Research article
UDC 159.9.072
https://doi.org/10.21702/9pgsm276

# Personality Predictors of Oocyte Donation in Russia

**Irina G. Polyakova*, Tatiana V. Valieva, Elvira E. Symaniuk**

Ural Federal University named after the first President of Russia B.N. Yeltsin, Ekaterinburg, Russian Federation

*Corresponding author: irinapolykova@yandex.ru

## Abstract

**Introduction.** Oocyte donation has become an increasingly common approach to addressing infertility, making the identification of psychological predictors of this type of donation a highly relevant issue. Previous international studies have described the personality profiles of oocyte donors using MMPI-based methods. The aim of this article is to present the results of an investigation of the personality characteristics of oocyte donors in a Russian sample. **Methods.** The study included 67 oocyte donors (M = 28.70 years) and a control group of 75 women matched by demographic characteristics (M = 28.21 years), recruited in 2022–2023 in the Sverdlovsk Region. Personality traits were assessed using the SMOL clinical questionnaire, a short form of the MMPI. Data analysis was conducted using the Kolmogorov–Smirnov test, Mann–Whitney U test, exploratory factor analysis, and discriminant analysis. **Results.** A personality profile of oocyte donors was constructed, with all scales falling within the normative range, except for Depression (D), Hysteria (Hy), and Psychasthenia (Pt), which were lower. Overall, the donor profile was statistically significantly lower than that of the control group on all scales except the Psychopathic Deviate (Pd) scale. A two-factor structure of donor personality traits was identified, comprising the factors "Reflective, Conscious Self vs. Conversion Self" (first factor) and "Responsible, Confident Self vs. Intrapunitive, Self-Oriented Self" (second factor), which differed from the factor structure observed in the comparison group. Discriminant analysis indicated that emotional stability, frustration tolerance, adherence to social norms, and a responsible attitude toward health are key predictors of oocyte donation. **Discussion.** The results, reported for the first time in a Russian sample, are

consistent with findings from international studies, particularly regarding the placement of oocyte donors' personality profiles within normal or below-average ranges without pronounced peaks. The study's novelty lies in the identification of the factor structure of donor personality profiles and the development of a predictive model of personality traits for oocyte donation.

### Keywords

oocyte donation, personality predictors, personality profile, Mini-Mult

### For citation

Polyakova, I. G., Valieva, T. V., & Symaniuk, E. E. (2025). Personality predictors of oocyte donation in Russia. *Russian Psychological Journal, 22*(2), 191–209. https://doi.org/10.21702/9pgsm276

## Introduction

In many countries, including Russia, raising the birth rate is a critical priority for maintaining population levels and supporting long-term socio-economic stability. Among the strategies aimed at achieving this goal, reproductive medicine has been gaining increasing prominence. Within this field, reproductive donation has emerged as a key method for addressing infertility, a condition affecting a steadily growing proportion of the population. In some cases, oocyte donation is the only means by which women suffering from pathologies related to folliculogenesis disorders—such as the complete absence of oocytes or their poor quality—can conceive. The use of donor material is also indicated when there is a risk of transmitting hereditary diseases. While infertility may result from a variety of causes, one notable trend with profound socio-demographic implications is the increasing tendency in developed countries to postpone childbearing until later in life.

However, assisted reproductive technology (ART) procedures in general, and oocyte donation in particular, involve not only medical and technological aspects but also place significant emphasis on the well-being of all participants, including donors and prospective parents. Almost invariably, both donors and recipients face a complex set of social and ethical challenges arising from modern society's ambivalent attitudes toward reproductive donation, the specific legal regulations governing this sociocultural phenomenon, and psychological concerns, including uncertainties regarding the future of children conceived through donor material.

As Kruchinina & Voronova (2020) demonstrate, ART is perceived differently across countries, being seen either as a potential threat to security or as a solution to demographic and economic challenges. In Russian academia, the legal and bioethical aspects of ART

are actively debated. Researchers have explored the relationship between property rights and reproductive rights (Belova, 2021), analyzed the shortcomings of the legal framework governing reproductive technologies (Kruchinina & Voronova, 2020; Pechegina, 2021; Semkina, 2021), and examined the challenges of assigning legal meaning to medical terminology (Krasnova, 2022). They have also raised questions regarding the future status of embryos stored in medical institutions (Yarosh, 2021) and discussed the need for legislative restrictions on the use of ART in Russia (Ustinkin & Rudakova, 2023). This selection represents only a portion of the relatively recent literature on these topics.

At the same time, it has been noted that "the current legal norms regulating legal relations in the use of ART address only certain aspects of the problems that arise. The situation is further complicated by a range of non-medical factors emerging in the course of demographic development, encompassing economic, social, legal, ethical, and psychological dimensions" (Albitskiy, Odinayeva & Mansimova, 2011, p. 14). Thus, from a sociological perspective, contemporary literature addresses issues related to public attitudes toward donation and ART, including attitudes toward the use of ART among young people (Dadaeva & Baranova, 2019) and among residents of large cities (Symaniuk, Polyakova & Mokerova, 2021). From a socio-psychological perspective, factors influencing individuals' readiness to donate are also examined, such as procedural risks, the anonymity of donation, the opinions of relatives or friends, financial compensation, and other considerations (Antonova, Eritsyan & Tsvetkova, 2019).

