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Research article

Predictors of aggressive behavior among police officers

S. M. Shingaev [1], M. S. Potarykina [✉2]

[1] Saint Petersburg Academy of Postgraduate Pedagogical Education named after K. D. Ushinsky,
Letter A, 11–13 Lomonosova Str., Saint Petersburg 191002, Russia
[2] The Main Directorate of the Ministry of Internal Affairs of Russia for Saint Petersburg and Leningrad Region,
50/52 Suvorovsky Ave., Saint Petersburg 191015, Russia

Abstract

Introduction. Aggression among police officers is a critical issue for public safety. Cases of unlawful use of force are reported annually, contributing to negative stereotypes and undermining the reputation of the police system. This study aims to identify psychological predictors of aggressive behavior among police officers, which could inform the development of preventive strategies. It was hypothesized that the degree of aggressive behavior is associated with individual psychological characteristics, including negative emotionality, goodwill, respectfulness, trust, extroversion (specifically, the persistence subfactor), and Machiavellianism.
Materials and Methods. The sample consisted of 105 male police officers from Saint Petersburg, aged 23–48, with 1–15 years of professional experience. The study employed the Buss–Durkee Hostility Inventory, the Big Five Inventory (BFI-2), and the Short Dark Triad (SD3).
Results. Based on the Buss-Durkee test, the sample was divided into two groups with differing levels of aggressiveness. Comparative analysis revealed that officers prone to aggressive behavior differ significantly from their colleagues with normative behavior in terms of BFI-2 factors ('Goodwill', $p = 0.001$; 'Conscientiousness', $p = 0.001$; and 'Negative emotionality', $p = 0.001$) and Dark Triad scales ('Machiavellianism', $p = 0.015$; 'Psychopathy', $p = 0.000$). Multiple regression models were constructed to identify the most significant predictors of aggression. For each model, the coefficient of determination was calculated. It was revealed that 'Respectfulness', 'Machiavellianism', 'Trust', and 'Persistence' were the most significant predictors included in the regression equations.
Conclusion. These findings refine the understanding of the personality traits associated with aggressive behavior in police officers and can inform the development of targeted preventive interventions.

Keywords: aggression, aggressive behavior, police officers, predictors of aggressive behavior, prevention of aggressive behavior

Предикторы агрессивного поведения сотрудников полиции

С. М. Шингаев [1], М. С. Потарыкина [✉2]

[1] Санкт-Петербургская академия постдипломного педагогического образования им. К. Д. Ушинского, 191002, Россия, г. Санкт-Петербург, ул. Ломоносова, д. 11–13, лит. А
[2] Главное управление МВД России по г. Санкт-Петербургу и Ленинградской области, 191015, Россия, г. Санкт-Петербург, Суворовский пр., д. 50/52

Аннотация

Введение. Ежегодно становится известно о значительном количестве случаев неправомерного применения насилия и превышения служебных полномочий полицейскими, которые должны выступать гарантом законности и находиться на переднем крае борьбы с преступностью. Подобные факты зачастую принято связывать с различными формами проявления агрессивного поведения. Целью исследования было изучение не только самого феномена агрессии у представителей закона, но и выявление предикторов агрессивного поведения, которые могут служить основой профилактики агрессии и насилия среди сотрудников полиции, осуществляющих профессиональную деятельность. В качестве гипотезы исследования выдвинуто предположение о том, что разная степень выраженности агрессивных проявлений у сотрудников полиции обусловлена такими индивидуально-психологическим характеристиками, как негативная эмоциональность, доброжелательность, уважительность, доверие, экстраверсия (настойчивость), макиавеллизм.

Материалы и методы. Выборку испытуемых составили сотрудники территориальных подразделений полиции ГУ МВД России по Санкт-Петербургу и Ленинградской области (105 лиц мужского пола в возрасте от 23 до 48 лет со стажем от 1 до 15 лет). Использовались: опросник Басса — Дарки, вопросник «Большой пятерки» (BFI-2), «Краткий опросник Темной триады» (SD3).

Результаты исследования. На основании результатов теста Басса — Дарки выборка была разделена на две группы с разным уровнем агрессивности. В ходе сравнительного анализа было выявлено, что сотрудники, более склонные к агрессивному поведению, в значительной степени отличаются от своих коллег с нормативным поведением по следующим показателям: «Доброжелательность» ($p = 0{,}001$), «Добросовестность» ($p = 0{,}001$), «Негативная эмоциональность» ($p = 0{,}001$), а также по шкале «Темной триады» — «Макиавеллизм» ($p = 0{,}015$) и «Психопатия» ($p = 0{,}000$). Для выявления наиболее значимых предикторов агрессии были построены модели множественной регрессии. Для каждой модели рассчитывались коэффициенты детерминации. В ходе исследования было выявлено, что для агрессивного поведения сотрудников полиции наиболее значимыми показателями, вошедшими в уравнения регрессии, являются: «Уважительность», «Макиавеллизм», «Доверие», «Настойчивость».

