lower or desiring a higher frequency of intercourse than the actual one. The reference group consists of persons who are satisfied with the actual frequency of intercourse. Table 7 provides the key results.

Extraversion is significantly associated with a higher likelihood of desiring a higher frequency of intercourse. The separate estimations by gender show that this particularly holds for women. In a similar vein, for women, openness to experience is significantly

associated with a lower probability of desiring less frequent sex and a higher probability of desiring more frequent sex. Conscientiousness is a significantly negative determinant of desiring more frequent sex. This holds for the combined sample of men and women and for the separate estimations by gender. Neuroticism is significantly associated with both a higher likelihood of desiring less frequent sex and a higher likelihood of desiring more frequent sex. This pattern can be found for both men and women. The estimations show no significant influence of agreeableness.

4.5 Extradysadic Affairs

Finally we examine the role of personality traits in having extradysadic affairs. Table 8 shows the key results of random effects probit regressions. As the dependent variable captures extradysadic affairs during the last two years, we use two-year lags of the explanatory variables

In none of the regressions, openness to experience emerges with significant coefficients. In the regression with combined sample of men and women, extraversion and neuroticism take significantly positive coefficients while conscientiousness and agreeableness emerge with significantly negative coefficients. The influences of these personality traits are also quantitatively meaningful. Extraversion and conscientiousness have the strongest influences. An additional point on the scale of extraversion is associated with a 1 percentage point higher likelihood of having extradysadic affairs while an additional point on the scale of conscientiousness reduces that likelihood by 1 percentage point. Given that there are 3 percent of observations with extradysadic affairs in our data, this implies a change in the likelihood of having extradysadic affairs by 33 percent. The

separate regressions by gender show that the pattern of results specifically holds for men. We find no significant influence of personality on extradyadic affairs of women.

5. Discussion of Results

5.1 General Insights

Our results show that the Big Five personality traits play an important role in the sex life of people. The Big Five personality traits not only play a role in a person's sexual satisfaction. They also play a role in how the person behaves in a sexual relationship. This conforms to our theoretical considerations suggesting that personality traits influence sexual communication and information sharing, the way dissonant sexual preferences of the partners are handled, and the extent to which the person is committed to promises made to the partner.

Neuroticism is associated with lower sexual satisfaction. On the one hand, a higher degree of emotional instability may entail that a person derives less utility from sex as he or she fears sex or is disgusted about some aspects of sexuality. On the other hand, our results suggest that a higher degree of emotional instability negatively affects sexual satisfaction through the person's behavior in the sexual relationship. Neuroticism is negatively associated with (the self-assessment of) being a good sex partner and fulfilling the partner's sexual needs and desires. This indicates that a person's emotional instability also negatively affects the partner's sexual satisfaction and makes a mutually beneficial sex life less likely. Our findings on sexual communication corroborate this view. Neuroticism is negatively associated with expressing preferences during sex and the ability of expressing sexual needs and desires in general. This conforms to the notion that emotional instability entails inadequate and hostile sexual communication and information

sharing. Furthermore, neuroticism is associated with a lower frequency of sex and a higher likelihood of being satisfied with the actual frequency of sex. However, a higher degree of neuroticism increases both the likelihood of desiring less frequent and the likelihood of desiring more frequent sex. This indicates that a neurotic person has rather volatile sexual preferences and is driven by impulsivity. Hence, it is more difficult for the person and the partner to coordinate their preferences and to handle dissonant preferences. Finally, our estimations show that neuroticism is associated with an increased likelihood of having extradyadic affairs. This conforms to the notion that lower self-control and a higher discounting of the future entail more severe commitment problems.

Conscientiousness is associated with higher sexual satisfaction in general and with a higher likelihood that a person is satisfied with the actual frequency of sex. Moreover, it is also positively associated with being a good sex partner and fulfilling the partner's sexual needs and desires. Thus our findings fit the notion that a higher degree of conscientiousness helps realize a win-win situation within the sexual relationship. As suggested by our theoretical considerations, conscientiousness may contribute to a more balanced style of sexual communication, a more fair-minded and cooperative handling of dissonant sexual preferences, and a higher commitment to promises made to the partner. Indeed, our empirical results confirm a positive role of conscientiousness in sexual communication. Conscientiousness is positively associated with expressing preferences during sex and expressing sexual needs and desires in general. Moreover, our results provide evidence that conscientiousness has a commitment value in a sexual relationship. Conscientiousness is associated with a lower likelihood of having extradyadic affairs.

Agreeableness is also associated with higher sexual satisfaction. However, our estimations provide no evidence that improved sexual communication is a transmission channel. Quite the contrary, we find some evidence of a negative role of agreeableness in sexual communication. Agreeableness is negatively associated with expressing preferences during sex. As suggested by our theoretical considerations, there can be two opposing influences. On the one hand, agreeableness may contribute to a more harmonious and empathic style of communication. On the other hand, a stronger desire for harmony and a higher degree of altruism may imply that an agreeable person to some extent sacrifices his or her personal needs. Our empirical results on sexual communication suggest that the latter influence dominates. The interesting point is that an agreeable person nonetheless experiences higher sexual satisfaction. This may be explained by a higher degree of humility implying that an agreeable person gains sexual satisfaction even if he or she sacrifices some of his or her needs. Furthermore, our estimations show that agreeableness is associated with a lower likelihood of having extradyadic affairs. This suggests that agreeableness has a commitment value.

Extraversion is associated with both higher sexual satisfaction and higher frequency of sex. Moreover, it is a positive determinant of being a good sex partner and fulfilling the partner's sexual needs and desires. Thus, extraversion appears to contribute to a mutually beneficial sex life of the person and the partner. Our results suggest that improved sexual communication is one transmission channel. Extraversion is positively associated with expressing preferences during sex and the ability of expressing sexual needs and desires in general. However, extraversion is also associated with a higher likelihood of having extradyadic affairs. Thus, while a person's extraversion contributes to a mutually beneficial

sex life of the couple, at the same time it appears to entail more severe commitment problems. The positive link between extraversion and extradyadic affairs also indicates that a more extroverted person has better outside options increasing his or her bargaining power within the sexual relationship. A stronger bargaining power enables a more extroverted person to get through his or her preferred sexual practices. Altogether, our results conform to the notion that a person's extraversion increases both the joint surplus generated by a couple's sexual relationship and the person's share in this surplus.

We also find some evidence that openness to experience is positively associated with sexual satisfaction. Furthermore, our estimations provide evidence that openness to experience is a positive determinant of being a good sex partner and fulfilling the partner's sexual needs and desires. This suggests that an open person is more able to take into account the partner's sexual preferences. Our results also show that openness to experience contributes to improved sexual communication. It is positively associated with expressing preferences during sex and the ability of expressing sexual needs and desires in general. This indicates that a person who is more open to the partner's sexual preferences has better opportunities to communicate his or her preferences to the partner. In contrast to extraversion, we find no evidence that openness to experience is associated with extradyadic affairs. Thus, our analysis provides no evidence that openness to experience has an influence on commitment problems or the person's outside options.

5.2 Gender Differences

While many of the results hold for both women and men, the estimations also provide evidence of some interesting gender differences in the relationship between personality and sexuality. These differences may be explained by still existing inequalities in gender roles.

Gender roles are based on the different normative expectations a society has of individuals based on their sex (Blackstone 2003).⁷ Traditional gender roles place men in a dominant and women in a subordinate position. Men are expected to be forceful and self-assertive, while women are expected to be docile, caring and generous (Eagly 1987, Ridgeway 2011, Williams and Best 1990). These normative expectations guide behavior because people experience social and personal pressure to conform to them. Violations of the normative expectations by acting in a gender atypical manner elicits backlash, or negative reactions. For example, women acting in a dominant manner tend to lose likability, while men behaving passively, unassertively or anxiously tend to lose status and respect and are more likely to be perceived as insufficiently competent (Wood and Eagly 2012).

Against this background, one can expect that gender roles to some extent moderate the relationship between personality and sexuality. Indeed, our separate estimations by gender show that a significantly positive link between extraversion and sexual satisfaction can only be found for men, but not for women. Extraversion involves greater assertiveness and, given prevalent gender roles, assertiveness is perceived as a typical masculine attribute. Thus, a higher degree of extraversion enables men to act in a more gender typical and socially accepted way, while it leads women to act in a gender atypical and socially less accepted way. This makes it more likely that a high degree of extraversion helps men, but not women get through their preferred sexual activities in a relationship. While both extroverted men and extroverted women appear to be more able to express their sexual needs and desires, this only translates into higher sexual satisfaction for men, but not for women. A woman directly expressing her sexual needs and desires may trigger negative responses from the male partner who perceives her as being too dominant.

In contrast to extraversion, a significantly positive link between openness to experience and sexual satisfaction can only be found for women, but not for men. Unequal gender roles may also explain this result. As unequal gender roles place women in a subordinate and less powerful position, they may tend to emphasize the preferred sexual activities of their male partners.⁸ Emphasizing the partner's preferred sexual activities is more likely to increase a woman's sexual satisfaction if she is open to experience and, hence, welcomes those activities.