In the Russian psychological literature, research on assisted reproductive technologies (ART) has predominantly addressed the psychological characteristics of ART recipients and their children. Previous studies have examined potential risks for impaired cognitive development in children conceived through ART (Bokhan et al., 2023), demonstrated that parental relationships in IVF families are largely unaffected by other dimensions of family functioning (Leshchinskaia et al., 2022), and emphasized the role of medical and genetic counseling in enabling informed decision-making when selecting ART methods (Krechmar & Blokh, 2020). Further investigations have focused on the psychological dimensions of parenthood among mothers and fathers expecting or raising a child conceived via ART (Burina & Moshkivskaya, 2022; Moshkivskaya, 2021a, 2021b; Moshkivskaya & Burina, 2021), the attitudinal and emotional responses to pregnancy and the unborn child in women who conceived using ART (Likhachev, 2022), and the specific psychological effects of the IVF procedure on the mental health of prospective mothers (Tyuvina & Nikolaevskaya, 2020). Notably, the psychological profiles and personal characteristics of oocyte donors remain a largely unexplored domain within Russian scholarship, representing a significant gap in the current evidence base.

In countries where oocyte donation is strictly regulated, the procedure entails a rigorous screening process that includes comprehensive social, medical, and psychological evaluations of donor candidates (Practice Committee of the American Society for Reproductive Medicine, and the Practice Committee of the Society for Assisted Reproductive Technology, 2008; Gorrill et al., 2001). Such an approach suggests that a

donor's favorable socio-psychological profile is among the key factors contributing to the success of an ART cycle and the birth of a healthy child in individuals diagnosed with infertility who choose to use donor material. In the Russian Federation, however, Order No. 803n of the Ministry of Health, issued on 31 July 2020 and titled *On the Procedure for the Use of Assisted Reproductive Technologies, Contraindications, and Restrictions on Their Application*, does not require psychological assessment or support for oocyte donors. Instead, the regulations mandate only a "certificate from a psychiatric facility" and a "certificate from a narcological facility."

The issue of safeguarding the psychological and physical health of female oocyte donors, both during and after the donation process, is highly relevant, as oocyte donation entails significant health risks for the donor. International studies conducted over the years have consistently emphasized the need for psychological assessment and support prior to any donation procedure. For instance, in 2009 it was reported that, out of 315 telephone inquiries from potential donors, only 38 women (12%) were admitted to the pool of active donors (Gorrill et al., 2001), with mental health problems being the most common reason for refusal (24%) (Levy et al., 2007). A 2019 study found that many successful donors had a history of depression (52.9%, n = 9) and/or anxiety (58.8%, n = 10). None of the respondents reported treatment for, or a history of, bipolar disorder, schizophrenia, or ADHD, while 29.4% (n = 9) indicated other psychiatric symptoms. The vast majority of donors surveyed in the same study, 81.3% (n = 26), expressed interest in maintaining future contact regarding health, reproductive, and psychological matters (Blakemore et al., 2019). Additional evidence that oocyte donors may experience mental disorders regardless of age, education, employment status, or motivation for donation is provided by a 2023 study, which reported that eight women (20.5%) had at least one disorder. The most common was obsessive–compulsive disorder (n = 4, 10.3%), followed by severe depressive disorder (n = 2, 5.1%), persistent depressive disorder (n = 2, 5.1%), anxiety disorder (n = 1, 2.6%), mixed anxiety–depressive disorder (n = 1, 2.6%), and adjustment disorder (n = 1, 2.6%). Three donors had two psychiatric disorders concurrently (Sharafi et al., 2023).

This problem also acquires a specific dimension in light of recipients' expectations regarding the "quality" of donors. As noted by Grishanina, Narskaya, and Smirnova (2021, p. 96), "for families, criteria such as the health of the donor and their relatives, blood type, similar phenotype, as well as the personality type and character of the donor are important."

Based on these data, it can be concluded that, in addition to medical and social parameters, it is essential to thoroughly evaluate the psychological characteristics of potential donors. Researchers emphasize the importance of establishing advisory units in all oocyte donation centers and ensuring that donors are able to make informed decisions, taking into account potential risks to their social, physical, and mental well-being (Tulay & Atılan, 2019). At the same time, as early as 2019, it was noted that follow-up of oocyte donors has primarily focused on medical and physical parameters, while considerably less attention has been paid to assessing the long-term psychological impact of the

donation experience (Blakemore et al., 2019). According to Russian researchers, the scope of psychological counseling and testing conducted directly at ART centers varies across clinics, partly due to the absence of confirmed genetically transmitted mental illnesses. In clinics where psychological counseling is mandatory, the donor's personality type and motivation for donation are assessed (Grishanina, Narskaya, & Smirnova, 2021).

After completing the stimulation cycle, a female oocyte donor must preserve her reproductive health, maintain stable interpersonal relationships, and remain aligned with her moral values. Reproductive centers, in turn, seek donors who are both physically and mentally healthy, willing to undergo repeated donation, and capable of consciously weighing the risks and benefits for their psychological and physical well-being. In this context, investigating the psychological predictors of oocyte donation among mentally healthy women appears particularly relevant. A large-scale study conducted in 2010 demonstrated how an individual's psychological profile correlates with the outcomes of oocyte donation (Klock & Covington, 2010). The personality traits of identified oocyte donors were examined in a Swedish cohort in 2011 (Sydsjö et al., 2011) and in a French cohort in 2022 (Bujan et al., 2022). No comparable studies have been conducted in domestic samples. In our previous work, we analyzed the motivational characteristics of oocyte donation (Polyakova, 2022), described methods and tools for the psychological assessment of potential donors (Bashmakova et al., 2024), and outlined the typical features of candid communication between psychologists and donors (Vepreva, Polyakova, & Shalina, 2024). This study aims to characterize the psychological profile of oocyte donors and to identify personal predictors of oocyte donation in a Russian sample.