Заключение. Полученные результаты расширяют и уточняют знания о личностных чертах сотрудников полиции, склонных к агрессивному поведению, и могут быть использованы в профилактических целях.

Ключевые слова: агрессия, агрессивное поведение, сотрудники полиции, предикторы агрессивного поведения, профилактика агрессивного поведения

Introduction

At present, aggression remains one of the most pressing problems both in Russia and globally, given the wide range of forms in which it manifests itself, including genocide, armed conflicts, terrorist acts, school bullying, online aggression, crimes marked by extreme cruelty, and torture. However, for scholarly inquiry, no less significant are those manifestations of aggression that arise in everyday social interactions, including encounters with representatives of law enforcement agencies. Each year, a substantial number of cases involving the unlawful use of force and abuse of official authority by police officers are identified (Crimes committed by law enforcement officers 2025). At the same time, both the penalties imposed for misconduct and the initiation of criminal proceedings in response to unlawful behavior by officers have failed to provide an effective solution to this problem. Moreover, such unlawful behavior contributes to the formation of negative public stereotypes and undermines the reputation of Russia's Ministry of Internal Affairs as a whole. In this regard, there is a growing need to examine possible approaches to the timely prevention of aggressive and violent behavior among police officers.

The relevance of this research is primarily associated with the fact that the causes, mechanisms, and forms of aggression and violent behavior among police officers are not always apparent. Officers undergo professional selection and, as a rule, obtain satisfactory results in psychodiagnostic assessments. It may be assumed that the psychodiagnostic criteria employed by departmental psychologists do not allow for the identification of tendencies toward aggression and violent behavior at the early stages of their manifestation, and, consequently, this issue requires systematic investigation.

The problem of aggression, its causes, and the mechanisms of aggressive behavior is common to several disciplines, including philosophy, criminology, psychology, law, psychiatry, and others. Analysis of the literature indicates that, both in Russian and international psychology, there is currently no consensus on the definition of 'aggression' that could be considered exhaustive. One of the most prominent researchers of aggression in international psychology is L. Berkowitz, who was among the first to attempt a comprehensive account of the phenomenon (Berkowitz 2019).

As theoretical sources suggest, some researchers, in attempting to determine the essential characteristics of aggression, consider it a feature of individual behavior directed toward overcoming obstacles in the external environment. Most scholars,

however, emphasize the destructive component of aggression, which is understood as including behavior aimed at insulting or causing harm to another living being that does not consent to it (Antonyan 2017; Rean and Stavtsev 2021).

Later, both Russian and international psychology developed another perspective, which highlights the intrapsychic nature of aggression. Within this framework, aggressiveness is considered a stable trait of the individual, reflecting innate-biological or socially determined characteristics. Certain studies indicate a correlation between aggression and personality traits such as Machiavellianism (Tuktaeva 2024), as well as a complex of traits including extraversion, neuroticism, deceitfulness, moral qualities (Kirillova 2023), agreeableness, and several other socially significant characteristics (Dmitrieva 2018).

Another line of research emphasizes aggression as a form of adaptive or maladaptive behavior (Furmanov 2016).

In recent Russian psychology, an approach has been established where aggression is considered — within the context of personality traits and structure — as a property subject not only to natural reduction but also to psychological correction (Kirillova 2023).

Special attention is required for the study of aggressive manifestations among police officers. The profession demands from officers a reasonable level of aggressiveness (Chovdyrova 2017). Professional duties are often carried out under stressful and extreme conditions, associated with risk and threats, including aggressive encounters such as arrests, crowd control, conflicts, and physical or verbal provocation, and therefore require the application of force. Federal legislation, for instance Federal Law No. 3-FZ 'On Police' of 07 February 2011, and police regulations explicitly allow for the use of physical force, special equipment, and weapons (Federal Law 'On Police' 2011). It is difficult to imagine a courageous and self-assured police officer who cannot exercise controlled (constructive) aggression. Constructive aggression, however, must be manifested in socially acceptable forms and directed not at humiliation, insult, or cruelty, but at persistence and determination in achieving objectives. Certain aspects of this issue have already been partially reflected in contemporary research (Novichkova and Shcheglova 2023; Chernysheva 2019; Yakimova 2022, etc.).

