

**R. Berkinbay<sup>1</sup>**, **F. Sakhiyeva<sup>2</sup>**, **A. Kukubayeva<sup>3</sup>**,  
**S. Berdibayeva<sup>1\*</sup>**, **A. Garber<sup>4</sup>**

<sup>1</sup>Farabi University, Almaty, Kazakhstan

<sup>2</sup>M. Auezov South Kazakhstan University, Shymkent, Kazakhstan

<sup>3</sup>A. Myrzakhmetov Kokchetau University, Kokchetau, Kazakhstan

<sup>4</sup>Rehabilitation Clinic “Reinhardshöhe”, Bad Wildungen, Hessen, Germany

\*e-mail: berdibayeva.sveta1@mail.ru

## THE RELATIONSHIP BETWEEN PERSONALITY IMPULSIVENESS AND EMOTIONAL DISTRESS DURING ONLINE SHOPPING IN THE MODERN GENERATION

Impulsive online shopping among young people is becoming increasingly common in the digital environment and may lead to financial and psychological problems. The aim of this study is to identify the relationship between emotional distress (depression, anxiety, stress), personality impulsivity, and impulsive online purchasing behavior among youth. The scientific and practical significance lies in understanding the psychological mechanisms of impulsive consumption to develop preventive interventions. The methodology includes a cross-sectional quantitative design using the DASS-21, Barratt Impulsiveness Scale (BIS-11), and Richmond Compulsive Buying Scale (RCBS). The sample consisted of 102 students aged 18–21 years. The results showed that emotional distress is positively correlated with personality impulsivity but has no direct statistically significant relationship with impulsive online purchases. Regression analysis revealed that personality impulsivity is the only significant predictor of impulsive purchases ( $\beta = .51, p \leq .001$ ), explaining 26% of the variance. Mediation analysis demonstrated that depression symptoms have a significant indirect effect on impulsive buying through personality impulsivity, indicating full mediation. The scientific value of this study is the empirical demonstration that personality impulsivity serves as the central psychological mechanism underlying impulsive online shopping, while depression influences consumer behavior indirectly through self-regulation processes. The practical significance includes recommendations for developing self-regulation training, digital literacy programs, and psychological interventions aimed at improving impulse control among young consumers.

**Keywords:** impulsive purchasing behavior, online shopping, personal impulsiveness, emotional distress, self-control, digital environment, youth.

Р.М. Беркінбай<sup>1</sup>, Ф.А. Сахиева<sup>2</sup>, А.Х. Күкубаева<sup>3</sup>,  
С.Қ. Бердибаева<sup>1\*</sup>, А.И. Гарбер<sup>4</sup>

<sup>1</sup>Әл-Фараби атындағы Қазақ ұлттық университеті, Алматы, Қазақстан

<sup>2</sup>М. Әуезов атындағы Оңтүстік Қазақстан университеті, Шымкент, Қазақстан

<sup>3</sup>А. Мырзахметов атындағы Көкшетау университеті, Көкшетау, Қазақстан

<sup>4</sup>«Reinhardshöhe» оңалту клиникасы, Бад-Вильдунген, Гессен, Германия

\*e-mail: berdibayeva.sveta1@mail.ru

### Қазіргі жастардың онлайн-сатып алу кезіндегі импульсивтілігі мен эмоциялық дистрессі арасындағы өзара байланысы

Цифрлық ортадағы импульсивті сатып алу мінез-құлқы жастардың арасында жиі байқалады. Бұл жастардың тек қаржылай мәселелері емес, психологиялық ерекшеліктеріне байланысты болуы мүмкін. Зерттеудің мақсаты – жастардың эмоциялық дистресс (стресс, мазасыздық, депрессия), тұлғалық импульсивтілік деңгейі мен онлайн-сатып алу кезіндегі импульсивті мінез-құлқының арақатынасын айқындау. Импульсивті сатып алудың психологиялық механизмдерін түсіндіру арқылы психопрофилактикалық шараларды әзірлеу мүмкіндігі – зерттеудің ғылыми және практикалық маңызын көрсетеді. Зерттеудің әдіснамалық негізі DASS-21 (депрессия, мазасыздық және стресс шкаласы), Барратттың BIS-11 импульсивтілік шкаласы және Ричмондтың RCBS компульсивті сатып алу шкаласы әдістемелері пайдаланылған сандық дизайнды бірізгілік зерттеу. Зерттеуге 18-21 жас аралығындағы 102 студент қатысты. Нәтижелер эмоциялық дистрестің тұлғалық импульсивтілікпен оң мәнді байланыс көрсететінін; бірақ импульсивті онлайн-сатып алумен тікелей статистикалық маңызды байланысы жоқ екенін көрсетті. Регрессиялық талдау импульсивтілік сатып алудың жалғыз маңызды предикторы