Finally, our estimations suggest that personality traits play a significant role in extradyadic affairs of men, but not in extradyadic affairs of women. An explanation for this finding may be that unequal gender roles entail a sexual double standard. This sexual double standard holds that multiple sex partners are acceptable for men, but not for women (Petersen and Hyde 2011). Considering the sexual double standard, it appears to be plausible that personality traits have a stronger influence on men's than on women's inclination to have extradyadic affairs.⁹

6. Conclusions

In this study, we have developed an economics-based approach to the role personality plays in people's sex life. Personality not only shapes a person's preferences for sex. It also shapes a person's behavior in a sexual relationship. This behavior has an influence on the quality and quantity of sex and, hence, on the sexual well-being of the person and his or her partner. Personality shapes sexual communication and information sharing, the way dissonant sexual preferences of the partners are handled, and the extent to which the person is committed to promises made to the partner. Using a large representative dataset from Germany, our empirical results confirm that personality plays an important role in various

dimensions of sexuality. The Big Five personality traits have an influence on own sexual satisfaction, sexual fulfillment of the partner, sexual communication, actual and desired frequency of sex, and extradyadic affairs.

We recognize the need for future research within this theme. Economists have been increasingly interested in the determinants of life satisfaction. Against this background, a small number of econometric studies have examined the link between sex and happiness. Future research could fruitfully examine if this link depends on personality traits. Personality may not only influence the quality and quantity of sex, but may also moderate how sex translates into life satisfaction.

Furthermore, comparative analyses could be a fruitful avenue for future research. Our estimations have provided evidence of some gender differences in the relationship between personality and sex. We have argued that asymmetric gender roles may explain these differences. More generally, this indicates that the relationship between personality and sex to some extent is shaped by the social environment. This calls for comparative research systematically examining the relationship between personality and sex for different cultures, countries and societies.

Finally, on a broader scale, our study suggests that giving sex and personality a more prominent role in family economics could lead to interesting theoretical and empirical advancements in this field. For example, it would be interesting to examine the influence of sexuality on family formation and dissolution.

References

- Agarwal, B. 1997. ““Bargaining” and Gender Relations: Within and Beyond the Household,” *Feminist Economics* 3: 1 – 51.
- Akerlof, George A. and Rachel E. Kranton. 2000. “Economics and Identity,” *Quarterly Journal of Economics* 115: 715 – 753.
- Akerlof, George A. and Rachel E. Kranton. 2005. “Identity and the Economics of Organizations,” *Journal of Economic Perspectives* 19: 9 – 32.
- Albanesi, Stefania and Claudia Olivetti. 2016. “Gender Roles and Medical Progress,” *Journal of Political Economy* 124: 650 – 695.
- Alesina, Alberto, Paola Giuliano and Nathan Nunn. 2013. “On the Origins of Gender Roles: Women and the Plough,” *Quarterly Journal of Economics* 128: 469 – 530.
- Allen, M.S. 2019. “The Role of Personality in Sexual and Reproductive Health,” *Current Directions in Psychological Science* 28: 581 – 586.
- Allen, M.S. and E.E. Walter. 2018. “Linking Big Five Personality Traits to Sexuality and Sexual Health: A Meta-Analytic Review,” *Psychological Bulletin* 144: 1081 – 1110.
- Allport, G.M. and H.S. Odbert. 1936. “Traitnames. A Psycho-Lexical Study,” *Psychological Monographs* 47: 171.
- Almlund, M., A.L. Duckworth, J. Heckman and T. Kautz. 2011. “Personality Psychology and Economics,” in E.A. Hanushek, S. Machin and L. Woessmann, eds., *Handbook of the Economics of Education*, Vol. 4, Elsevier: 1 – 181.
- Ashton, M.C., K. Lee and R.E. de Vries. 2014. “The HEXACO Honesty-Humility, Agreeableness, and Emotionality Factors: A Review of Research and Theory,” *Personality and Social Psychology Review* 18: 139 – 152.
- Averett, S.L., C. Bansak and J.K. Smith. 2020. “Behind Every High Earning Man Is a Conscientious Woman: The Impact of Spousal Personality on Earnings and Marriage,” *Journal of Family and Economic Issues*, Forthcoming.
- Becker, A., T. Deckers, T. Dohmen, A. Falk and F. Kosse. 2012. “The Relationship between Economic Preferences and Psychological Personality Measures,” *Annual Review of Economics* 4: 453 – 478.
- Bergstrom, T.C. 1997. “A Survey of Theories of the Family,” in M.R. Rosenzweig and O. Stark, eds., *Handbook of Population and Family Economics*, Elsevier: 21 – 77.
- Bertrand, Marianne, Emir Kamencia and Jessica Pan. 2015. “Gender Identity and Relative Income within Households,” *Quarterly Journal of Economics* 130: 571 – 614.
- Blackstone, Amy. 2003. “Gender Roles and Society,” in *Human Ecology: An Encyclopedia of Children, Families, Communities, and Environments*, edited by Julia R. Miller, Richard M. Lerner, and Lawrence M. Schiamberg, ABC-CLIO, Santa Barbara, CA: 335 – 338.

- Blanchflower, D.G. and A.J. Oswald. 2004. "Money, Sex and Happiness: An Empirical Study," *Scandinavian Journal of Economics* 106: 393 – 415.
- Borghans, L., A.L. Duckworth, J.J. Heckman and B. ter Weel. 2008. "The Economics and Psychology of Personality Traits," *Journal of Human Resources* 43: 972 – 1059.
- Boxho, C., A. Donald, M. Goldstein, J. Montalvao and L. Rouanet. 2020. "Assortative Matching in Africa: Evidence from Rural Mozambique, Côte d'Ivoire, and Malawi," *Economics Letters* 187: 108924.
- Brüderl, J., Schmiedeberg, C., Castiglioni, L., Arránz Becker, O., Buhr, P., Fuß, D., Ludwig, V., Schröder, J. and Schumann, N. 2018. "The German Family Panel - Study Design and Cumulated Field Report (Waves 1 to 9)," Pairfam Technical Paper No. 01.
- Buss, D.M. 1996. "Social Adaption and Five Major Factors of Personality," in J.S. Wiggins, ed., *The Five-Factor Model of Personality: Theoretical Perspectives*, Guilford Press: 180 – 207.
- Castelo-Branco, C., Palacios, S., Ferrer-Barriendos, J. and X. Alberich. 2010. "Do Patients Lie? An Open Interview vs. a Blind Questionnaire on Sexuality," *Journal of Sexual Medicine* 7: 873 – 880.
- Cheng, Z. and R. Smyth. 2015. "Sex and Happiness," *Journal of Economic Behavior and Organization* 112: 26 – 32.
- Clark, Andrew E. 1997. "Job Satisfaction and Gender: Why Are Women So Happy at Work?" *Labour Economics* 4: 341 – 372.
- Cobb-Clark, D.A. 2015. "Locus of Control and the Labor Market," *IZA Journal of Labor Economics* 4: 1 – 19.
- Cobb-Clark, D.A. and S. Schurer. 2012. "The Stability of Big-Five Personality Traits," *Economics Letters* 115: 11 – 15.
- Dupuy, A. and A. Galichon. 2014. "Personality Traits and the Marriage Market," *Journal of Political Economy* 122: 1271 – 1319.
- Eagly, A. H. 1987. *Sex Differences in Social Behavior: A Social-Role Interpretation*. Erlbaum, Hillsdale, NJ.
- Eysenck, H.J. 1971. "Personality and Sexual Behavior," *Journal of Psychosomatic Research* 16: 141 – 152.
- Eysenck, H.J. 1976. *Sex and Personality*, London, Open Books.
- Flinn, C.J., P.E. Todd and W. Zhang. 2018. "Personality Traits, Intra-Household Allocation and the Gender Wage Gap," *European Economic Review* 109: 191 – 220.
- Frey, B.S. 2008. *Happiness: A Revolution in Economics*. MIT Press, Cambridge, MA and London, UK.

- Frey, B.S. and A. Stutzer. 2002. *Happiness and Economics*. Princeton University Press, Princeton, NJ.
- Goldberg, L.R. 1981. "Language and Individual Differences: The Search for Universals in Personality Lexicons," *Review of Personality and Social Psychology* 2: 141 – 165.
- Hajek, K. 2019. "Sex and Housework: Does Perceived Fairness of the Distribution of Housework Actually Matter?" *Zeitschrift für Familienforschung* 31: 83 – 104.
- Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L. and Feldhaus, M. 2011. "Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual Framework and Design," *Zeitschrift für Familienforschung* 23: 77 – 100.
- Jirjahn, U. and C. Chadi. 2020. "Out-of-Partnership Births in East and West Germany," *Review of Economics of the Household* 18: 853 – 881.
- John, O.P., L.P. Naumann and C.J. Soto. 2008. "Paradigm Shift to the Integrative Big Five Trait Taxonomy: History, Measurement, and Conceptual Issues," in O.P. John, R.W. Robins and L.A. Pervin, eds., *Handbook of Personality: Theory and Research*, 3rd edition, New York, Guilford Press: 114 – 158.
- Josephs, L. and J. Shimberg. 2010. "The Dynamics of Sexual Fidelity: Personality Style as a Reproductive Strategy," *Psychoanalytic Psychology* 27: 273 – 295.
- Kahneman, D., A.B. Krueger, D. Schkade, N. Schwarz and A. Stone. 2004. "Toward National Wellbeing Accounts," *American Economic Review* 94: 429 – 434.
- Kislev, E. 2020. "Does Marriage Really Improve Sexual Satisfaction? Evidence from the Pairfam Data Set," *Journal of Sex Research* 57: 470 – 481.
- Laumann, E.O., A. Paik, D.B. Glasser, J.H. Kang, T. Wang, B. Levinson, E. Moreira, A. Nicolosi and C. Gilling. 2006. "A Cross-National Study of Subjective Wellbeing among Older Women and Men: Findings from the Global Study of Sexual Attitudes and Behaviors" *Archives of Sexual Behavior* 35: 143 – 159.
- Lazear, E.P. 2000. "Economic Imperialism," *Quarterly Journal of Economics* 115: 99 – 146.
- Loewenstein, G. 2000. "Emotions in Economic Theory and Economic Behavior," *American Economic Review* 90: 426 – 432.
- Loewenstein, G., T. Krishnamurti, J. Kopsic and D. McDonald. 2015. "Does Increased Sexual Frequency Enhance Happiness?" *Journal of Economic Behavior and Organization* 116: 206 – 218.
- Lundberg, S. 2011. "Psychology and Family Economics," *Perspektiven der Wirtschaftspolitik* 12: 66 – 81.
- Lundberg, S. 2012. "Personality and Marital Surplus," *IZA Journal of Labor Economics* 1: 3.
- Lundberg, S. and R.A. Pollak. 1994. "Non-cooperative Bargaining Models of Marriage," *American Economic Review* 84: 132 – 137.