In practice, however, cases of non-legitimate aggressive behavior among police officers are frequently encountered. The boundary between permissible (legitimate) aggression necessary to accomplish professional tasks and non-legitimate

aggression is fluid and is determined not only by legal norms. According to our view, non-legitimate forms of aggression may be underpinned by a combination of specific personality traits of police officers.

A comprehensive analysis of all significant indicators relevant to the study of aggressive behavior among police officers served as the basis for identifying a group of key factors that formed the foundation of our investigation. In our study, a tendency toward aggressive behavior in a police officer is understood as a set of stable psychological characteristics that, under certain conditions of professional activity, have a heightened likelihood of triggering aggressive behavior. To identify such characteristics, we conducted a comparative analysis of the psychological profiles of officers prone to aggression and violent behavior and those of law-abiding officers socially adapted to police work. Identifying these characteristics will allow not only for the development of assessment tools to predict the propensity for aggressive behavior among officers engaged in professional duties but also for the design of a program for the prevention of aggressive behavior among police personnel. As A. A. Mishin notes: 'there is no single approach that characterizes the phenomenon of "aggressive behavior" as unequivocally constructive or destructive' (Mishin 2022, p. 61).

Within the scope of this research, aggression is understood as the degree of activity in an individual's attitude toward the surrounding world in general and its specific aspects that ensure one's capacity for social interaction.

Materials and Methods

The aim of the study was to identify predictors of aggressive behavior among police officers, which underlie the effective prevention of aggression in professional activities.

The study was based on the hypothesis that the degree of expression of aggressive tendencies among police officers may be determined by individual psychological characteristics, such as negative emotionality, agreeableness, respectfulness, trust, extraversion (specifically, the assertiveness subfactor), and Machiavellianism.

The scientific novelty of the study lies in the expansion and refinement of knowledge regarding the personality traits of police officers prone to aggressive behavior.

The subject of the study is the psychological characteristics of aggressive behavior in police officers.

The sample consisted of officers from territorial divisions of the Main Directorate of the Ministry of Internal Affairs of Russia for Saint Petersburg and the Leningrad Region (n = 105, all male, aged 23–48 years, with service experience ranging from 1 to 15 years).

To divide the sample into groups, the Buss–Durkee Hostility Inventory adapted by S. N. Enikolopov was used. Personality traits were assessed using the Big Five Inventory (BFI-2) adapted by S. A. Shchebetenko (Mishkevich and Shchebetenko 2017) and the Short Dark Triad Questionnaire (SD3) adapted by M. S. Egorova (Egorova et al. 2015). The selection of these instruments was guided by theoretical developments in the study of aggressive manifestations.

Statistical analysis was performed using the Mann–Whitney test and Spearman's rank correlation coefficient. During the regression analysis, stepwise multiple linear regression was employed, and the significance of each regression coefficient was evaluated using the Student's t-test.

Mathematical and statistical calculations were conducted using the specialized data analysis software package SPSS 21.0 and Microsoft Excel.

Results

To achieve the aim of the study, a phased research design was implemented, addressing specific tasks at each stage:

Stage 1. The overall sample of police officers was analyzed to identify groups with different levels of aggressiveness and to determine differences in personality traits between these groups.

Stage 2. The relationship between manifestations of aggression and psychological characteristics was examined.

Stage 3. Psychological predictors of aggressive behavior among police officers were identified.

Based on the results of psychodiagnostic assessments of the overall sample of police officers (n = 105), two groups were distinguished: those with an aggressiveness index greater than M + σ and those with the index lower than M − σ. Group 1 comprised 20 conditionally 'aggressive' officers whose aggressiveness index was above the sample mean (M + σ > 18.72), while Group 2 included 17 'non-aggressive' officers whose aggressiveness index was below the sample mean (M − σ < 9.5). The aggressiveness index was normally distributed. This was confirmed using the Kolmogorov–Smirnov test (asymptotic significance p = 0.559). It was established that the groups differed in most types of aggressive manifestations (Table 1).

Table 1. Comparison of the Buss–Durkee Hostility Inventory scores
between 'aggressive' and 'non-aggressive' police officers (M ± m)

Buss–Durkee Hostility Inventory scales	Group 1 (n = 20)	Group 2 (n = 17)	Mann–Whitney U test	Level of statistical significance (p)
1. Physical aggression	7.35 ± 1.39	2.59 ± 1.06	0	0.000
2. Indirect aggression	5.30 ± 1.53	0.94 ± 0.75	2.00	0.000
3. Irritability	4.55 ± 1.76	1.06 ± 0.75	13.50	0.000
4. Negativism	2.05 ± 1.23	1.35 ± 0.70	111.50	0.074
5. Resentment	2.70 ± 1.56	0.76 ± 0.56	41.50	0.000
6. Suspiciousness	3.35 ± 2.01	2.06 ± 1.34	103.50	0.042
7. Verbal aggression	8.50 ± 1.70	4.12 ± 1.54	7.50	0.000
8. Guilt	4.95 ± 1.93	4.00 ± 1.62	125	0.177
Aggression Index	21.15 ± 2.06	7.65 ± 1.69	0	0.000
Hostility Index	6.05 ± 3.10	2.82 ± 1.63	61.50	0.001

Note: Group 1 — conditionally 'aggressive' officers; Group 2 — conditionally 'non-aggressive' officers.