( $\beta = .51, p \leq .001$ ) болып, дисперсияның 26%-ын түсіндіретінін анықтады. Медиациялық талдау депрессия симптомдарының тұлғалық импульсивтілік арқылы импульсивті сатып алуға айтарлықтай деңгейде жанама ықпал ететінін көрсетті, бұл толыққанды медиацияны білдіреді. Бұл зерттеудің ғылыми құндылығы – тұлғалық импульсивтілік импульсивті онлайн-сатып алудың негізінде жатқан орталық психологиялық механизм екенін, ал депрессия өзін-өзі реттеу процестері арқылы тұтынушылық мінез-құлыққа жанама әсер ететінін эмпирикалық түрде дәлелденуінен көрінеді. Практикалық маңызы – жас тұтынушыларда импульсивті бақылауды жақсартуға бағытталған өзін-өзі реттеу тренингтерін, цифрлық сауаттылық бағдарламалары мен психологиялық интервенцияларды өзірлеу бойынша ұсыныстарды қамтиды.

**Түйін сөздер:** импульсивті сатып алу, онлайн-сатып алу, тұлғалық импульсивтілік, эмоциялық дистресс, өзін-өзі бақылау, цифрлық орта, жастар.

Р.М. Беркінбай<sup>1</sup>, Ф.А. Сахиева<sup>2</sup>, А.Х. Кукубаева<sup>3</sup>,  
С.К. Бердибаева<sup>1\*</sup>, А.И. Гарбер<sup>4</sup>

<sup>1</sup>Казахский национальный университет имени аль-Фараби, Алматы, Казахстан

<sup>2</sup>Южно-Казахстанский университет имени М. Ауэзова, Шымкент, Казахстан

<sup>3</sup>Кокшетауский университета имени А. Мырзахметова, Кокшетау, Казахстан

<sup>4</sup>Реабилитационная клиника «Reinhardshöhe», Бад-Вильдунген, Гессен, Германия

\*e-mail: berdibayeva.sveta1@mail.ru

### Взаимосвязь импульсивности личности и эмоционального дистресса при онлайн покупках у современного поколения

Импульсивные онлайн-покупки среди молодежи становятся все более распространенными в цифровой среде и могут приводить к финансовым и психологическим проблемам. Цель данного исследования – выявить взаимосвязь между эмоциональным стрессом (депрессией, тревожностью, стрессом), личностной импульсивностью и импульсивным поведением при онлайн-покупках среди молодежи. Научное и практическое значение заключается в понимании психологических механизмов импульсивного потребления для разработки профилактических мер. Методология включает поперечное количественное исследование с использованием шкалы DASS-21, шкалы импульсивности Барратта (BIS-11) и шкалы компульсивных покупок Ричмонда (RCBS). В выборку вошли 102 студента в возрасте 18–21 года. Результаты показали, что эмоциональный стресс положительно коррелирует с личностной импульсивностью, но не имеет прямой статистически значимой связи с импульсивными онлайн-покупками. Регрессионный анализ показал, что личностная импульсивность является единственным значимым предиктором импульсивных покупок ( $\beta = 0,51, p \leq 0,001$ ), объясняя 26% дисперсии. Анализ опосредования показал, что симптомы депрессии оказывают значительное косвенное влияние на импульсивные покупки через личностную импульсивность, что указывает на полное опосредование. Научная ценность этого исследования заключается в эмпирическом доказательстве того, что личностная импульсивность служит центральным психологическим механизмом, лежащим в основе импульсивных онлайн-покупок, в то время как депрессия влияет на потребительское поведение косвенно через процессы саморегуляции. Практическая значимость включает рекомендации по разработке тренингов по саморегуляции, программ цифровой грамотности и психологических вмешательств, направленных на улучшение контроля над импульсами у молодых потребителей.

**Ключевые слова:** импульсивное покупательское поведение, онлайн-покупки, личностная импульсивность, эмоциональный дистресс, самоконтроль, цифровая среда, молодежь.