- Lundberg, S. and R.A. Pollak. 1996. "Bargaining and Distribution in Marriage," *Journal of Economic Perspectives* 10: 139 – 158.
- McAdams, D.P. and J.L. Pals. 2006. "A New Big Five: Fundamental Principles for an Integrative Science of Personality," *American Psychologist* 61: 204 – 217.
- McCrae, R.R. and P.T. Costa. 2008. "The Five-Factor Theory of Personality," in O.P. John, R.W. Robins and L.A. Pervin, eds., *Handbook of Personality: Theory and Research*, 3rd edition, New York, Guilford Press: 159 – 181.
- Morgan, P.C. and J.A. Durtshi. 2018. "Sexual and Relationship Satisfaction Associated with Shifts in Dyadic Trajectories of Depressive Symptoms in German Couples across Four Years," *Journal of Marital and Family Therapy* 44: 655 – 670.
- Müller, B. and L. Castiglioni. 2015. "Attrition im Beziehungs- und Familienpanel pairfam," in J. Schupp and C. Wolf, eds., *Nonresponse Bias: Qualitätssicherung sozialwissenschaftlicher Umfragen*. Wiesbaden, Springer: 383 – 408.
- Nettle, D. 2006. "The Evolution of Personality Variation in Humans and Other Animals," *American Psychologist* 61: 622 – 631.
- Petersen, J.L. and J.S. Hyde. 2011. "Gender Differences in Sexual Attitudes and Behaviors: A Review of Meta-Analytic Results and Large Datasets," *Journal of Sex Research* 48: 149 – 165.
- Peterson, A, G. Geher and S.B. Kaufman. 2011. "Predicting Preferences for Sex Acts: Which Traits Matter Most, and Why?" *Evolutionary Psychology* 9: 371 – 389.
- Rainer, H. and I. Smith. 2012. "Education, Communication and Wellbeing: An Application to Sexual Satisfaction," *Kyklos* 65: 581 – 598.
- Rammstedt, B and O.P. John. 2005. "Kurzversion des Big Five Inventory (BFI-K): Entwicklung und Validierung eines ökonomischen Inventars zur Erfassung der fünf Faktoren der Persönlichkeit," *Diagnostica* 51: 195 – 206.
- Rammstedt, B. and O.P. John. 2007. "Measuring Personality in One Minute or Less: A 10-Item Short Version of the Big Five Inventory in English and German," *Journal of Research in Personality* 41: 203 – 212.
- Ridgeway, C.L. 2011. *Framed by Gender: How Gender Inequality Persists in the Modern World*. New York, NY: Oxford University Press.
- Roberts, B.W. 2009. "Back to the Future: Personality and Assessment and Personality Development," *Journal of Research in Personality* 43: 137 – 145.
- Roberts, B.W., N.R. Kuncel, R. Shiner, A. Caspi and L.R. Goldberg. 2007. "The Power of Personality: The Comparative Validity of Personality Traits, Socioeconomic Status, and Cognitive Ability for Predicting Important Life Outcomes," *Perspectives on Psychological Science* 2: 313 – 345.

- Schmiedeberg, C., B. Huyer-May and L. Castiglioni. 2017. "The More or the Better? How Sex Contributes to Life Satisfaction," *Archives of Sexual Behavior* 46: 465 – 473.
- Schmiedeberg, C. and J. Schröder. 2016. "Does Sexual Satisfaction Change with Relationship Duration?" *Archives of Sexual Behavior* 45: 99 – 107.
- Schröder, J. and C. Schmiedeberg. 2015. "Effects of Relationship Duration, Cohabitation, and Marriage on the Frequency of Intercourse in Couples: Findings from German Panel Data," *Social Science Research* 52: 72 – 82.
- Smith, A., A. Lyons, J. Ferris, J. Richters, M. Pitts, J. Shelley and J.M. Simpson. 2011. "Sexual and Relationship Satisfaction among Heterosexual Men and Women: The Importance of Desired Frequency of Sex," *Journal of Sex and Marital Therapy* 37: 104 – 115.
- Soto, C.J. and O.P. John. 2017. "Short and Extra-Short Forms of the Big Five Inventory–2: The BFI–2–S and the BFI–2–XS," *Journal of Research in Personality* 68: 69 – 81.
- Sprecher, S. 2002. "Sexual Satisfaction in Premarital Relationships: Associations with Satisfaction, Love, Commitment, and Stability," *Journal of Sex Research* 39: 190 – 196.
- Swaffield, J.K. 2001. "Does Measurement Error Bias Fixed-Effects Estimates of the Union Wage Effect?" *Oxford Bulletin of Economics and Statistics* 63: 437 – 457.
- Van Kampen, D. 2012. "The 5-Dimensional Personality Test (5DPT): Relationship with Two Lexically Based Instruments and the Validation of the Absorption Scale," *Journal of Personality Assessment* 94: 92 – 101.
- Velten, J. and J. Margraf. 2017. "Satisfaction Guaranteed? How Actor, Partner, and Relationship Factors Impact Sexual Satisfaction within Partnerships," *PloS One* 12, e0172855, doi: 10.1007/s10508-015-0547-8.
- Weiss, Y. 1997. "The Formation and Dissolution of Families: Why Marry? Who Marries Whom? And What Happens Upon Divorce?" In M.R. Rosenzweig and O. Stark, eds., *Handbook of Population and Family Economics*, Elsevier: 81 – 123.
- Williams, J.E. and D.L. Best. 1990. *Measuring Sex Stereotypes: A Multinational Study*. Newbury Park, CA: Sage.
- Wood, Wendy and Alice H. Eagly. 2012. "Biosocial Construction of Sex Differences and Similarities in Behavior," *Advances in Experimental Social Psychology* 46: 55 – 123.
- World Health Organization. 2006. *Defining Sexual Health: Report of a Technical Consultation on Sexual Health*. Geneva.

Table 1: Definitions and Descriptive Statistics of the Dependent Variables

| <i>Variable</i> | <i>Definition</i> | <i>Mean</i> | <i>Std.dev.</i> | <i>N</i> | <i>Years</i> |
|--|---|-------------|-----------------|----------|------------------------------|
| Sexual satisfaction | Score of sexual satisfaction. The interviewee answers the question “How satisfied are you with your sex life?” on an eleven-point Likert scale. The scale ranges from 0 “very dissatisfied” to 10 “very satisfied”. | 6.614 | 2.518 | 35204 | 2008–2017 |
| Expressing preferences during sex | The interviewee responds to the statement “If I want something different during sex, I say it or show it” on a five-point Likert scale ranging from 1 “not at all” to 5 “absolutely”. | 3.707 | 0.981 | 13507 | 2009, 2010, 2012, 2014, 2016 |
| Expressing sexual needs and desires in general | The interviewee responds to the statement “In general, I can express my sexual needs and desires very well” on a five-point Likert scale ranging from 1 “not at all” to 5 “absolutely”. | 3.654 | 0.937 | 13449 | 2009, 2010, 2012, 2014, 2016 |
| Good sex partner | The interviewee responds to the statement “I am a very good sex partner” on a five-point Likert scale ranging from 1 “not at all” to 5 “absolutely”. | 3.559 | 0.888 | 12948 | 2009, 2010, 2012, 2014, 2016 |
| Fulfilling partner’s sexual needs and desires | The interviewee responds to the statement “In general, I can fulfill the sexual needs and desires of my partner very well” on a five-point Likert scale ranging from 1 “not at all” to 5 “at absolutely”. | 3.728 | 0.876 | 13182 | 2009, 2010, 2012, 2014, 2016 |
| Frequency of sex | Frequency of intercourse per month during the past three months: 0, 0.67, 2.5, 4, 10, 20 or 30 days per month. | 5.838 | 6.105 | 30517 | 2009–2017 |
| Desire for less frequent sex | Dummy equals 1 if the person prefers to have sex somewhat less often or much less often than he or she had during the past three months. | 0.051 | 0.220 | 12911 | 2014–2017 |
| Desire for more frequent sex | Dummy equals 1 if the person prefers to have sex somewhat more often or much more often than he or she had during the past three months. | 0.564 | 0.496 | 12911 | 2014–2017 |
| Extradyadic affair | Dummy equals 1 if the person had sex with someone other than the partner during the past two years. | 0.030 | 0.170 | 11223 | 2010, 2012, 2014, 2016 |