Табл. 1. Результаты сравнения показателей опросника Басса — Дарки
у «агрессивных» и «неагрессивных» сотрудников полиции, (M ± m)

Показатели теста Басса —Дарки	Группа 1 (n = 20)	Группа 2 (n = 17)	U-критерий Манна — Уитни	Уровень статистической значимости (p)
1. Физическая агрессия	7,35 ± 1,39	2,59 ± 1,06	0	0,000
2. Косвенная агрессия	5,30 ± 1,53	0,94 ± 0,75	2,00	0,000
3. Раздражительность	4,55 ± 1,76	1,06 ± 0,75	13,50	0,000
4. Негативизм	2,05 ± 1,23	1,35 ± 0,70	111,50	0,074
5. Обида	2,70 ± 1,56	0,76 ± 0,56	41,50	0,000
6. Подозрительность	3,35 ± 2,01	2,06 ± 1,34	103,50	0,042
7. Вербальная агрессия	8,50 ± 1,70	4,12 ± 1,54	7,50	0,000
8. Чувство вины	4,95 ± 1,93	4,00 ± 1,62	125	0,177
Индекс агрессивности	21,15 ± 2,06	7,65 ± 1,69	0	0,000
Индекс враждебности	6,05 ± 3,10	2,82 ± 1,63	61,50	0,001

Примечание: группа 1 — условно «агрессивные» сотрудники; группа 2 — условно «неагрессивные» сотрудники.

The criteria for distinguishing the 'aggressive' and 'non-aggressive' groups were based on measures of verbal and physical aggression, which showed the greatest differences between the groups. This suggests that 'aggressive' officers, in the course of their professional duties, are more likely to raise their voices, use insults or abusive language toward opponents, and more frequently move 'from words to actions', including the potential use of physical force to achieve their objectives or assert their opinions.

Further research was aimed at identifying personality characteristics associated with an increased risk of using aggression in police officers' profes-sional activities. A comparative analysis of personality indicators based on the Big Five Inventory (BFI-2) and the Short Dark Triad (SD3) questionnaires was conducted within the identified groups. The results of testing for significant differences in the mean values of the BFI-2 domains and facets between the groups are presented in Tables 2–4.

Statistically significant differences were found between the groups. As the analysis showed, the conditionally 'aggressive' group, compared with the 'non-aggressive' group, demonstrated higher levels of Negative Emotionality and lower levels of Extraversion, Agreeableness, and Conscientiousness.

Table 2. Differences in the scores of the main Big Five factors based on the Mann–Whitney test
in subsamples of police officers with different levels of aggression

Factors of the Big Five Model	Group 1 (n = 20)	Group 2 (n = 17)	Mann–Whitney U test	Level of statistical significance (p)
Extroversion	44.50 ± 6.92	49.35 ± 5.67	92.500	0.017
Agreeableness	44.75 ± 5.88	51.47 ± 4.30	59.500	0.001
Conscientiousness	48.05 ± 6.69	55.76 ± 2.99	57.000	0.001
Negative emotionality	27.20 ± 7.96	19.00 ± 5.23	65.500	0.001
Openness to experience	41.45 ± 6.69	42.24 ± 6.60	163.500	0.843

Note: Group 1 — conditionally 'aggressive' officers; Group 2 — conditionally 'non-aggressive' officers.

Табл. 2. Различия показателей главных факторов «Большой пятерки» по критерию Манна — Уитни
в выборках сотрудников полиции с разной выраженностью агрессии

Факторы модели «Большая пятерка»	Группа 1 (n = 20)	Группа 2 (n = 17)	U-критерий Манна — Уитни	Уровень статистической значимости (p)
Экстраверсия	44,50 ± 6,92	49,35 ± 5,67	92,500	0,017
Доброжелательность	44,75 ± 5,88	51,47 ± 4,30	59,500	0,001
Добросовестность	48,05 ± 6,69	55,76 ± 2,99	57,000	0,001
Негативная эмоциональность	27,20 ± 7,96	19,00 ± 5,23	65,500	0,001
Открытость опыту	41,45 ± 6,69	42,24 ± 6,60	163,500	0,843

Примечание: группа 1 — условно «агрессивные» сотрудники; группа 2 — условно «неагрессивные» сотрудники.