## Introduction

Currently, impulsive purchasing behavior in the digital environment is a common problem among young people and can have potentially negative consequences for their well-being. In psychological science, impulsive purchases are defined as unplanned, spontaneous acquisitions of products under the influence of a strong internal urge, which most often occur without regard to long-term goals (Rook & Fisher, 1995). The online space is characterized by easy access, personalized, targeted advertising,

and social influence, which can create conditions conducive to impulsive behavior.

In Kazakhstan, we see a picture of strong infrastructure, including consumer loans, installment plans, and online shopping platforms, that, by removing financial and geographical barriers, stimulate impulsive consumption. More than half of all bank consumer loans are interest-free installment plans (TALAP, 2024). Many marketplaces, such as Kaspi and Wildberries, actively use this tool. Psychologically, this can be perceived as ‘not a loan’, which reduces awareness in consumption and in-

creases the likelihood of impulsive purchases. Supporting this, the report ‘Analysis of the Problem of Over-indebtedness of the Population in the Republic of Kazakhstan’ (TALAP, 2024) points out a problem: the commission charged to the seller is embedded in the product price for all buyers, which distorts market value and encourages consumption. In Kazakhstan, as in the rest of the world, digital behavior is on the rise. According to studies by Akhmetova, Kozhankulova, and Kim (2022), young people in Kazakhstan report spending more time on social media (65.4% of respondents) and frequently using delivery apps (58.7%). This creates an environment that constantly generates consumer stimuli (Akhmetova et al., 2022).

The goal of our research is to identify the psychological determinants of impulsive behavior among the modern generation during the online shopping to develop theoretical and practical recommendations to increase consumer awareness and improve the psychological well-being of contemporary youth.

The following tasks are set within the scope of the study:

- Are emotional experiences a psychological determinant of impulsive purchases?
- Does an increase in personal impulsiveness, such as a lack of self-control, lead to impulsive online shopping?
- How can psychological interventions influence increasing awareness in online consumption and generally reduce the level of impulsive online purchases among modern youth?

We hypothesize that the influence of emotional distress on impulsive online purchasing behavior is mediated by trait impulsivity. It is assumed that trait impulsivity is positively related to impulsive online shopping behavior and that impulsive online shopping behavior is positively related to emotional distress.

## Literature review

Modern consumer behavior, particularly among the younger generation, is undergoing significant changes due to digitalization and the transformation of social relations. Impulsive online purchases are a prominent phenomenon among youth, making them an important subject for study. The goal of this theoretical analysis is to review the results of recent empirical research regarding the psychological determinants of impulsive online purchases among young people and to analyze the situation among Kazakhstani youth.

Low self-control is one of the stable predictors of impulsive shopping behavior. In many foreign studies examining impulsivity, the theoretical basis is the Theory of Planned Behavior by I. Ajzen (1991). For example, in the study by Bosnjak et al. (2020), the Theory of Planned Behavior is used, where self-control is a manifestation of behavioral control that can either facilitate or hinder the execution of an action. Here, low self-control is the inability to restrain immediate impulses in pursuit of long-term goals, indicating a direct connection between this phenomenon and impulsive purchases (Baumeister, 2002).

In recent studies, it is worth highlighting the work of Nyrhinen et al. (2024), who modified the classic Theory of Planned Behavior by excluding ‘intention’ as an essential mediator between attitudes and behavior. Instead, they proposed a new model where the components of planned behavior are behavioral control, attitude, and subjective norm. Additionally, the study’s authors indicate that, according to this model, impulsive behavior is more prevalent among the most active young people aged 18 to 29 who consume digital media and social media. The study identified a direct and positive relationship between low self-control and a tendency toward impulsive online purchases among Finnish youth aged 18–29 (Nyrhinen et al., 2024).

These results are reflected in the studies by Wang et al. (2022), which indicate that self-control is negatively associated with impulsive shopping behavior in digital commerce and that this relationship is partially mediated by negative emotions. The research by Xie et al. (2025) deepens these observations, showing that self-control is not only a predictor but also a mediator of the relationship between personality traits and impulsive purchases. The authors found that when self-control increases, traits such as conscientiousness and agreeableness can predict impulsive purchases, whereas when self-control decreases, neuroticism and extraversion can positively predict impulsive purchases. This means that a deficit in self-control is one of the main factors that drives vulnerability to marketing stimuli in the marketing environment.

A significant number of studies examine the influence of basic personality traits on impulsive consumption within the Big Five model. Among personality traits, neuroticism was consistently correlated with impulsive purchases. In a study conducted in Portugal during the COVID-19 pandemic, neuroticism was positively associated with all types of consumer behavior examined, including impulsive, compulsive, and panic buying (Aquino and

Lins, 2023). The authors refer to the personality trait neuroticism as a ‘joker’, reflecting a tendency to experience negative emotions, and they argue that individuals seek to alleviate these emotions through shopping.