Table 2: Definitions and Descriptive Statistics of the Variables for the Big Five

| <i>Variable</i> | <i>Definition</i> | <i>Mean</i> | <i>Std.dev.</i> |
|-------------------|---|-------------|-----------------|
| Extraversion | Score of extraversion constructed from adding up four survey items measured on a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The sum of items is divided by 4. The items are: (1) I am usually modest and reserved. (2) I get enthusiastic easily and can motivate others easily. (3) I tend to be the strong and silent type. (4) I am expansive and gregarious. Items (1) and (3) were recoded in inverse order before adding up. | 3.579 | 0.799 |
| Openness | Score of openness to experience constructed from adding up five survey items measured on a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The sum of items is divided by 5. The items are: (1) I am interested in many kinds of things. (2) I am intellectual and like to contemplate things. (3) I am very imaginative. (4) I appreciate artistic and aesthetic impressions. (5) I am hardly interested in art. Item (5) was recoded in reverse order before adding up. | 3.641 | 0.681 |
| Conscientiousness | Score of conscientiousness constructed from adding up four survey items measured on a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The sum of items is divided by 4. The items are: (1) I complete my tasks thoroughly. (2) I make things comfortable for myself and tend to be lazy. (3) I am proficient and work fast. (4) I make plans and carry them out. Item (2) was recoded in inverse order before adding up. | 3.878 | 0.612 |
| Agreeableness | Score of agreeableness constructed from adding up four survey items measured on a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The sum of items is divided by 4. The items are: (1) I tend to criticize others. (2) I trust others easily and believe that people are inherently good. (3) I can be cold and distanced in my behavior. (4) I can be gruff and dismissive with others. Items (1), (3) and (4) were recoded in inverse order before adding up. | 3.304 | 0.698 |
| Neuroticism | Score of neuroticism constructed from adding up four survey items measured on a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The sum of items is divided by 4. The items are: (1) I easily become depressed or discouraged. (2) I am relaxed and don’t let myself be worried by stress. (3) I worry a lot. (4) I easily become nervous and insecure. Item (2) was recoded in reverse order before adding up. | 2.659 | 0.787 |

N = 35204

Table 3: Determinants of Sexual Satisfaction

| <i>Explanatory Variables</i> | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Extraversion | 0.080 [0.016] (2.807)*** | 0.146 [0.024] (3.413)*** | 0.022 [0.005] (0.571) |
| Openness | 0.049 [0.010] (1.594) | 0.006 [0.001] (0.135) | 0.091 [0.019] (2.183)** |
| Conscientiousness | 0.293 [0.060] (8.609)*** | 0.338 [0.067] (6.759)*** | 0.266 [0.056] (5.720)*** |
| Agreeableness | 0.190 [0.039] (6.669)*** | 0.232 [0.046] (5.323)*** | 0.156 [0.033] (4.179)*** |
| Neuroticism | -0.255 [-0.053] (9.001)*** | -0.179 [-0.035] (3.911)*** | -0.304 [-0.064] (8.446)*** |
| Controls | Included | Included | Included |
| Log likelihood | -70357.120 | -30809.010 | -39489.040 |
| Number of persons | 7263 | 3288 | 3975 |
| Number of observations | 35204 | 15472 | 19732 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. Average marginal effects in square brackets are calculated on the probability of answering one of the three highest satisfaction categories of the eleven-point Likert scale.

*** Statistically significant at the 1% level; ** 5% level.

Table 4: Determinants of Satisfying the Partner's Sexual Wishes

| | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|--|-------------------------------|-------------------------------|
| <i>Explanatory Variables</i> | <i>Being a Good Sex Partner</i> | | |
| Extraversion | 0.318 [0.064] (6.969)*** | 0.383 [0.071] (5.708)*** | 0.265 [0.055] (4.278)*** |
| Openness | 0.270 [0.054] (5.437)*** | 0.353 [0.065] (4.853)*** | 0.219 [0.046] (3.233)*** |
| Conscientiousness | 0.367 [0.074] (6.408)*** | 0.474 [0.088] (5.655)*** | 0.307 [0.064] (3.887)*** |
| Agreeableness | 0.058 [0.012] (1.239) | 0.054 [0.010] (0.801) | 0.071 [0.015] (1.104) |
| Neuroticism | -0.333 [-0.067] (7.526)*** | -0.263 [-0.049] (3.966)*** | -0.366 [-0.077] (6.189)*** |
| Controls | Included | Included | Included |
| Log likelihood | -14476.050 | -5952.455 | -8440.108 |
| Number of persons | 5652 | 2558 | 3094 |
| Number of observations | 12948 | 5723 | 7225 |
| | <i>Fulfilling Partner's Sexual Needs and Desires</i> | | |
| Extraversion | 0.349 [0.062] (8.379)*** | 0.440 [0.072] (7.108)*** | 0.273 [0.051] (4.842)*** |
| Openness | 0.305 [0.054] (6.709)*** | 0.290 [0.048] (4.305)*** | 0.324 [0.061] (5.269)*** |
| Conscientiousness | 0.429 [0.076] (8.227)*** | 0.511 [0.084] (6.729)*** | 0.383 [0.072] (5.325)*** |
| Agreeableness | 0.048 [0.009] (1.141) | 0.096 [0.016] (1.543) | 0.025 [0.005] (0.433) |
| Neuroticism | -0.226 [-0.040] (5.567)*** | -0.147 [-0.024] (2.381)** | -0.264 [-0.049] (4.944)*** |
| Controls | Included | Included | Included |
| Log likelihood | -14731.680 | -6166.200 | -8512.297 |
| Number of persons | 5725 | 2598 | 3127 |
| Number of observations | 13182 | 5844 | 7338 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. Average marginal effects in square brackets are calculated on the probability of answering one of the two highest self-esteem categories of the five-point Likert scale. *** Statistically significant at the 1% level; ** 5% level.

Table 5: Determinants of Sexual Communication

| | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|---|-------------------------------|-------------------------------|
| <i>Explanatory Variables</i> | <i>Expressing Preferences during Sex</i> | | |
| Extraversion | 0.410 [0.076] (9.704)*** | 0.398 [0.073] (6.343)*** | 0.400 [0.075] (6.994)*** |
| Openness | 0.296 [0.055] (6.312)*** | 0.216 [0.040] (3.137)*** | 0.359 [0.067] (5.593)*** |
| Conscientiousness | 0.298 [0.056] (5.771)*** | 0.241 [0.044] (3.368)*** | 0.370 [0.069] (4.983)*** |
| Agreeableness | -0.079 [-0.015] (1.809)* | -0.021 [-0.004] (0.329) | -0.135 [-0.025] (2.225)** |
| Neuroticism | -0.229 [-0.043] (5.489)*** | -0.225 [-0.041] (3.567)*** | -0.221 [-0.041] (3.966)*** |
| Controls | Included | Included | Included |
| Log likelihood | -16375.930 | -7082.487 | -9241.700 |
| Number of persons | 5786 | 2624 | 3162 |
| Number of observations | 13507 | 5974 | 7533 |
| | <i>Expressing Sexual Needs and Desires in General</i> | | |
| Extraversion | 0.424 [0.081] (9.696)*** | 0.497 [0.089] (7.581)*** | 0.356 [0.070] (6.086)*** |
| Openness | 0.316 [0.060] (6.593)*** | 0.273 [0.049] (3.883)*** | 0.354 [0.070] (5.430)*** |
| Conscientiousness | 0.401 [0.076] (7.567)*** | 0.409 [0.073] (5.352)*** | 0.421 [0.083] (5.714)*** |
| Agreeableness | -0.034 [-0.006] (0.773) | -0.014 [-0.003] (0.219) | -0.051 [-0.010] (0.857) |
| Neuroticism | -0.273 [-0.052] (6.279)*** | -0.257 [-0.046] (3.926)*** | -0.270 [-0.053] (4.651)*** |
| Controls | Included | Included | Included |
| Log likelihood | -15715.300 | -6631.123 | -9019.434 |
| Number of persons | 5776 | 2619 | 3157 |
| Number of observations | 13449 | 5958 | 7491 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. Average marginal effects in square brackets are calculated on the probability of answering one of the two highest communication categories of the five-point Likert scale.

*** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table 6: Determinants of Frequency of Intercourse

| <i>Explanatory Variables</i> | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|----------------------|------------------------|--------------------------|
| Extraversion | 0.337 (5.014)*** | 0.468 (4.682)*** | 0.218 (2.416)** |
| Openness | 0.033 (0.431) | 0.018 (0.154) | 0.059 (0.598) |
| Conscientiousness | 0.093 (1.079) | 0.275 (2.129)** | -0.032 (0.272) |
| Agreeableness | -0.021 (0.296) | -0.129 (1.149) | 0.052 (0.577) |
| Neuroticism | -0.224 (3.395)*** | -0.149 (1.405) | -0.264 (3.155)*** |
| Controls | Included | Included | Included |
| R ² | 0.142 | 0.167 | 0.119 |
| Number of persons | 6947 | 3151 | 3796 |
| Number of observations | 30517 | 13477 | 17040 |

Method: Random effects GLS. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level.