Table 3. Differences in the Big Five subfactor scores based on Mann–Whitney test
in subsamples of police officers with different levels of aggression

Big Five main factors	Subfactors of the Big Five	Group 1 (n = 20)	Group 2 (n = 17)	Mann–Whitney U test	Level of statistical significance (p)
Extroversion	Sociability	14.40 ± 4.24	15.47 ± 2.65	153.500	0.613
	Persistence	14.35 ± 2.43	15.65 ± 2.71	117.500	0.107
	Energy	15.75 ± 2.45	18.24 ± 1.03	65.500	0.001
Agreeableness	Empathy	15.65 ± 2.98	17.53 ± 2.10	107.000	0.052
	Respectfulness	15.85 ± 2.37	18.76 ± 1.35	42.500	0.000
	Trust	13.25 ± 3.06	15.18 ± 2.60	112.500	0.077
Conscientiousness	Organization	15.55 ± 3.43	18.76 ± 1.30	64.000	0.001
	Productivity	15.40 ± 3.14	18.12 ± 1.50	69.000	0.002
	Responsibility	17.10 ± 2.20	18.88 ± 1.22	81.500	0.006
Negative emotionality	Anxiety	10.55 ± 4.07	7.88 ± 3.00	104.000	0.043
	Depressiveness	7.00 ± 2.27	5.35 ± 1.77	98.000	0.025
	Emotional volatility	9.65 ± 3.54	5.76 ± 1.68	52.000	0.000
Openness to experience	Curiosity	13.45 ± 2.72	13.35 ± 2.45	154.000	0.623
	Aesthetics	12.35 ± 3.80	12.65 ± 3.46	156.000	0.668
	Creative imagination	15.65 ± 3.08	16.24 ± 2.61	158.500	0.724

Note: Group 1 — conditionally 'aggressive' officers; Group 2 — conditionally 'non-aggressive' officers.

Табл. 3. Различия показателей субфакторов «Большой пятерки» по критерию Манна — Уитни
в выборках сотрудников полиции с разной выраженностью агрессии

Главные факторы «Большой пятерки»	Аспекты «Большой пятерки»	Группа 1 (n = 20)	Группа 2 (n = 17)	U-критерий Манна — Уитни	Уровень статистической значимости (p)
Экстра-версия	Общительность	14,40 ± 4,24	15,47 ± 2,65	153,500	0,613
	Настойчивость	14,35 ± 2,43	15,65 ± 2,71	117,500	0,107
	Энергичность	15,75 ± 2,45	18,24 ± 1,03	65,500	0,001
Добро-желатель-ность	Сочувствие	15,65 ± 2,98	17,53 ± 2,10	107,000	0,052
	Уважительность	15,85 ± 2,37	18,76 ± 1,35	42,500	0,000
	Доверие	13,25 ± 3,06	15,18 ± 2,60	112,500	0,077
Добро-совест-ность	Организованность	15,55 ± 3,43	18,76 ± 1,30	64,000	0,001
	Продуктивность	15,40 ± 3,14	18,12 ± 1,50	69,000	0,002
	Ответственность	17,10 ± 2,20	18,88 ± 1,22	81,500	0,006
Негативная эмоциональ-ность	Тревожность	10,55 ± 4,07	7,88 ± 3,00	104,000	0,043
	Депрессивность	7,00 ± 2,27	5,35 ± 1,77	98,000	0,025
	Эмоциональная измен-чивость	9,65 ± 3,54	5,76 ± 1,68	52,000	0,000
Откры-тость опыту	Любознательность	13,45 ± 2,72	13,35 ± 2,45	154,000	0,623
	Эстетичность	12,35 ± 3,80	12,65 ± 3,46	156,000	0,668
	Творческое воображение	15,65 ± 3,08	16,24 ± 2,61	158,500	0,724

Примечание: группа 1 — условно «агрессивные» сотрудники; группа 2 — условно «неагрессивные» сотрудники.

Table 4. Differences in the Dark Triad scores based on the Mann–Whitney test
in subsamples of police officers with different levels of aggression

Dark Triad Scales	Group 1 (n = 20)	Group 2 (n = 17)	Mann–Whitney U test	Level of statistical significance (p)
Machiavellianism	31.15 ± 6.41	25.65 ± 3.82	91.000	0.015
Narcissism	24.55 ± 5.22	24.53 ± 3.64	161.500	0.795
Psychopathy	18.80 ± 3.71	14.06 ± 2.88	44.000	0.000

Note: Group 1 — conditionally 'aggressive' officers; Group 2 — conditionally 'non-aggressive' officers.