Wang et al. (2022) also confirmed that neuroticism is positively related to impulsive purchases, both directly and indirectly: in impulsive purchases, the study found increased negative emotions.

Tomar et al. (2023), in their study among Indian youth, emphasize that impulsive purchases are a reaction to external stimuli and can develop into compulsive behavior, a response to chronic internal negative experiences. The Richmond Scale (RCBS; Ridgway et al., 2008) was used in the study, and as a result, it was found that among Indian youth with compulsive buying disorder, the impulsive component contributes more significantly to explaining the variance than the obsessive-compulsive component.

In their work, Trubnikov and Garber (2019) analyze the psychological foundations of attitudes toward money and consumption. They analyzed Western psychologists’ classifications of individuals’ attitudes toward money and consumption and demonstrated that money can serve not only as a medium of exchange but also as a psychological symbol of security, power, love, and freedom (Trubnikov & Garber, 2019). This means that shopping can become a way to cope with stress or loneliness. Purchases can fulfill the need for power and prestige, enhancing status and self-assertion. Additionally, this research revealed that when forming entitlement levels and consumption norms, a factor involves the influence of the reference group and a person’s social status (Trubnikov & Garber, 2019).

Although psychological traits can predispose individuals to impulsive online shopping, the digital environment is the strongest catalyst for action. The study by Akhmetova, Kozhamkulova, and Kim (2022) shows a significant increase in consumer stimuli, including greater time spent on social media and more frequent use of delivery apps (Akhmetova et al., 2022).

In another study by Nurkhanova et al. (2025), the concept of the ‘third place’ by R. Oldenburg is used to understand the online environment as a space for online shopping, where shopping and entertainment centers have become the main places for socialization. In this context, 44% of respondents in the study reported making more spontaneous purchases (Nurkhanova et al., 2025). Currently, we observe that marketplaces and social networks have become the ‘third place,’ where the functions of shopping and entertainment centers are seamlessly

integrated, and shopping has become part of social interaction and leisure activities.

A study on impulsive behavior among Kazakhstani student youth was conducted as part of a survey by Bogatyreva, Bogorodskaya, and Osipova (2024). In the survey, 70.6% of participating students admit to making impulsive purchases; results also show that, upon realizing their spontaneous spending, some students report experiencing negative emotions (Bogatyreva et al., 2024). Moreover, the report “Analysis of the Population’s Debt Problem in the Republic of Kazakhstan” by the Center for Applied Research «TALAP» (2024) provides data indicating a link between irrational consumer behavior and catastrophic growth in the population’s debt levels. According to these data, 86% of the working-age population have loans, and 90% of them have loans exceeding 1 million tenge, which directly points to the accumulation of small, including impulsive, expenditures.

The analysis conducted allows for a comprehensive understanding of the psychological determinants of impulsive behavior among the modern generation and demonstrates the relevance of this research in Kazakhstan. Among the psychological determinants, self-control plays a key role by mitigating impulsiveness, a personality trait that influences susceptibility to targeted advertising and social influence. Studies show that emotional states, especially negative ones, significantly contribute to the development of impulsive shopping behavior. The aim of this study is to examine the influence of negative emotions (emotional distress) and the level of impulsiveness (a measure of self-control) on impulsive buying behavior.

## Materials and methods

This study aims to identify the psychological determinants of impulsive online purchases among the young generation. The main research question is to explore the relationship between impulsive buying, emotional distress, and personality impulsivity. The following hypothesis was proposed: personality impulsivity is positively associated with impulsive online shopping behavior, and, at the same time, impulsive online shopping behavior is positively associated with emotional distress.

The study used a quantitative, cross-sectional design.

According to the selection criteria, 102 students (N=102) participated in the study, who, according to previous research, are more susceptible to impulsive online purchases and impulsive behavior:

- The participants' ages ranged from 18 to 21 years.

- The group of participants has a moderate level of emotional distress without pronounced extreme deviations (based on the obtained results), which allows the study to be conducted within the set research objectives.

- Informed consent for participation in the study was obtained from all participants, in accordance with the study's goals, as well as consent for the processing of personal data, including participants' personal information and age.