## Methods

### *Methodology*

Given the specificity of the phenomenon under study, the SMOL, Russian-language adaptation of the Mini-Mult—a short form of the Minnesota Multiphasic Personality Inventory (MMPI)—was employed to identify personality predictors of oocyte donation. This adaptation, developed by Zaitsev (1981, 2004), has been widely used in Russian psychological research and has demonstrated robust diagnostic validity in long-term practice. An important advantage of the SMOL questionnaire in the context of donor candidate selection is its efficiency and cost-effectiveness, as administration requires only 20–30 minutes.

### *Participants*

The study sample comprised 148 women residing in the Sverdlovsk Region. The experimental group included 70 potential oocyte donors, all registered as donor candidates at a large medical center with an assisted reproductive technologies department, between

March 1, 2022, and March 1, 2024. Assessments were conducted prior to the participants' enrollment in the donation program and before they underwent mandatory medical and psychiatric evaluations. At this center, oocyte donation is conducted on a paid basis.

The control group consisted of 78 women with no history of oocyte donation, selected through randomization and stratification based on socio-demographic variables to minimize measurement error and improve the accuracy of population estimates. Recruitment and assessment of control participants occurred sequentially over the same period as the donor group: for each potential donor tested, a socio-demographically matched non-donor was subsequently examined.

Following analysis of the L (Lie) and F (Infrequency) scales, three respondents (4.29%) with elevated L-scale scores were excluded from the donor group, resulting in a final sample of 67 donors (M = 28.70 years, SD = 4.49). Likewise, three respondents (3.85%) with elevated F-scale scores were excluded from the control group, leaving 75 participants (M = 28.21 years, SD = 6.38).

The characteristics of the final sample (n = 142) are presented in Table 1. In both groups, participants with profiles exceeding the normative threshold (T > 65) were identified: in the donor group, 5 participants (13.9%), and in the control group, 6 participants (20.7%).

**Table 1**
*Characteristics of the study participants*

| Category | Experimental group | | Control group | |
|---|---|---|---|---|
| | N | % | N | % |
| Education | | | | |
| Higher education | 27 | 40.3 | 31 | 41.3 |
| Vocational secondary education | 31 | 46.3 | 19 | 25.3 |
| Incomplete higher education | 9 | 13.4 | 18 | 24.0 |
| Secondary professional education | – | – | 7 | 9.3 |
| Professional field | | | | |
| Medicine | 17 | 25.4 | 16 | 21.3 |
| Social sphere | 19 | 28.4 | 21 | 28.0 |

| Category | Experimental group | | Control group | |
|---|---|---|---|---|
| | N | % | N | % |
| Arts | 2 | 3.0 | – | – |
| Education | 10 | 14.9 | 8 | 10.7 |
| Management and Economics | 11 | 16.4 | 6 | 8.0 |
| Military affairs | 1 | 1.5 | 6 | 8.0 |
| Technical field | 1 | 1.5 | 3 | 4.0 |
| On maternity leave | 4 | 6.0 | 6 | 8.0 |
| Unemployed | 2 | 3.0 | 9 | 12.0 |
| Marital status | | | | |
| First marriage | 34 | 50.7 | 40 | 53.3 |
| Second marriage | 2 | 3.0 | – | – |
| Third marriage | 2 | 3.0 | 1 | 1.3 |
| Cohabitation | 13 | 19.4 | 3 | 4.0 |
| Not married | 16 | 23.9 | 31 | 41.3 |
| Number of children | | | | |
| 1 | 30 | 44.8 | 18 | 24.0 |
| 2 | 20 | 29.9 | 12 | 16.0 |
| 3 | 3 | 4.5 | 3 | 4.0 |
| None | 14 | 20.9 | 42 | 56.0 |

### *Statistical data analysis methods*

Mathematical and statistical analysis of the study results was performed using the STATISTICA 12.0 software package. The normality of the distribution was tested using the Kolmogorov–Smirnov test with Lilliefors significance level correction. Group comparisons were conducted using the nonparametric Mann–Whitney U test. The structure of the personality profile of oocyte donors was examined through exploratory factor analysis, and a predictive model of oocyte donation–related personality traits was developed using discriminant analysis.

## Results

An analysis of the normality of the distribution using the Kolmogorov–Smirnov test with Lilliefors significance level correction revealed statistically significant deviations from the normal distribution across all questionnaire scales (Table 2). Examination of the data skewness indicated that, overall, the sample tended toward below-average values. The kurtosis values demonstrated a flattened distribution on the Schizophrenia scale (Sc) and a peak on the Hypomania scale (Ma). Given these distribution characteristics, nonparametric statistical methods were employed for all subsequent analyses.

**Table 2**
*Results of the distribution normality analysis*

| Variables | Indicators | | | |
|---|---|---|---|---|
| | max D | Significance Level | Skewness | Kurtosis |
| Hypochondriasis, Hs | 0.17 | p < 0.01 | *0.640* | 0.038 |
| Depression, D | 0.11 | p < 0.01 | *0.403* | -0.171 |
| Hysteria, Hy | 0.11 | p < 0.01 | *0.417* | *-0.557* |
| Psychopathic Deviate, Pd | 0.10 | p < 0.01 | 0.168 | -0.192 |
| Paranoia, Pa | 0.18 | p < 0.01 | *0.392* | -0.128 |
| Psychasthenia, Pt | 0.11 | p < 0.01 | *0.365* | -0.283 |
| Schizophrenia, Sc | 0.13 | p < 0.01 | *0.352* | *-0.419* |
| Hypomania, Ma | 0.17 | p < 0.01 | *0.608* | *0.847* |

*Note. Italicized values indicate statistically significant deviations from their standard error (standard error of skewness = 0.203, standard error of kurtosis = 0.404).*

The diagrams depicting the range of personality characteristics for the experimental and control groups, presented in Figures 1–2, indicate that the overall profiles of both groups fall within normative values. In the experimental group, several scales—Depression (D), Hysteria (Hy), and Psychasthenia (Pt)—show reduced scores (T < 40).