Table 7: Determinants of Desire for Less Frequent or More Frequent Sex

| <i>Explanatory Variables</i> | <i>(1)</i> <i>All</i> | | <i>(2)</i> <i>Only Men</i> | | <i>(3)</i> <i>Only Women</i> | |
|------------------------------|--------------------------------|----------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | <i>Less Sex</i> | <i>More Sex</i> | <i>Less Sex</i> | <i>More Sex</i> | <i>Less Sex</i> | <i>More Sex</i> |
| Extraversion | -0.110 [-0.008] (1.331) | 0.094 [0.024] (2.600)*** | -0.159 [-0.003] (1.048) | 0.081 [0.018] (1.449) | -0.097 [-0.011] (1.035) | 0.124 [0.034] (2.568)** |
| Openness | -0.148 [-0.008] (1.697)* | 0.029 [0.010] (0.728) | 0.045 [0.001] (0.230) | -0.053 [-0.011] (0.833) | -0.163 [-0.015] (1.688)* | 0.088 [0.027] (1.684)* |
| Conscientiousness | -0.130 [-0.003] (1.273) | -0.122 [-0.025] (2.597)*** | -0.005 [0.001] (0.019) | -0.137 [-0.028] (1.955)* | -0.149 [-0.006] (1.321) | -0.118 [-0.023] (1.846)* |
| Agreeableness | -0.088 [-0.003] (1.075) | -0.059 [-0.011] (1.582) | -0.186 [-0.002] (0.887) | -0.069 [-0.012] (1.147) | -0.073 [-0.004] (0.811) | -0.037 [-0.006] (0.772) |
| Neuroticism | 0.215 [0.006] (2.748)*** | 0.175 [0.035] (4.689)*** | 0.323 [0.003] (2.049)** | 0.180 [0.034] (3.038)*** | 0.194 [0.007] (2.209)** | 0.177 [0.036] (3.652)*** |
| Controls | Included | Included | Included | Included | Included | Included |
| Log Likelihood | -10297.920 | | -3783.327 | | -6380.738 | |
| Number of persons | 4411 | | 1971 | | 2440 | |
| Number of observations | 12911 | | 5745 | | 7166 | |

Method: Multinomial logit. The reference group consists of persons who prefer to have sex just as often as they had during the past three months. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. Average marginal effects are in square brackets. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table 8: Determinants of Extradyadic Affairs

| <i>Explanatory Variables</i> | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|------------------------------|------------------------------|----------------------------|
| Extraversion | 0.508 [0.009] (2.877)*** | 0.624 [0.013] (2.729)*** | 0.332 [0.005] (1.538) |
| Openness | -0.041 [-0.001] (0.213) | 0.173 [0.004] (0.743) | -0.158 [-0.003] (0.617) |
| Conscientiousness | -0.533 [-0.009] (2.518)** | -0.609 [-0.013] (2.382)** | -0.404 [-0.006] (1.419) |
| Agreeableness | -0.445 [-0.008] (2.444)** | -0.561 [-0.012] (2.454)** | -0.316 [-0.005] (1.369) |
| Neuroticism | 0.417 [0.007] (2.290)** | 0.481 [0.010] (2.104)** | 0.353 [0.006] (1.532) |
| Controls | Included | Included | Included |
| Pseudo R ² | 0.07 | 0.01 | 0.12 |
| Number of persons | 4927 | 2123 | 2804 |
| Number of observations | 11223 | 4734 | 6489 |

Method: Random effects logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. Average marginal effects are in square brackets. *** Statistically significant at the 1% level; ** 5% level.

Appendix

Table A1: Definitions and Descriptive Statistics of the Control Variables

| <i>Variable</i> | <i>Definition</i> | <i>Mean</i> | <i>Std.dev</i> |
|-------------------------|--|-------------|----------------|
| Enrollment in education | Dummy equals 1 if the person is enrolled in education. | 0.184 | 0.388 |
| Full-time | Dummy equals 1 if the person is employed full-time. | 0.436 | 0.496 |
| Part-time | Dummy equals 1 if the person is employed part-time. | 0.148 | 0.355 |
| Self-employed | Dummy equals 1 if the person is self-employed. | 0.058 | 0.234 |
| Irregular employment | Dummy equals 1 if the person has an irregular job (e.g., internship, occasional job, mini job). | 0.037 | 0.188 |
| East Germany | Dummy equals 1 if the person resides in East Germany. | 0.245 | 0.430 |
| Female | Dummy equals 1 if the person is a woman. | 0.561 | 0.496 |
| Migration background | Dummy equals 1 if the person is a first- or second generation immigrant. | 0.183 | 0.386 |
| Number of children | Number of children living with the person in the same household. | 1.057 | 1.115 |
| Education | Years of schooling. | 13.091 | 3.404 |
| Married | Dummy equals 1 if the person is married to his or her partner. | 0.531 | 0.499 |
| Cohabiting | Dummy equals 1 if the person is not married to the partner and the couple lives together in the same dwelling. | 0.236 | 0.425 |
| Health | Ordered variable for the person's health status during the past four weeks. The variable ranges from 1 "bad" to 5 "very good". | 3.733 | 0.950 |
| Relationship duration | Duration of the relationship with the current partner in months. | 109.213 | 87.311 |
| Age | The person's age in years. | 32.871 | 7.794 |
| Age squared | The person's age squared. | 1141.257 | 502.392 |
| Protestant | Dummy equals 1 if the person has a Protestant religious affiliation. | 0.321 | 0.467 |
| Catholic | Dummy equals 1 if the person has a Catholic religious affiliation. | 0.288 | 0.453 |
| Muslim | Dummy equals 1 if the person has a Muslim religious affiliation. | 0.028 | 0.166 |
| Other religion | Dummy equals 1 if the person has another religious affiliation. | 0.031 | 0.172 |
| Cohort dummies | Dummy variables for the birth cohort. | ----- | ----- |
| Wave dummies | Dummy variables for the years of observation. | ----- | ----- |

N = 35204. The reference group of the variables for marriage and cohabitation (variables for employment status, variables for religion) consists of persons who do not live together with the partner (persons who are unemployed or out of the labor force, persons who are not religious).

Table A2: Determinants of Sexual Satisfaction; Full Results

| <i>Explanatory Variables</i> | <i>(1) All</i> | <i>(2) Only Men</i> | <i>(3) Only Women</i> |
|------------------------------|-----------------------|-------------------------|---------------------------|
| Extraversion | 0.080 (2.807)*** | 0.146 (3.413)*** | 0.022 (0.571) |
| Openness | 0.049 (1.594) | 0.006 (0.135) | 0.091 (2.183)** |
| Conscientiousness | 0.293 (8.609)*** | 0.338 (6.759)*** | 0.266 (5.720)*** |
| Agreeableness | 0.190 (6.669)*** | 0.232 (5.323)*** | 0.156 (4.179)*** |
| Neuroticism | -0.255 (9.001)*** | -0.179 (3.911)*** | -0.304 (8.446)*** |
| Enrollment in education | 0.009 (0.140) | -0.124 (1.057) | 0.094 (1.227) |
| Full-time | 0.063 (1.241) | -0.027 (0.264) | 0.135 (2.118)** |
| Part-time | 0.132 (2.491)** | 0.049 (0.285) | 0.126 (2.243)** |
| Self-employed | 0.074 (0.870) | -0.071 (0.487) | 0.171 (1.540) |
| Irregular employment | 0.044 (0.544) | -0.150 (0.654) | 0.060 (0.703) |
| East Germany | 0.183 (3.041)*** | 0.204 (2.305)** | 0.164 (1.994)* |
| Female | 0.238 (4.545)*** | ----- | ----- |
| Migration background | 0.310 (4.262)*** | 0.532 (4.734)*** | 0.157 (1.659)* |
| Number of children | -0.057 (2.068)** | -0.076 (1.838)* | -0.025 (0.656) |
| Education | -0.031 (4.884)*** | -0.032 (3.204)*** | -0.029 (3.476)*** |
| Married | -0.594 (8.709)*** | -0.528 (5.273)*** | -0.600 (6.379)*** |
| Cohabiting | -0.625 (12.180)*** | -0.541 (6.984)*** | -0.672 (9.769)*** |
| Health | 0.161 (11.276)*** | 0.169 (7.323)*** | 0.154 (8.509)*** |
| Relationship duration | -0.006 (12.623)*** | -0.007 (9.003)*** | -0.006 (9.147)*** |
| Age | -0.099 (2.679)*** | -0.133 (2.320)** | -0.092 (1.887)* |
| Age squared | 0.002 (4.469)*** | 0.003 (4.195)*** | 0.001 (2.645)*** |
| Protestant | 0.019 (0.338) | -0.047 (0.558) | 0.073 (0.940) |
| Catholic | 0.018 | -0.043 | 0.063 |