The study used the following psychodiagnostics tools, which are valid for the research objectives:

- The Barratt Impulsiveness Scale–Brief (BIS-Brief; Steinberg et al., 2013)

- Richmond Compulsive Buying Scale (RCBS; Ridgway et al., 2008)

- The Depression Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995)

All data for the study were collected through a survey administered via Google Forms.

This study is one of the first investigations into the psychological determinants of impulsive online shopping behavior and has significant practical importance in increasing awareness of online consumption and reducing the level of impulsive online purchases among the modern generation.

## Results and discussion

A statistical analysis was conducted on a sample of 102 participants to study the psychological determinants of impulsive purchases among the modern generation. No missing values were identified

during the analysis; the full sample (valid N=102) was used in all analyses. Primary data processing was performed in Excel; statistical data analysis was carried out using JASP 0.95.4 (Apple Silicon). The data analysis includes descriptive statistics, normality tests, correlation analysis, regression analysis and mediation analysis.

The study examined impulsiveness (the Barratt Impulsiveness Scale, BIS-11; Barratt, 1959, 1995), levels of depression, stress, and anxiety (DASS-21 scales; Lovibond & Lovibond, 1995), as well as the dependent variable of impulsive buying behavior (the Richmond Compulsive Buying Scale, RCBS; Ridgway et al., 2008).

According to the conducted descriptive statistics, all examined variables demonstrate sufficient variability. The skewness indicators ranged from 0.042 to 0.523, and the kurtosis indicators ranged from -0.873 to 0.282, which do not exceed acceptable limits and indicate a moderate deviation from normality. Additionally, a visual inspection using a Q-Q plot revealed clear asymmetry and a platykurtic distribution, which are characteristic of psychometric data in non-clinical samples. For this reason, the decision was made to use non-parametric tests. The descriptive statistics data are presented in Table 1.

The spread of indicators indicates sufficient variability in the sample, which allows for correlation and regression analysis.

Based on the results of the study, the level of psycho-emotional distress in the sample can be characterized as moderate, while indicators of impulsivity and compulsive buying behavior demonstrate significant inter-individual variability.

**Table 1**  
*Descriptive statistics of data for the DASS-21, BISS-11, and RCBS scales (N=102)*

Variable	M	SD	Min	Max	Skewness	Kurtosis
Stress (DASS-21)	10.19	3.85	1	21	.05	.01
Anxiety (DASS-21)	7.81	3.77	0	19	.31	.28
Depression (DASS-21)	6.97	3.76	0	19	.52	.16
Impulsivity (BIS-11)	30.89	5.60	19	46	.37	.03
Compulsive Buying (RCBS Total)	19.38	8.53	6	38	.18	-.87
RCBS Compulsivity	8.53	4.49	3	19	.43	-.78
RCBS Impulsivity	10.85	4.90	3	21	.04	-.83

*Note.* M = mean; SD = standard deviation.

Given moderate deviations from normality and possible uneven distribution across subscales, the decision was made to use Spearman's rank correlation coefficient. During the correlation analysis, the relationships between the DASS-21 scores and impulsivity, impulsive buying behavior, and personal impulsivity, as measured by the BIS-11 general impulsivity scale, and impulsive buying behavior, as measured by the Richmond Compulsive Buying Scale, were examined. The obtained data are presented in Table 2.

**Table 2**  
*Spearman Correlations Among Study Variables (N=102)*

Variable	1	2	3	4	5
1. Depression	-				
2. Anxiety	.57***	-			
3. Stress	.61***	.56***	-		
Impulsivity (BIS-11)	.42***	.21*	.32**	-	
RCBS Impulsivity	.19	.11	.07	.49***	-

Note. Spearman's  $\rho$  reported.  $p \leq .05^*$ ,  $p \leq .01^{**}$ ,  $p \leq .001^{***}$ .

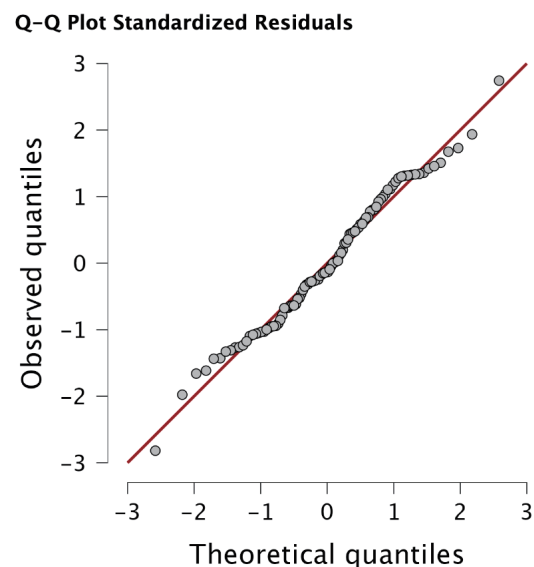
When analyzing the relationship between the overall impulsivity level and the DASS-21 scales, a positive correlation was found between depression scores and the overall impulsivity level ( $r = .42$ ,  $p \leq .001$ ). Thus, it can be assumed that impulsivity acts as a more direct psychological mechanism of online shopping behavior, while depression, anxiety, and stress are indirectly related to shopping behavior through personality impulsivity.