**Figure 1**

*Range of Personality Characteristics in the Experimental Group*

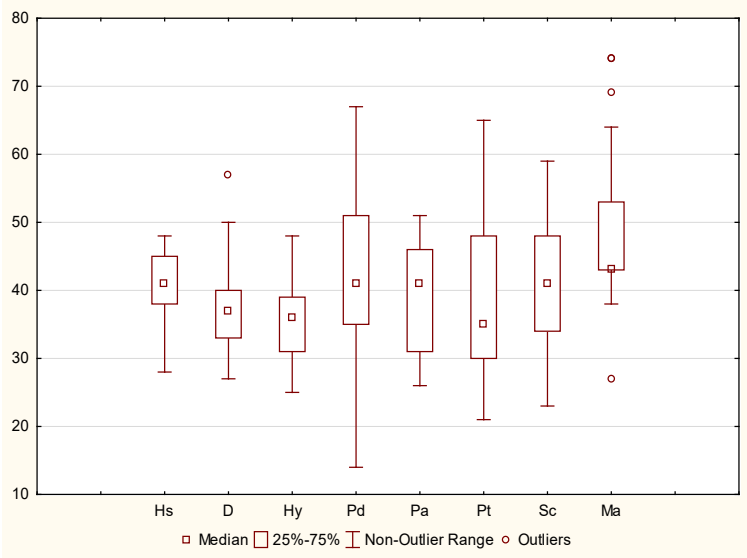
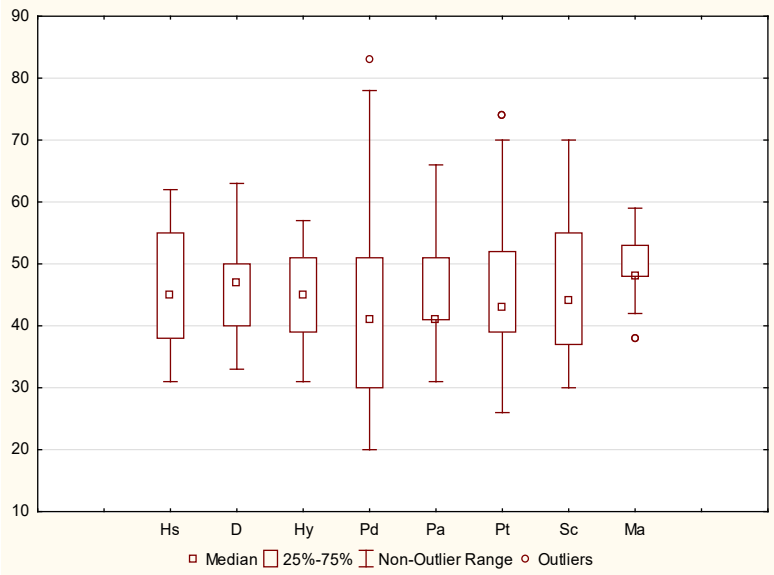



**Figure 2**

*Range of Personality Characteristics in the Control Group*



To examine differences between group profiles, a comparative analysis using the Mann–Whitney U test was conducted, which revealed significant differences across all scales except the Psychopathic Deviate (Pd) scale (Table 3).

**Table 3**
*Results of the comparative analysis between groups*

| Variables | Rank Sum, Experimental Group | Rank Sum, Control Group | U | Z | p |
|---|---|---|---|---|---|
| Hypochondriasis, Hs | 3646.00 | 6507.00 | 1368.00 | -4.67 | 0.000 |
| Depression, D | 3118.50 | 7034.50 | 840.50 | -6.83 | 0.000 |
| Hysteria, Hy | 3042.50 | 7110.50 | 764.50 | -7.14 | 0.000 |
| Psychopathic Deviate, Pd | 4621.50 | 5531.50 | 2343.50 | -0.69 | 0.491 |
| Paranoia, Pa | 3862.00 | 6291.00 | 1584.00 | -3.79 | 0.000 |
| Psychasthenia, Pt | 3899.50 | 6253.50 | 1621.50 | -3.64 | 0.000 |
| Schizophrenia, Sc | 4308.00 | 5845.00 | 2030.00 | -1.97 | 0.049 |
| Hypomania, Ma | 3980.00 | 6173.00 | 1702.00 | -3.31 | 0.001 |

Analysis of the standardized Z-scores presented in Table 3 indicates that on the Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), and Hypomania (Ma) scales, the control group demonstrates statistically significant elevations. These traits are notably less pronounced in oocyte donors compared to non-donor women.

To examine the structure of personality profiles in the studied samples, an exploratory factor analysis was conducted using the principal component method with Varimax rotation (Table 4).

**Table 4**

*Factor structures of personality profiles in the experimental and control groups*

| Experimental Group | | | Control Group | | |
|---|---|---|---|---|---|
| Variables | Factor 1 | Factor 2 | Variables | Factor 1 | Factor 2 |
| Hysteria, Hy | 0.92 | | Schizophrenia, Sc | 0.85 | |
| Hypochondriasis, Hs | 0.86 | | Psychasthenia, Pt | 0.81 | |
| Psychopathic Deviate, Pd | 0.84 | | Psychopathic Deviate, Pd | 0.77 | |
| Schizophrenia, Sc | 0.82 | | Hypomania, Ma | 0.70 | |
| Psychasthenia, Pt | 0.71 | 0.53 | Paranoia, Pa | 0.67 | |
| Depression, D | | 0.73 | Hypochondriasis, Hs | | 0.94 |
| Paranoia, Pa | | 0.65 | Hysteria, Hy | | 0.90 |
| Hypomania, Ma | | 0.61 | Depression, D | | 0.68 |
| Variance percentage | 0.44 | 0.22 | Variance percentage | 0.40 | 0.32 |

To identify personal predictors of oocyte donation, a discriminant analysis was conducted. This approach enabled the identification of variables exerting the strongest influence on the decision to become an oocyte donor, as well as the classification of new participants into donor or non-donor categories through the construction of classification functions. The grouping variable was dichotomous: donor (experimental group) versus non-donor (control group), with the SMOL, Russian-language adaptation of the Mini-Mult test, scales employed as discriminant variables.