| | | | |
|------------------------|----------------------|----------------------|----------------------|
| | (0.281) | (0.459) | (0.757) |
| Muslim | 0.692 (4.022)*** | 0.430 (1.814)* | 0.881 (3.472)*** |
| Other religion | 0.341 (2.711)*** | 0.330 (1.593) | 0.355 (2.318)** |
| Constant | 3.035 (31.069)*** | 2.898 (20.681)*** | 3.125 (23.158)*** |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| Log likelihood | -70357.120 | -30809.010 | -39489.040 |
| Number of persons | 7263 | 3288 | 3975 |
| Number of observations | 35204 | 15472 | 19732 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A3: Determinants of Being a Good Sex Partner; Full Results

| <i>Explanatory Variables</i> | <i>(1) All</i> | <i>(2) Only Men</i> | <i>(3) Only Women</i> |
|------------------------------|----------------------|-------------------------|---------------------------|
| Extraversion | 0.318 (6.969)*** | 0.383 (5.708)*** | 0.265 (4.278)*** |
| Openness | 0.270 (5.437)*** | 0.353 (4.853)*** | 0.219 (3.233)*** |
| Conscientiousness | 0.367 (6.408)*** | 0.474 (5.655)*** | 0.307 (3.887)*** |
| Agreeableness | 0.058 (1.239) | 0.054 (0.801) | 0.071 (1.104) |
| Neuroticism | -0.333 (7.526)*** | -0.262 (3.966)*** | -0.366 (6.189)*** |
| Enrollment in education | -0.093 (0.842) | -0.348 (1.752)* | 0.014 (0.104) |
| Full-time | -0.079 (0.858) | -0.253 (1.382) | -0.057 (0.505) |
| Part-time | 0.004 (0.034) | 0.021 (0.066) | -0.007 (0.058) |
| Self-employed | -0.115 (0.798) | -0.407 (1.569) | 0.081 (0.471) |
| Irregular employment | 0.0101 (0.067) | -0.273 (0.753) | 0.058 (0.352) |
| East Germany | 0.122 (1.434) | -0.165 (1.315) | 0.330 (2.870)*** |
| Female | -0.611 (8.197)*** | ----- | ----- |
| Migration background | 0.388 (3.816)*** | 0.419 (2.648)*** | 0.335 (2.555)** |
| Number of children | 0.055 (1.308) | 0.165 (2.666)*** | -0.034 (0.577) |
| Education | -0.012 (1.193) | -0.010 (0.662) | -0.013 (1.023) |
| Married | -0.683 (6.172)*** | -0.768 (4.674)*** | -0.566 (3.700)*** |
| Cohabiting | -0.595 (7.307)*** | -0.428 (3.477)*** | -0.683 (6.296)*** |
| Health | 0.104 (3.666)*** | 0.201 (4.578)*** | 0.050 (1.340) |
| Relationship duration | -0.006 (8.472)*** | -0.004 (3.549)*** | -0.007 (8.213)*** |
| Age | -0.199 (2.909)*** | -0.273 (2.655)*** | -0.141 (1.543) |
| Age squared | 0.002 (2.207)** | 0.002 (1.764)* | 0.002 (1.394) |
| Protestant | 0.027 (0.331) | 0.139 (1.144) | -0.048 (0.420) |
| Catholic | -0.015 | 0.160 | -0.114 |

| | | | |
|------------------------|----------------------|----------------------|----------------------|
| | (0.166) | (1.161) | (0.907) |
| Muslim | 0.100 (3.778)*** | 0.830 (2.411)** | 1.260 (2.975)*** |
| Other religion | 0.375 (1.954)* | 0.436 (1.481) | 0.352 (1.379) |
| Constant | 4.136 (19.880)*** | 3.848 (12.521)*** | 4.284 (15.364)*** |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| Log likelihood | -14476.050 | -5952.455 | -8440.108 |
| Number of persons | 5652 | 2558 | 3094 |
| Number of observations | 12948 | 5723 | 7225 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A4: Determinants of Fulfilling Partner's Sexual Needs and Desires; Full Results

| <i>Explanatory Variables</i> | <i>(1) All</i> | <i>(2) Only Men</i> | <i>(3) Only Women</i> |
|------------------------------|----------------------|-------------------------|---------------------------|
| Extraversion | 0.349 (8.379)*** | 0.440 (7.108)*** | 0.273 (4.842)*** |
| Openness | 0.305 (6.709)*** | 0.290 (4.305)*** | 0.324 (5.269)*** |
| Conscientiousness | 0.429 (8.227)*** | 0.511 (6.729)*** | 0.383 (5.325)*** |
| Agreeableness | 0.048 (1.141) | 0.096 (1.543) | 0.025 (0.433) |
| Neuroticism | -0.226 (5.567)*** | -0.147 (2.381)** | -0.264 (4.944)*** |
| Enrollment in education | -0.100 (0.963) | -0.106 (0.553) | -0.063 (0.485) |
| Full-time | -0.225 (2.576)*** | -0.237 (1.352) | -0.203 (1.928)* |
| Part-time | -0.111 (1.100) | 0.135 (0.429) | -0.146 (1.393) |
| Self-employed | -0.185 (1.334) | -0.193 (0.798) | -0.156 (0.876) |
| Irregular employment | -0.054 (0.346) | 0.025 (0.070) | -0.078 (0.466) |
| East Germany | 0.092 (1.179) | -0.061 (0.516) | 0.204 (1.953)* |
| Female | -0.316 (4.547)*** | ----- | ----- |
| Migration background | 0.168 (1.799)* | 0.180 (1.243) | 0.137 (1.131) |
| Number of children | 0.063 (1.680)* | 0.162 (2.916)*** | -0.017 (0.322) |
| Education | -0.019 (2.131)** | -0.012 (0.886) | -0.027 (2.242)** |
| Married | -0.489 (4.899)*** | -0.534 (3.565)*** | -0.441 (3.201)*** |
| Cohabiting | -0.437 (5.737)*** | -0.399 (3.465)*** | -0.445 (4.322)*** |
| Health | 0.110 (4.158)*** | 0.157 (3.810)*** | 0.082 (2.404)** |
| Relationship duration | -0.005 (7.963)*** | -0.004 (4.456)*** | -0.005 (6.695)*** |
| Age | -0.207 (3.202)*** | -0.245 (2.478)** | -0.170 (1.966)** |
| Age squared | 0.002 (3.000)*** | 0.004 (2.833)*** | 0.002 (1.436) |
| Protestant | 0.014 (0.177) | 0.044 (0.374) | 0.001 (0.014) |
| Catholic | -0.067 | 0.001 | -0.103 |

| | | | |
|------------------------|----------------------|----------------------|----------------------|
| | (0.795) | (0.008) | (0.896) |
| Muslim | 0.613 (2.633)*** | 0.500 (1.631) | 0.722 (1.940)* |
| Other religion | 0.240 (1.324) | 0.122 (0.460) | 0.333 (1.356) |
| Constant | 3.227 (19.774)*** | 3.194 (12.669)*** | 3.209 (15.086)*** |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| Log likelihood | -14731.680 | -6166.200 | -8512.297 |
| Number of persons | 5725 | 2598 | 3127 |
| Number of observations | 13182 | 5844 | 7338 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A5: Determinants of Expressing Preferences during Sex; Full Results

| <i>Explanatory Variables</i> | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|----------------------|------------------------|--------------------------|
| Extraversion | 0.410 (9.704)*** | 0.398 (6.343)*** | 0.400 (6.994)*** |
| Openness | 0.296 (6.312)*** | 0.216 (3.137)*** | 0.359 (5.593)*** |
| Conscientiousness | 0.298 (5.771)*** | 0.241 (3.368)*** | 0.370 (4.983)*** |
| Agreeableness | -0.079 (1.809)* | -0.021 (0.329) | -0.135 (2.225)** |
| Neuroticism | -0.229 (5.489)*** | -0.225 (3.567)*** | -0.221 (3.966)*** |
| Enrollment in education | -0.117 (1.224) | -0.556 (3.276)*** | 0.164 (1.370) |
| Full-time | -0.206 (2.480)** | -0.482 (3.136)*** | -0.025 (0.236) |
| Part-time | -0.190 (1.947)* | -0.509 (1.815)* | -0.138 (1.318) |
| Self-employed | -0.254 (1.874)* | -0.565 (2.659)*** | -0.049 (0.251) |
| Irregular employment | 0.069 (0.485) | -0.150 (0.437) | 0.084 (0.549) |
| East Germany | 0.121 (1.509) | 0.088 (0.756) | 0.152 (1.364) |
| Female | 0.066 (0.937) | ----- | ----- |
| Migration background | 0.199 (2.105)** | 0.344 (2.416)** | 0.083 (0.664) |
| Number of children | 0.039 (1.013) | 0.047 (0.823) | 0.065 (1.211) |
| Education | -0.019 (2.054)** | -0.023 (1.644) | -0.016 (1.376) |
| Married | -0.291 (2.933)*** | -0.499 (3.257)*** | -0.076 (0.570) |
| Cohabiting | -0.244 (3.323)*** | -0.297 (2.723)*** | -0.166 (1.650)* |
| Health | 0.076 (2.983)** | 0.169 (4.323)** | 0.013 (0.376) |
| Relationship duration | -0.003 (6.074)*** | -0.004 (4.710)*** | -0.004 (4.502)*** |
| Age | 0.007 (0.112) | -0.116 (1.242) | 0.096 (1.104) |
| Age squared | -0.001 (0.911) | 0.001 (0.642) | -0.002 (1.555) |
| Protestant | -0.043 (0.537) | -0.021 (0.176) | -0.048 (0.442) |
| Catholic | -0.164 | -0.148 | -0.165 |