Табл. 4. Различия показателей «Темной триады» по критерию Манна — Уитни
в выборках сотрудников полиции с разной представленностью агрессии

Шкалы «Темной триады»	Группа 1 (n = 20)	Группа 2 (n = 17)	U-критерий Манна — Уитни	Уровень статистиче-ской значимости (p)
Макиавеллизм	31,15 ± 6,41	25,65 ± 3,82	91,000	0,015
Нарциссизм	24,55 ± 5,22	24,53 ± 3,64	161,500	0,795
Психопатия	18,80 ± 3,71	14,06 ± 2,88	44,000	0,000

Примечание: группа 1 — условно «агрессивные» сотрудники; группа 2 — условно «неагрессивные» сотрудники.

To obtain a more detailed understanding of the BFI-2 factors (domains), we analyzed their subfactors (facets) — that is, the more specific traits within each domain (Table 3).

In the conditionally 'aggressive' group, significantly higher scores were found for Anxiety, Depression, and Emotional Volatility, whereas significantly lower scores were observed for Energy Level, Compassion, Respectfulness, Organization, Productiveness, and Responsibility.

To assess maladaptive personality traits reflecting violations of social norms, impulsivity, and manipulative behavior for personal gain (namely Machiavellianism, Narcissism, and Psychopathy),

the Short Dark Triad questionnaire was used (Table 4).

The analysis of the results indicates that conditionally 'aggressive' officers demonstrated higher levels of Machiavellianism and Psychopathy. The findings obtained from the BFI-2 and SD3 measures showed that officers more prone to aggressive behavior differ substantially from their colleagues with more normative behavior in the structure of personality traits, particularly in Agreeableness, Conscientiousness, Negative Emotionality, Machiavellianism, and Psychopathy.

The next stage involved a correlation analysis of the obtained results (Table 5).

Table 5. Significant correlations of the Buss–Darkey composite indicators (aggression index and hostility index) with the Big Five and Dark Triad factors in subsamples of conditionally 'aggressive' and 'non-aggressive' police officers

Parameters	'Aggressive' officers (n = 20)		'Non-aggressive' officers (n = 17)	
	Aggression index	Hostility index	Aggression index	Hostility index
Big Five factors				
Extroversion	−0.526*			
Agreeableness	−0.653**			−0.619**
Conscientiousness	−0.447*			
Negative emotionality	+0.716**	+0.579**		
Openness to experience				
Big Five subfactors				
Sociability				
Persistence				
Energy	−0.575**			
Empathy	−0.480*			
Respectfulness	−0.453*			
Trust	−0.496*			−0.760**
Organization				
Productivity			−0.543*	
Responsibility				
Anxiety	+0.698**	+0.440*		
Depressiveness				
Emotional volatility	+0.526*	+0.554**		
Curiosity				
Aesthetics				
Creative imagination				
Dark Triad scales				
Machiavellianism				
Narcissism			−0.517*	
Psychopathy				

Note: * $p < 0.05$, ** $p < 0.01$.

Табл. 5. Значимые корреляции интегральных показателей по тесту Басса — Дарки
(индекса агрессии и индекса враждебности) с факторами «Большой пятерки» и «Темной триады»
в выборках условно «агрессивных» и «неагрессивных» сотрудников полиции

Параметры	«Агрессивные» сотрудники (n = 20)		«Неагрессивные» сотрудники (n = 17)	
	Индекс агрессии	Индекс враждебности	Индекс агрессии	Индекс враждебности
Факторы «Большой пятерки»				
Экстраверсия	−0,526*			
Доброжелательность	−0,653**			−0,619**
Добросовестность	−0,447*			
Негативная эмоциональность	+0,716**	+0,579**		
Открытость опыту				
Аспекты «Большой пятерки»				
Общительность				
Настойчивость				
Энергичность	−0,575**			
Сочувствие	−0,480*			
Уважительность	−0,453*			
Доверие	−0,496*			−0,760**
Организованность				
Продуктивность			−0,543*	
Ответственность				
Тревожность	+0,698**	+0,440*		
Депрессивность				
Эмоциональная изменчивость	+0,526*	+0,554**		
Любознательность				
Эстетичность				
Творческое воображение				
Шкалы «Темной триады»				
Макиавеллизм				
Нарциссизм			−0,517*	
Психопатия				

Примечание: **p < 0,01, *p < 0,05.

The correlation analysis revealed several significant relationships between aggression and personality factors.