The resulting discriminant model demonstrated a high statistical significance in differentiating between the groups using the selected set of variables (Wilks' $\lambda = 0.461$, $F(4,137) = 40.122$, $p < 0.00001$). The overall accuracy of classification was 86.68%. Among the variables, the Hysteria (Hy) scale exhibited the strongest predictive power (Wilks' $\lambda = 0.641$).

**Table 5**
*Discriminant Analysis Results*

| Variables | Wilks' λ | Partial λ | F-remove (1.137) | p | $R^2$ |
|---|---|---|---|---|---|
| Hypochondriasis, Hs | 0.506 | 0.910 | 13.63 | < 0.0001 | 0.710 |
| Depression, D | 0.509 | 0.905 | 14.39 | < 0.0001 | 0.194 |
| Hysteria, Hy | 0.641 | 0.719 | 53.64 | < 0.0001 | 0.799 |
| Psychopathic Deviate, Pd | 0.565 | 0.815 | 31.06 | < 0.0001 | 0.463 |

**Table 6**
*Classification Equation Coefficients*

| Variables | Experimental Group | Control Group |
|---|---|---|
| Hypochondriasis, Hs | 0.4131 | 0.1695 |
| Depression, D | 0.5080 | 0.6567 |
| Hysteria, Hy | 0.4278 | 0.9945 |
| Psychopathic Deviate, Pd | -0.0607 | -0.1826 |
| Constant | -24.7004 | -37.9052 |

## Discussion

The personality profile of oocyte donors revealed average scores on the Hypomania (Ma), Schizophrenia (Sc), Hypochondriasis (Hs), Paranoia (Pa), and Psychopathic Deviate (Pd) scales. This suggests that donors generally maintain a stable, elevated mood even in adverse situations, demonstrate heightened activity, and exhibit accelerated cognitive processing. They do not show tendencies toward social withdrawal or restricted emotional expression in interpersonal interactions. Donors display well-developed health awareness, focus on physical fitness and a healthy lifestyle, and strive to adopt a responsible approach to disease prevention and treatment, avoiding risks to their well-being. Overall, they are balanced, mature, and judicious, able to perceive and respond to life's challenges appropriately, showing loyalty, decisiveness, and self-control. While

donors are motivated to meet societal expectations, they may also demonstrate traits such as moralism, self-criticism, conformity, compliance, mediocrity, and low sexual expressiveness.

Low scores were observed on the Psychasthenia (Pt), Depression (D), and Hysteria (Hy) scales. Oocyte donors are not prone to excessive self-analysis, unrealistic self-demands, or harsh self-criticism rooted in low self-esteem. They do not experience acute distress in response to setbacks and assess their achievements objectively. Donors exhibit emotional stability, reduced sensitivity to environmental influences, and relatively low involvement in social microclimate issues, reflected in a more structured, less flexible style of interpersonal interaction.

Overall, the analysis of personality traits in the donor group indicates a moderate, balanced profile without any pronounced or accentuated characteristics. In contrast, the control group showed average scores across all scales. Comparative analysis revealed that, on most scales, donors scored significantly lower than the control group, with the only exception being the Psychopathic Deviate (Pd) scale. This suggests that donors are less passive, less rigid, more questioning rather than accepting things at face value, adapt more readily, handle changes effectively, and maintain composure in social conflicts.

Donors are less sensitive, less prone to anxiety, and do not become discouraged by minor setbacks. They exhibit low susceptibility to conversion-type neurological defense mechanisms and are unlikely to use somatic symptoms to avoid responsibility; they do not resolve problems by feigning illness. Their emotions are deeper, and their interests are stable. The donor group is less likely to develop overvalued ideas and tends to be more adaptable, less aggressive, and less vindictive. Although donors may be less attuned to subtle or abstract stimuli, they respond emotionally to everyday joys and sorrows. They tend to be less cheerful, less energetic, and less lively, preferring stable, predictable tasks over frequent social engagement. Nonetheless, their interests are deep and consistent, and they possess sufficient endurance and perseverance. Overall, oocyte donors demonstrate higher neuro-emotional stability, greater integration of personality traits, and superior adaptation to the social environment compared to the control group.

These results are consistent with previous international studies. Research indicates that donors' personality traits generally fall within the normative range (Bujan et al., 2022). Compared to control groups, donors exhibit lower levels of anxiety, fear of uncertainty, shyness, and fatigue, alongside higher persistence (Sydsjö et al., 2011). At the same time, MMPI-2 profiles of donors and controls are highly similar, reflecting the non-clinical, non-psychiatric nature of the sample (Klock & Covington, 2010). Similar findings, showing normative scores across all MMPI-2 scales, have been reported in surrogacy research (Klock & Covington, 2015).