| | | | |
|------------------------|----------------------|----------------------|----------------------|
| | (1.906)* | (1.143) | (1.423) |
| Muslim | -0.143 (0.575) | -0.307 (0.925) | -0.035 (0.092) |
| Other religion | -0.173 (0.941) | -0.358 (1.456) | -0.028 (0.107) |
| Constant | 3.526 (21.096)*** | 3.339 (13.732)*** | 3.656 (15.965)*** |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| Log likelihood | -16375.930 | -7082.487 | -9241.700 |
| Number of persons | 5786 | 2624 | 3162 |
| Number of observations | 13507 | 5974 | 7533 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A6: Determinants of Expressing Sexual Needs and Desires in General; Full Results

| <i>Explanatory Variables</i> | (1) <i>All</i> | (2) <i>Only Men</i> | (3) <i>Only Women</i> |
|------------------------------|----------------------|------------------------|--------------------------|
| Extraversion | 0.424 (9.696)*** | 0.497 (7.581)*** | 0.356 (6.086)*** |
| Openness | 0.316 (6.593)*** | 0.273 (3.883)*** | 0.354 (5.430)*** |
| Conscientiousness | 0.401 (7.567)*** | 0.409 (5.352)*** | 0.421 (5.714)*** |
| Agreeableness | -0.034 (0.773) | -0.014 (0.219) | -0.051 (0.857) |
| Neuroticism | -0.273 (6.279)*** | -0.257 (3.926)*** | -0.270 (4.651)*** |
| Enrollment in education | -0.144 (1.462) | -0.470 (2.569)** | 0.065 (0.535) |
| Full-time | -0.213 (2.504)** | -0.427 (2.542)** | -0.077 (0.728) |
| Part-time | -0.023 (0.234) | -0.068 (0.233) | -0.006 (0.059) |
| Self-employed | -0.206 (1.477) | -0.453 (1.932)* | -0.030 (0.156) |
| Irregular employment | 0.176 (1.209) | -0.081 (0.260) | 0.223 (1.393) |
| East Germany | 0.101 (1.266) | -0.018 (0.155) | 0.198 (1.813)* |
| Female | -0.185 (2.555)** | ----- | ----- |
| Migration background | 0.219 (2.277)** | 0.485 (3.375)*** | 0.028 (0.222) |
| Number of children | 0.076 (1.954)* | 0.093 (1.613) | 0.086 (1.610) |
| Education | -0.046 (5.055)*** | -0.058 (4.108)*** | -0.040 (3.308)*** |
| Married | -0.515 (5.151)*** | -0.700 (4.684)*** | -0.331 (2.397)** |
| Cohabiting | -0.354 (4.651)*** | -0.531 (4.636)*** | -0.189 (1.834)* |
| Health | 0.114 (4.257)*** | 0.188 (4.524)*** | 0.068 (1.961)** |
| Relationship duration | -0.004 (6.615)*** | -0.003 (4.042)*** | -0.005 (5.631)*** |
| Age | -0.040 (0.619) | 0.008 (0.085) | -0.077 (0.878) |
| Age squared | 0.000 (0.321) | 0.001 (0.586) | 0.000 (0.028) |
| Protestant | -0.071 (0.913) | -0.036 (0.316) | -0.087 (0.823) |
| Catholic | -0.179 | -0.148 | -0.184 |

| | | | |
|------------------------|----------------------|----------------------|----------------------|
| | (2.073)** | (1.167) | (1.561) |
| Muslim | 0.515 (2.179)** | 0.239 (0.747) | 0.658 (1.805)* |
| Other religion | 0.111 (0.534) | -0.007 (0.027) | 0.225 (0.722) |
| Constant | 3.737 (20.766)*** | 3.429 (13.761)*** | 3.927 (15.668)*** |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| Log likelihood | -15715.300 | -6631.123 | -9019.434 |
| Number of persons | 5776 | 2619 | 3157 |
| Number of observations | 13449 | 5958 | 7491 |

Method: Random effects ordered logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A7: Determinants of Frequency of Intercourse; Full Results

| <i>Explanatory Variables</i> | <i>(1) All</i> | <i>(2) Only Men</i> | <i>(3) Only Women</i> |
|------------------------------|-----------------------|-------------------------|---------------------------|
| Extraversion | 0.337 (5.014)*** | 0.468 (4.682)*** | 0.218 (2.416)** |
| Openness | 0.033 (0.431) | 0.018 (0.154) | 0.059 (0.598) |
| Conscientiousness | 0.093 (1.079) | 0.275 (2.129)** | -0.032 (0.272) |
| Agreeableness | -0.021 (0.296) | -0.129 (1.149) | 0.052 (0.577) |
| Neuroticism | -0.224 (3.395)*** | -0.149 (1.405) | -0.264 (3.155)*** |
| Enrollment in education | 0.306 (1.690)* | -0.128 (0.340) | 0.615 (2.889)*** |
| Full-time | 0.347 (2.553)** | 0.153 (0.505) | 0.591 (3.669)*** |
| Part-time | 0.565 (4.578)*** | 0.865 (1.936)* | 0.500 (3.927)*** |
| Self-employed | 0.216 (1.071) | -0.022 (0.055) | 0.384 (1.666)* |
| Irregular employment | 0.357 (1.784)* | -0.283 (0.407) | 0.421 (2.134)** |
| East Germany | 0.490 (3.141)*** | 0.168 (0.711) | 0.748 (3.582)*** |
| Female | -0.285 (2.186)** | ----- | ----- |
| Migration background | 0.797 (4.539)*** | 0.919 (3.347)*** | 0.690 (3.018)*** |
| Number of children | -0.089 (1.354) | -0.128 (1.228) | -0.001 (0.013) |
| Education | -0.009 (0.467) | 0.036 (1.148) | -0.042 (1.755)* |
| Married | -1.738 (8.699)*** | -1.574 (5.190)*** | -1.761 (6.642)*** |
| Cohabiting | -1.410 (8.896)*** | -1.429 (5.929)*** | -1.348 (6.435)*** |
| Health | 0.129 (3.519)*** | 0.144 (2.354)** | 0.111 (2.440)** |
| Relationship duration | -0.020 (16.787)*** | -0.025 (12.146)*** | -0.017 (12.207)*** |
| Age | -0.283 (2.875)*** | -0.438 (2.745)*** | -0.218 (1.761)* |
| Age squared | 0.005 (4.608)*** | 0.008 (4.653)*** | 0.003 (2.258)** |
| Protestant | -0.068 (0.478) | -0.165 (0-.762) | 0.050 (0.269) |
| Catholic | -0.160 | -0.540 | 0.136 |

| | | | |
|------------------------|----------------------|----------------------|----------------------|
| | (0.999) | (2.276)** | (0.631) |
| Muslim | 0.306 (0.683) | 0.900 (1.450) | -0.382 (0.584) |
| Other religion | 0.141 (0.403) | -0.728 (1.374) | 0.869 (1.950)* |
| Constant | 12.417 (7.438)*** | 14.034 (5.140)*** | 11.642 (5.580)*** |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| R ² | 0.142 | 0.167 | 0.119 |
| Number of persons | 6947 | 3151 | 3796 |
| Number of observations | 30517 | 13477 | 17040 |

Method: Random effects GLS. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A8: Determinants of Desire for Less Frequent or More Frequent Sex; Full Results