In the sample of conditionally 'aggressive' police officers, the aggression index — representing the sum of physical, indirect, and verbal aggression scores — was positively correlated with Negative Emotionality (r = 0.716, p ≤ 0.01) and negatively correlated with Agreeableness (r = −0.653, p ≤ 0.01), Extraversion (r = −0.526, p ≤ 0.05), and Conscientiousness (r = −0.447, p ≤ 0.05). The hostility index, which includes components of resentment and suspicion, showed positive correlations with Negative Emotionality (r = 0.579, p ≤ 0.01), Emotional Volatility (r = 0.554, p ≤ 0.01), and Anxiety (r = 0.440, p ≤ 0.05).

In the sample of conditionally 'non-aggressive' officers, the aggression index was negatively correlated with Productiveness (r = −0.543, p ≤ 0.05) and Narcissism (r = −0.517, p ≤ 0.05), while the hostility index showed negative correlations with Agreeableness (r = −0.619, p ≤ 0.01) and Trust (r = −0.760, p ≤ 0.01).

Considering the relationships with the BFI-2 facets, the observed correlations indicate that aggressive police officers are more likely to experience

negative emotions, irritability (Emotional Volatility, r = 0.526, p ≤ 0.05), and anxiety (Anxiety, r = 0.698, p ≤ 0.01). Negative correlations with Agreeableness — including Compassion (r = −0.480, p ≤ 0.05), Respectfulness (r = −0.453, p ≤ 0.05), and Trust (r = −0.496, p ≤ 0.05) — may reflect lower tolerance toward others, egocentricity, a stronger focus on personal rather than group interests, indifference to others' suffering, and cruelty. A negative correlation of moderate strength with Conscientiousness suggests reduced goal orientation, lower self-control, and carelessness. The negative correlation with Extraversion, specifically Energy Level (r = −0.575, p ≤ 0.01), may reflect social independence, reluctance to be among people, and reduced activity levels.

Hostility scores were positively correlated with Negative Emotionality (r = 0.579, p ≤ 0.01), Anxiety (r = 0.440, p ≤ 0.05), and Emotional Volatility (r = 0.554, p ≤ 0.01), suggesting that negative attitudes toward others are linked with the expression of negative emotions, irritability, and anxiety in social behavior, including the evaluation of events and other people. Overall, the correlation analysis confirmed the association between aggression indicators and personality characteristics.

To clarify the contribution of psychological traits to predicting the tendency toward aggressive behavior among police officers, a multiple linear regression analysis (forward stepwise method) was conducted. The dependent variables were the composite Aggression Index and Hostility Index, while the independent variables (predictors) included BFI-2 and SD3 scores. The analysis yielded the following results: 45% of the variance in the Aggression Index was accounted for by Respectfulness (Beta = −0.416, p = 0.000), Machiavellianism (Beta = 0.278, p = 0.000), and Assertiveness (Beta = 0.179, p = 0.018); and 42% of the variance in the Hostility Index was accounted for by Trust (Beta = −0.273, p = 0.001) and Machiavellianism (Beta = 0.233, p = 0.005). Both models were statistically significant (p = 0.000), demonstrating the predictive value of BFI-2 and Dark Triad measures in assessing police officers' aggressiveness.

Discussion

The comparative analysis indicated that conditionally 'aggressive' police officers exhibited higher levels of Negative Emotionality alongside lower levels of Extraversion, Agreeableness, and Conscientiousness.

Examination of subfactors revealed that the factors mentioned above manifest in the context of elevated Anxiety, Depression, and Emotional Volatility. Increased aggressiveness was accompanied by reduced activity (Energy Level) and diminished professionally important qualities such as Compassion, Respectfulness, Responsibility, Organization, and Productiveness. It may be assumed that more aggressive officers are less energetic, show less Agreeableness (manifested in lower Respectfulness and Compassion), are less conscientious (including lower Organization, Productiveness, and Responsibility), are more prone to negative emotions (Anxiety and Depression), and are more emotionally unstable than their less aggressive peers.

The findings further showed that conditionally 'aggressive' officers had higher levels of Machiavellianism and Psychopathy. These individuals were more egocentric, dominant, ambitious, bold, and persistent, often capable of concealing negative traits. They were generally indifferent to others, cynical, emotionally cold, impulsive, interpersonally more destructive, and prone to deception and manipulation.

Analysis of the BFI-2 and SD3 results confirmed that officers with a higher propensity for aggressive behavior differed markedly from colleagues with more normative behavior in the structure of their personality traits.