Factor analysis revealed two-factor models of personality profiles in both study samples. In the control group, the first factor is interpreted as "Self-Oriented vs. Other-Oriented Self" and the second as "Rigid Self vs. Flexible, Adaptable Self." The first factor

includes the Schizophrenia, Psychasthenia, Psychopathic Deviate, Hypomania, and Paranoia scales, reflecting a focus on personal needs and maintenance of autonomy in behavior. The second factor, formed by the Hypochondriasis, Hysteria, and Depression scales, indicates behavioral conservatism and inflexibility. Considering that the average scores fall within the normative range on the SMOL, Russian-language adaptation of the Mini-Mult, scales, it can be concluded that non-donor women exhibit a psychologically healthy balance between self- and other-orientation, along with moderate stability and adaptive behavioral flexibility.

In the group of oocyte donors, the personality profile is structured around two factors: "Reflective, Conscious Self vs. Conversion Self" (first factor) and "Responsible, Confident Self vs. Intrapunitive, Self-Oriented Self" (second factor). The first factor encompasses the Hysteria, Hypochondriasis, Psychopathic Deviate, Schizophrenia, and Psychasthenia scales, which can be interpreted as reflecting the individual's capacity for self-reflection, awareness of one's mental and physical state, and sensitivity to internal experiences. The second factor includes the Depression, Paranoia, Hypomania, and Psychasthenia scales, with the first two contributing most significantly. This factor may indicate a well-developed sense of responsibility, an active personal stance, and high self-esteem. Conversely, in cases where scores on these scales are clinically elevated, it could reflect pronounced intrapunitive reactions, egocentric attitudes, vulnerability, and hostility.

The positioning of oocyte donors' personality profiles within the low to medium range indicates that women who are donors, or intend to become donors, demonstrate a well-developed capacity for self-reflection, responsibility, and self-confidence.

Discriminant analysis indicated that the key personal predictors of oocyte donation are the Hysteria (Hy), Psychopathic Deviate (Pd), Depression (D), and Hypochondriasis (Hs) scales, with the Hysteria (Hy) scale demonstrating the strongest predictive value. This indicates that psychological characteristics such as emotional stability and self-awareness, socially normative behavior, an adequate response to frustration, and a responsible attitude toward one's health constitute the core criteria for selecting oocyte donors.

The coefficients obtained enable the prediction of a positive decision to donate oocytes among new respondents using SMOL, Russian-language adaptation of the Mini-Mult, scores through classification equations:

$$Y_{\text{Experimental Group}} = 0.4131\text{Hs} + 0.508\text{D} + 0.4278\text{Hy} - 0.0607\text{Pd} - 24.7004;$$

$$Y_{\text{Control Group}} = 0.1695\text{Hs} + 0.6567\text{D} + 0.9945\text{Hy} - 0.1826\text{Pd} - 37.9052.$$

To predict a T-score using the SMOL, Russian-language adaptation of the Mini-Mult, method, the values are substituted into the classification equations. If the resulting inequality $Y_{\text{Experimental Group}} > Y_{\text{Control Group}}$ holds, there is an 86.68% probability that the woman under examination will decide to become an oocyte donor.

### *Conclusion*

An empirical study of personality profiles and psychological predictors of oocyte donation in a Russian sample allows several conclusions to be drawn. Indicators of neuro-emotional stability, integration of personality traits, and adaptation to the social environment are significantly higher in the group of Russian donors compared to the control group. Oocyte donors exhibit greater stability and consistency in psycho-emotional characteristics than women in the general population.

The personality profiles of oocyte donors and non-donors differ. In donors, the profile is organized according to two factors: "Reflective, Conscious Self vs. Conversion Self" and "Responsible, Confident Self vs. Intrapunitive, Self-Oriented Self" Key personality predictors of oocyte donation include emotional stability and frustration tolerance, adherence to social norms and behavioral rules, and conscientiousness regarding health.

The practical significance of these findings lies in their application within clinical psychology: the derived classification equations allow psychologists to identify, based on personality parameters, individuals with a high likelihood of choosing to become oocyte donors. Furthermore, understanding the specific structural components of the personality profile that define the "ideal potential oocyte donor" enables reproductive centers to develop and implement not only psychological selection programs, but also targeted personality development programs for prospective donors.

Future research could involve replicating these findings in other regions of the Russian Federation, as well as examining the personality characteristics of oocyte donors in comparison with donors of other types of biological material.

## References

Albitskiy, V. Yu., Odinayeva, N. D., & Mansimova, V. O. (2011). Legal aspects of auxiliary reproductive technologies in infertility treatment. *Current Pediatrics, 10*(2), 12–14. (In Russ.).

Antonova, N. A., Eritsyan, K. Y., & Tsvetkova, L. A. (2019). Attitudes towards biobank donation among university community. *Social Psychology and Society, 10*(1), 169–181. https://doi.org/10.17759/sps.2019100110 (In Russ.).

Bashmakova, N. V., Valeeva, M. V., Gramatchikova, N. B., Mazurov, D. O., Isaeva, I. V., Polyakova, I. G., & Khramtsova, A. Yu. (2024). *Psychological examination and counseling of oocyte donors: Guidelines*. Ural University Publishing House. (In Russ.).

Belova, D. A. (2021). Legal framework for reproductive biological material. *Lex Russica, 74*(7), 111–121. https://doi.org/10.17803/1729-5920.2021.176.7.111-121 (In Russ.).

Blakemore, J. K., Voigt, P., Schiffman, M. R., Lee, S., Besser, A. G., & Fino, M. E. (2019). Experiences and psychological outcomes of the oocyte donor: A survey of donors post-donation from one center. *Journal of Assisted Reproduction and Genetics*, *36*(10), 1999–2005. https://doi.org/10.1007/s10815-019-01527-5

Bokhan, T. G., Leshchinskaia, S. B., Terekhina, O. V., Silaeva, A. V., & Shabalovskaya, M. V. (2023). Typological variants of the development of children born after assisted reproduction, and their family environment characteristics. *Russian Psychological Journal, 20*(2), 211–229. https://doi.org/10.21702/rpj.2023.2.13 (In Russ.).