| <i>Explanatory Variables</i> | <i>(1)</i> <i>All</i> | | <i>(2)</i> <i>Only Men</i> | | <i>(3)</i> <i>Only Women</i> | |
|------------------------------|--------------------------|-----------------------|-------------------------------|---------------------|---------------------------------|----------------------|
| | <i>Less Sex</i> | <i>More Sex</i> | <i>Less Sex</i> | <i>More Sex</i> | <i>Less Sex</i> | <i>More Sex</i> |
| Extraversion | -0.110 (1.331) | 0.094 (2.600)*** | -0.159 (1.048) | 0.081 (1.449) | -0.097 (1.035) | 0.124 (2.568)** |
| Openness | -0.148 (1.697)* | 0.029 (0.728) | 0.045 (0.230) | -0.053 (0.833) | -0.163 (1.688)* | 0.088* (1.684) |
| Conscientiousness | -0.130 (1.273) | -0.122 (2.597)*** | -0.005 (0.019) | -0.137 (1.955)* | -0.149 (1.321) | -0.118 (1.846)* |
| Agreeableness | -0.088 (1.075) | -0.059 (1.582) | -0.186 (0.887) | -0.069 (1.147) | -0.073 (0.811) | -0.037 (0.772) |
| Neuroticism | 0.215 (2.748)*** | 0.175 (4.689)*** | 0.323 (2.049)** | 0.180 (3.038)*** | 0.194 (2.209)** | 0.177 (3.652)*** |
| Enrollment in education | 0.213 (0.988) | 0.112 (1.067) | -0.969 (1.629) | 0.419 (2.088)** | 0.310 (1.403) | 0.174 (1.376) |
| Full-time | -0.090 (0.527) | -0.005 (0.060) | -0.447 (1.029) | 0.142 (0.837) | -0.130 (0.709) | -0.232 (2.182)** |
| Part-time | -0.009 (0.053) | -0.150 (1.579) | 0.082 (0.105) | 0.426 (1.402) | -0.032 (0.189) | -0.180 (1.765)* |
| Self-employed | -0.638 (2.100)** | 0.124 (0.954) | -1.012 (1.483) | 0.396 (1.793)* | -0.711 (2.035)** | -0.059 (0.339) |
| Irregular employment | 0.471 (1.955)* | 0.096 (0.615) | 0.164 (0.142) | 0.676 (1.522) | 0.464 (1.861)* | 0.079 (0.483) |
| East Germany | 0.016 (0.111) | -0.112 (1.680)* | -0.875 (2.502)** | -0.164 (1.593) | 0.164 (1.018) | -0.076 (0.862) |
| Female | 1.094 (6.807)*** | -0.769 (12.336)*** | ----- | ----- | ----- | ----- |
| Migration background | 0.233 (1.552) | -0.085 (1.056) | 0.471 (1.394) | -0.171 (1.291) | 0.189 (1.138) | -0.044 (0.424) |
| Number of children | 0.149 (2.538)** | -0.029 (0.890) | -0.005 (0.034) | 0.014 (0.250) | 0.158 (2.543)** | -0.131 (2.987)*** |
| Education | 0.046 (2.231)** | 0.059 (5.929)*** | -0.025 (0.474) | 0.081 (5.030)*** | 0.051 (2.253)** | 0.041 (3.148)*** |
| Married | 0.319 (1.525) | 0.533 (5.509)*** | 1.026 (2.236)** | 0.724 (4.744)*** | 0.196 (0.835) | 0.322 (2.568)** |
| Cohabiting | 0.419 (2.450)** | 0.392 (5.350)*** | 0.650 (1.855)* | 0.511 (4.680)*** | 0.376 (1.902)* | 0.270 (2.827)*** |
| Health | -0.097 (1.760)* | -0.096 (3.847)*** | -0.114 (0.904) | -0.073 (1.793)* | -0.094 (1.551) | -0.101 (3.204)*** |
| Relationship duration | 0.001 (0.844) | 0.001 (2.038)** | -0.004 (1.629) | 0.004 (4.793)*** | 0.001 (0.685) | -0.0004 (0.689) |
| Age | -0.272 (1.767)* | 0.056 (0.808) | -0.541 (1.390) | 0.030 (0.283) | -0.205 (1.212) | 0.107 (1.170) |
| Age squared | 0.003 (1.335) | -0.001 (0.903) | 0.008 (1.409) | -0.001 (0.443) | 0.002 (0.731) | -0.002 (1.270) |
| Protestant | 0.046 (0.314) | -0.073 (1.094) | -0.172 (0.492) | -0.058 (0.562) | 0.076 (0.475) | -0.105 (1.179) |

| | | | | | | |
|------------------------|------------------|----------------------|-------------------|--------------------|------------------|--------------------|
| Catholic | 0.118 (0.740) | -0.011 (0.144) | 0.052 (0.156) | 0.074 (0.644) | 0.126 (0.703) | -0.073 (0.725) |
| Muslim | 0.363 (1.121) | -0.503 (2.651)*** | 0.038 (0.062) | -0.459 (1.758)* | 0.315 (0.842) | -0.581 (1.899)* |
| Other religion | 0.139 (0.445) | -0.259 (1.536) | -0.863 (0.860) | -0.352 (1.396) | 0.317 (0.945) | -0.207 (0.941) |
| Constant | 1.988 (0.740) | -1.141 (0.948) | 6.873 (1.062) | -1.158 (0.628) | 2.023 (0.685) | -2.377 (1.501) |
| Wave dummies | Included | Included | Included | Included | Included | Included |
| Cohort dummies | Included | Included | Included | Included | Included | Included |
| Log likelihood | -10297.920 | | -3783.327 | | -6380.738 | |
| Number of persons | 12911 | | 5745 | | 7166 | |
| Number of observations | 4411 | | 1971 | | 2440 | |

Method: Multinomial logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level.

Table A9: Determinants of Extradyadic Affairs; Full Results

| <i>Explanatory Variables</i> | <i>(1) All</i> | <i>(2) Only Men</i> | <i>(3) Only Women</i> |
|------------------------------|---------------------|-------------------------|---------------------------|
| Extraversion | 0.508 (2.877)*** | 0.624 (2.729)*** | 0.332 (1.538) |
| Openness | -0.041 (0.213) | 0.173 (0.743) | -0.158 (0.617) |
| Conscientiousness | -0.533 (2.518)** | -0.609 (2.382)** | -0.404 (1.419) |
| Agreeableness | -0.445 (2.444)** | -0.561 (2.454)** | -0.316 (1.369) |
| Neuroticism | 0.417 (2.290)** | 0.481 (2.104)** | 0.353 (1.532) |
| Enrollment in education | 0.173 (0.383) | 0.759 (0.942) | 0.141 (0.246) |
| Full-time | 0.176 (0.474) | 0.967 (1.261) | -0.063 (0.141) |
| Part-time | -0.373 (0.897) | 1.388 (1.599) | -0.756 (1.697)* |
| Self-employed | 0.689 (1.188) | 1.654 (1.870)* | 0.315 (0.404) |
| Irregular employment | -0.865 (1.530) | -0.669 (0.387) | -0.910 (1.624) |
| East Germany | -0.109 (0.324) | -1.060 (2.229)** | 0.701 (1.725)* |
| Female | -0.429 (1.458) | ----- | ----- |
| Migration background | -0.003 (0.008) | 0.211 (0.491) | -0.433 (0.967) |
| Number of children | -0.043 (0.278) | -0.017 (0.096) | -0.070 (0.324) |
| Education | -0.004 (0.103) | -0.055 (1.311) | 0.053 (1.156) |
| Married | 0.525 (1.226) | 1.332 (2.454)** | -0.195 (0.351) |
| Cohabiting | 0.065 (0.190) | 0.821 (1.691)* | -0.573 (1.349) |
| Health | -0.020 (0.190) | -0.034 (0.260) | -0.000 (0.003) |
| Relationship duration | -0.004 (1.723)* | -0.007 (1.883)* | -0.003 (0.879) |
| Age | -0.433 (1.625) | -0.409 (1.325) | -0.493 (1.330) |
| Age squared | 0.005 (1.745)* | 0.003 (0.772) | 0.008 (1.930)* |
| Protestant | 0.108 (0.333) | -0.196 (0.498) | 0.555 (1.343) |
| Catholic | -0.041 | -0.233 | 0.391 |

| | | | |
|------------------------|-------------------|-------------------|-------------------|
| | (0.117) | (0.553) | (0.882) |
| Muslim | -1.081 (1.207) | -0.844 (0.914) | ----- |
| Other religion | -0.874 (1.222) | -0.889 (0.916) | -0.588 (0.685) |
| Constant | 0.485 (0.110) | 0.663 (0.129) | 0.228 (0.037) |
| Wave dummies | Included | Included | Included |
| Cohort dummies | Included | Included | Included |
| Pseudo R ² | 0.07 | 0.01 | 0.12 |
| Number of persons | 4927 | 2123 | 2804 |
| Number of observations | 11223 | 4734 | 6489 |

Method: Random effects logit. The table shows the estimated coefficients. Z-statistics in parentheses are based on standard errors clustered at the person level. *** Statistically significant at the 1% level; ** 5% level; * 10% level. In estimation (3), the variable for Muslims is not included because of perfect overlap with the dependent variable.

Endnotes

¹ Peterson et al. (2011) provide evidence that preferences for sex acts depend on personality traits.

² While humility is a component of agreeableness in the Big Five model, it belongs to an additional dimension of personality (the honesty-humility dimension) in the alternative HEXACO model (Ashton et al. 2014).

³ Castelo-Branco et al. (2010) provide evidence of a substantial over-reporting of sexual activity and importance of sex in personal interviews as compared to anonymous questionnaires.

⁴ The waves 2008 and 2009 also contain information on extradyadic affairs. We do not consider these waves as the information on extradyadic affairs has a different time frame.

⁵ Control variables are included in the regressions, but are suppressed to save space. The full results can be found in the Appendix.

⁶ We prefer the random effects model over a fixed effects approach. The fixed effects approach only takes into account within variation of the variables, but throws away all the information contained in the cross-sectional variation in the data. Thus, time-invariant variables cannot be included in a fixed effects regression. While variables with small variation across time may be included, small within variation can result in highly inefficient estimates. Moreover, attenuation bias due to measurement errors is likely to be more severe in fixed effects regressions (Swaffield 2001).

⁷ While the concept of gender roles traditionally plays a key role in sociology, economists increasingly recognize that gender roles are crucial for understanding socio-economic outcomes (Akerlof and Kranton 2000, 2005, Albanesi and Olivetti 2016, Alesina et al. 2013, Bertrand et al. 2015).

⁸ As shown by regression (1) in Table A2, women nonetheless express higher sexual satisfaction than men. This may be explained by lower expectations women have. A related result and explanation can also be found in the literature on gender and job satisfaction (Clark 1997).

⁹ The sexual double standard may not only imply an indirect moderating, but also a direct role of gender in extradyadic affairs. I.e., women should have a lower probability of having extradyadic affairs than men. As shown by regression (1) in Table A9, the variable for women indeed takes a negative coefficient. While the coefficient is not statistically significant, a t-statistic of about 1.5 suggests that the variable contributes to explaining extradyadic affairs.