Correlation analysis reinforced the comparative results and highlighted specific patterns of associations in the two groups. In the 'aggressive' group, Hostility showed the strongest relationships with emotional factors — Negative Emotionality, Emotional Volatility, and Anxiety — whereas in the 'non-aggressive' group, Hostility was linked exclusively to personality factors such as reduced Trust and Agreeableness. Overall Aggression demonstrated contrasting patterns: in the 'aggressive' group, it appeared alongside negative emotional changes and reduced Agreeableness and Conscientiousness, with lower Extraversion also observed, indicating the factor's relevance to professional functioning. Conversely, in the 'non-aggressive' group, aggression appeared in the context of reduced Productiveness.

Regression analysis demonstrated that aggressive behavior was characteristic of police officers less inclined to adhere to social and moral norms, less oriented toward considerate treatment of others, yet determined and persistent in achieving goals, including through deception and manipulation. Hostility, which may underlie aggressive behavior, was influenced by a lack of interpersonal trust, a lack of integrity, unwillingness to follow socially accepted rules, and a tendency toward manipulation, deceit, flattery, and disregard for social morality.

Consequently, the likelihood of aggressive behavior among police officers can be predicted

by such BFI-2 domains as lower Agreeableness, lower Conscientiousness, and higher Negative Emotionality, and elevated SD3 traits of Machiavellianism and Psychopathy.

The regression models further identified diagnostic predictors of aggressive behavior, including higher Persistence (BFI-2), elevated Machiavellianism (SD3), and lower Respectfulness and Trust (BFI-2). These predictors can serve as intervention targets to reduce aggression in professional activities, both through training and psychological support, as well as during candidate selection for police positions.

The findings confirm the hypothesis that personality characteristics (personality traits) significantly influence the propensity for aggressive behavior among police officers.

Conclusion

The identification of predictors of aggressive behavior among police officers made it possible to develop a psychodiagnostic toolkit, consisting of the BFI-2 and the SD3. This toolkit enables departmental psychologists to identify latent aggressive-violent tendencies in police officers, which are much more likely to emerge in authoritarian or coercive interactions with citizens.

Since the regression models obtained explain aggressive behavior only partially, further research may focus on identifying additional psychological characteristics indicative of unlawful aggressive conduct among police officers.

The results of this study may be applied in preliminary professional psychological screening, in making decisions regarding the issuance of service firearms, and in the prevention of unprovoked aggression and violent crimes committed by police officers.

Conflict of interest

The authors declare that there is no conflict of interest, either existing or potential.

Конфликт интересов

Авторы заявляют об отсутствии потенциального или явного конфликта интересов.

Ethics Approval

The authors report that the study was conducted in accordance with the ethical principles for human and animal research.

Соответствие принципам этики

Авторы сообщают, что при проведении исследования соблюдены этические принципы, предусмотренные для исследований с участием людей и животных.

Data Availability Statement

The data is available upon request addressed to the corresponding author.

Заявление о доступности данных

Данные доступны по запросу, адресованному автору-корреспонденту.

Author Contributions

Marina Potarykina: Conceptualization. Methodology. Formal analysis. Investigation. Data Curation. Writing — Original Draft.

Sergey Shingayev: Conceptualization. Methodology. Writing — Review & Editing. Visualization. Project administration.

Вклад авторов

Марина Потарыкина: разработка концепции, методология, формальный анализ, исследование, обработка данных, подготовка текста — черновик.

Сергей Шингаев: разработка концепции, методология, подготовка текста — доработка и редактирование.

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Authors

Sergey M. Shingaev, Doctor of Sciences (Psychology), Head, Department of Psychology, Saint Petersburg Academy of Postgraduate Pedagogical Education named after K. D. Ushinsky
SPIN: 1043-7169, ResearcherID: S-4159-2016, Scopus AuthorID: 56964987900, ORCID: 0000-0001-7546-7375,
e-mail: sshingaev@mail.ru

Marina S. Potarykina, Psychologist, Main Directorate of the Ministry of Internal Affairs of Russia for Saint Petersburg and Leningrad Region
ORCID: 0000-0002-2285-2429, e-mail: viktomars@gmail.com

Сведения об авторах

Сергей Михайлович Шингаев, доктор психологических наук, заведующий кафедрой психологии, Санкт-Петербургская академия постдипломного педагогического образования им. К. Д. Ушинского
SPIN-код: 1043-7169, ResearcherID: S-4159-2016, Scopus AuthorID: 56964987900, ORCID: 0000-0001-7546-7375,
e-mail: sshingaev@mail.ru

Марина Сергеевна Потарыкина, психолог, Главное управление МВД России по г. Санкт-Петербургу и Ленинградской области
ORCID: 0000-0002-2285-2429, e-mail: viktomars@gmail.com