Bujan, L., Nouri, N., Papaxanthos-Roche, A., Ducrocq, B., Brugnon, F., Ravel, C., ... Daudin, M. (2022). Motivations and personality characteristics of candidate sperm and oocyte donors according to parenthood status: A national study from the French CECOS network. *Human Reproduction Open*, *2022*(4), hoac042. https://doi.org/10.1093/hropen/hoac042

Burina, E. A., & Moshkivskaya, V. A. (2022, November). Features of parental attitudes in couples with different reproductive health. In *Psychology and medicine: Ways to search for optimal interaction: Proceedings of the IX International Conference of Students and Young Scientists*. Ryazan State Medical University named after academician I. P. Pavlov. (In Russ.).

Dadaeva, T. M., & Baranova, V. V. (2019). Assisted reproductive technology and the reproductive behavior of urban youth (experience of a pilot study). *Regionologiya = Regionology, 27*(1), 138–155. https://doi.org/10.15507/2413-1407.106.027.201901.138-155 (In Russ.).

Gorrill, M. J., Johnson, L. K., Patton, P. E., & Burry, K. A. (2001). Oocyte donor screening: The selection process and cost analysis. *Fertility and Sterility*, *75*(2), 400–404. https://doi.org/10.1016/s0015-0282(00)01711-8

Grishanina, A. V., Narskaya, A. I., & Smirnova, P. S. (2021). High-quality donor: Criteria for the selection of gamete donors in the Russian field of assisted reproductive technologies. *Journal of Economic Sociology, 22*(5), 83–107. https://doi.org/10.17323/1726-3247-2021-5-84-108 (In Russ.).

Klock, S. C., & Covington, S. N. (2010). Minnesota Multiphasic Personality Inventory (MMPI-2) profiles in the assessment of ovum donors. *Fertility and Sterility*, *94*(5), 1684–1688. https://doi.org/10.1016/j.fertnstert.2009.08.064

Klock, S. C., & Covington, S. N. (2015). Results of the Minnesota Multiphasic Personality Inventory-2 among gestational surrogacy candidates. *International Journal of Gynaecology and Obstetrics*, *130*(3), 257–260. https://doi.org/10.1016/j.ijgo.2015.03.030

Krasnova, T. V. (2022). Bioethical prerequisites of the recipient's civil status in the oocyte donation program. *Vestnik Tomskogo gosudarstvennogo universiteta. Pravo = Tomsk State University Journal of Law, 45*, 177–192. https://doi.org/10.17223/22253513/45/12 (In Russ.).

Krechmar, M. V., & Blokh, M. E. (2020, December). Psychological assistance in the structure of medical-genetic counseling within ART programs. In *Psychology of official activity: Achievements and prospects for development (in honor of the 75th anniversary of Victory in the Great Patriotic War 1941–1945): Proceedings of the International Scientific Conference*. Saint Petersburg State University. (In Russ.).

Kruchinina, N. V., & Voronova, N. V. (2020). Gaps in the legal regulation of the use of assisted reproductive technologies. *Probely v rossiiskom zakonodatel'stve = Gaps in Russian Legislation, 13*(4), 441–446. (In Russ.).

Leshchinskaia, S. B., Stoyanova, I. Ya., Bokhan, T. G., Terekhina, O. V., & Silaeva, A. V. (2022). The dynamics of marital relations and parental attitudes in families who conceived the child through in vitro fertilization. *Russian Psychological Journal, 19*(3), 41–55. https://doi.org/10.21702/rpj.2022.3.3 (In Russ.).

Levy, D., Minjarez, D., Weaver, T., Keller, J., Surrey, E., & Schoolcraft, W. (2007). Oocyte donor screening: A retrospective analysis of selection process and prospective donor exclusions. *Fertility and Sterility*, *88*(1), 266–267. https://doi.org/10.1016/j.fertnstert.2007.07.905

Likhachev, M. A. (2022, May). Attitudes toward pregnancy and the child in pregnant women who conceived using ART. In *Psychology of the XXI Century – 2022. Psychology in an unpredictable world: Conditions and opportunities: Proceedings of the International Scientific Conference of Young Scientists*. Saint Petersburg State University. (In Russ.).

Moshkivskaya, V. A. (2021a). Psychological readiness for parenthood in families with a burdened obstetric and gynecological history. *The Herald of South-Ural State Humanities-*

*Pedagogical University, 4*, 256–291. https://doi.org/10.25588/CSPU.2021.72.12.015 (In Russ.).

Moshkivskaya, V. A. (2021b). Comparative analysis of the subjective perception of oneself as a future parent among married couples with different reproductive history. *Vestnik of Minin University, 9*(4), 8. https://doi.org/10.26795/2307-1281-2021-9-4-8 (In Russ.).

Moshkivskaya, V. A., & Burina, E. A. (2021). Personal features and intra-family relationships of men with different reproductive status. *Psychology. Psychophysiology, 14*(4), 72–82. https://doi.org/10.14529/jpps210407 (In Russ.).

Pechegina, Yu. S. (2021). Human reproductive cells as objects of civil turnover in Russia and foreign countries. *Courier of Kutafin Moscow State Law University (MSAL), 1*(8), 125–135. https://doi.org/10.17803/2311-5998.2021.84.8.125-135 (In Russ.).

Polyakova, I. G. (2022). *Motivation for human reproduction donation: A sociological analysis* (Cand.Sci. Thesis). Ekaterinburg. (In Russ.).

Practice Committee of American Society for Reproductive Medicine, & Practice Committee of Society for Assisted Reproductive Technology. (2008). 2008 Guidelines for gamete and embryo donation: A Practice Committee report. *Fertility and Sterility*, *90*(5), 30–44. https://doi.org/10.1016/j.fertnstert.2008.08.090

Semkina, I. A. (2021). Assisted reproductive technologies: Foreign legislation and application practice. *Obrazovanie i pravo, (11)*, 295–301. https://doi.org/10.24412/2076-1503-2021-11-295-301 (In Russ.).

Sharafi, S. E., Hajibabaei, M., Keikha, F., & Montazeri, A. (2023). Evaluation of psychiatric disorders, personality characteristics and intelligence quotient among oocyte donor candidates: A cross-sectional study in a large referral hospital. *Journal of Obstetrics, Gynecology and Cancer Research*, *8*(5), 468–471. https://doi.org/10.30699/jogcr.8.5.464

Sydsjö, G., Lampic, C., Brändström, S., Gudmundsson, J., Karlström, P. O., Solensten, N. G., ... Svanberg, A. S. (2011). Personality characteristics in a Swedish national sample of identifiable oocyte donors. *BJOG: An International Journal of Obstetrics and Gynaecology*, *118*(9), 1067–1072. https://doi.org/10.1111/j.1471-0528.2011.02953.x

Symaniuk, E. E., Polyakova, I. G., & Mokerova, J. V. (2021). The attitude of the megalopolis inhabitants towards reproductive donation (on the example of Ekaterinburg). *Monitoring of Public Opinion: Economic and Social Changes, (2)*, 73–94. https://doi.org/10.14515/monitoring.2021.2.1813 (In Russ.).

Tulay, P., & Atılan, O. (2019). Oocyte donors' awareness on donation procedure and risks: A call for developing guidelines for health tourism in oocyte donation programmes. *Journal of the Turkish German Gynecological Association*, *20*(4), 236–242. https://doi.org/10.4274/jtgga.galenos.2018.2018.0110

Tyuvina, N. A., & Nikolaevskaya, A. O. (2020). Assisted reproductive technologies: Psychoneurological, moral-ethical, and socio-cultural aspects. *Nevrologiya, Neiropsikhiatriya, Psikhosomatika = Neurology, Neuropsychiatry, Psychosomatics, 12*(5), 104–110. https://doi.org/10.14412/2074-2711-2020-5-104-110 (In Russ.).

Ustinkin, S. V., & Rudakova, E. K. (2023). Protecting children's right to health in the context of the discussion on the legislative limitation of the use of assisted reproductive technologies in Russia. *Power = Vlast, 31*(4), 197–203. https://doi.org/10.31171/vlast.v31i4.9742 (In Russ.).

Vepreva, I. T., Polyakova, I. G., & Shalina, I. V. (2024). Open talk in the oral discourse of reproductive medicine: Peculiarities of professional refraction. *Speech Genres, 19*(1), 38–46. https://doi.org/10.18500/2311-0740-2024-19-1-41-38-46 (In Russ.).

Yarosh, A. V. (2021). Legal construction of the civil legal agreement for embryo cryoconservation and storage. *Journal of Russian Law, 25*(12), 108–119. https://doi.org/10.12737/jrl.2021.152 (In Russ.).

Zaitsev, V. P. (1981). Variant psikhologicheskogo testa Mini-Mult [A version of a psychological test Mini-Mult]. *Psikhologicheskii Zhurnal, 2*(3), 118–123. (In Russ.).

Zaitsev, V. P. (2004). SMOL psychological test. *Current Issues in Restorative Medicine, 2*, 17–19. (In Russ.).

Received: June 29, 2024
Revised: September 7, 2024
Accepted: April 19, 2025

## Author Contributions

**Irina G. Polyakova** justified the relevance and objectives of the study, conducted a theoretical analysis of the current state of the problem, planned and carried out the empirical research, and collected psychodiagnostic data.

**Tatiana V. Valieva** performed the mathematical and statistical processing of the data, discussed the consistency of the results with other studies, and prepared and edited the manuscript.

**Elvira E. Symaniuk** revised the research methodology and critically edited the content of the article.

## Author Details

**Irina G. Polyakova** – Cand. Sci. (Sociology), Researcher at the Interregional Institute of Social Sciences, Federal State Autonomous Educational Institution of Higher Education «Ural Federal University named after the first President of Russia B. N. Yeltsin», Ekaterinburg, Russian Federation; Researcher ID: AAF-8824-2020; Scopus ID: 57217079537; ORCID ID: http://orcid.org/0000-0002-9619-2152; e-mail: irinapolykova@yandex.ru

**Tatiana V. Valieva** – Cand. Sci. (Psychology), Associate Professor at the Department of General and Social Psychology, Federal State Autonomous Educational Institution of Higher Education «Ural Federal University named after the first President of Russia B. N. Yeltsin», Ekaterinburg, Russian Federation; Researcher ID: CAA-3211-2022, Scopus ID: 57189592382, ORCID ID: https://orcid.org/0000-0003-4945-1542; e-mail: t.v.valieva@urfu.ru

**Elvira E. Symaniuk** – Dr. Sci. (Psychology), Professor, Director of the Ural Humanitarian Institute, Head of the Department of General and Social Psychology, Federal State Autonomous Educational Institution of Higher Education «Ural Federal University named after the first President of Russia B. N. Yeltsin», Ekaterinburg, Russian Federation; Researcher ID: Q-8009-2016, Scopus ID: 57193401535, ORCID ID: https://orcid.org/0000-0002-7591-7230; e-mail: e.e.symaniuk@urfu.ru

## Conflict of Interest Information

The authors have no conflicts of interest to declare.