To examine the relationship between impulsive shopping behavior and psychological determinants, multiple regression analysis was used. The dependent variables were indicators of impulsive shopping behavior on the RCBS scale, and the psychological determinants included stress, anxiety, emotional distress, and overall impulsiveness.

Before interpreting the regression model, the statistical assumptions of linear regression were checked. This involved assessing the normality of the residuals' distribution. The standardized residuals ranged from -2.82 to 2.74, which does not exceed the critical threshold of  $\pm 3$  and indicates the absence of significant outliers. The Q-Q plot analysis of the standardized residuals showed their proximity to a normal distribution, as seen in Figure 1.

Based on the results of the correlation analysis, impulsive shopping behavior indicators on the RCBS scale do not have a significant relationship with emotional distress, in the form of stress indicators ( $r = .19$ ,  $p \geq .05$ ), anxiety ( $r = 0.11$ ;  $p \geq .05$ ), and stress ( $r = 0.07$ ;  $p \geq .05$ ). No direct significant relationships between emotional states and impulsive shopping behavior were identified. A significant correlation was found between the overall impulsivity indicators (BISS-11) and the impulsive shopping indicators on the RCBS scale ( $r = .49$ ,  $p \leq .001$ ).

**Figure 1**  
*Normal Q-Q Plot of Standardized Residuals for the Multiple Regression Model*



Note. The distribution of standardized residuals is approximately normal.

According to the Q-Q Plot, the distribution of residuals relative to the predicted values did not indicate heteroscedasticity. This indicates the correctness of the model interpretation and that the as-

sumptions of linear regression were not violated at a significant level, thereby confirming the reliability of the regression analysis results. The regression analysis results are presented in Table 3.

**Table 3**  
*Multiple Regression Determining RCBS Impulsivity (N= 102)*

Determinant	B	SE B	$\beta$	t	p
Intercept	-2.33	2.53	-	-0.92	.360
BIS-11 Total	0.45	0.08	.51	5.40	< .001
Depression	0.06	0.16	.05	0.36	.717
Anxiety	0.11	0.15	.09	0.75	.456
Stress	-0.18	0.15	-.14	-1.19	.238

Note. B = Unstandardized Coefficient; SE (B) = Standard Error of B;  $\beta$  = Standardized Coefficient.  
Model summary:  $R^2 = .26$ , Adjusted  $R^2 = .23$ ,  $F(4, 97) = 8.72$ ,  $p \leq .001$ .

The constructed model explains 26% of the variance in impulsive online shopping behavior ( $R^2 = .26$ , Adjusted  $R^2 = .23$ ,  $F(4, 97) = 8.72$ ,  $p \leq .001$ ), which corresponds to a moderate effect size. Regression analysis results showed that impulsivity personality (BIS-11) is the only statistically significant predictor ( $\beta = .51$ ), making a substantial contribution to explaining the variation in the dependent variable. Indicators of emotional distress did not demonstrate an independent direct contribution to the model ( $p \geq .05$ ).

This allows for viewing personal impulsiveness as a key psychological determinant of impulsive online shopping behavior. At the same time, it was hypothesized that emotional distress might influence this indirectly through increasing impulsiveness. To test this hypothesis and clarify the mechanism of the identified relationships, a mediational analysis was conducted.

The results of the mediative model partially confirmed the proposed hypotheses. As shown in Table 4, personality impulsiveness continues to exert a statistically significant influence on impulsive online purchases ( $\beta = .51$ ,  $p \leq .001$ ), whereas the direct effects of stress, anxiety, and depression indicators remain statistically insignificant ( $p > .05$ ).

At the same time, depressive symptoms showed a significant positive influence on the level of personality impulsivity ( $\beta = .37$ ,  $p = .007$ ), unlike stress and anxiety indicators (see Table 5). The analysis of indirect effects revealed that the impact of depression on impulsive online shopping is mediated through personality impulsivity ( $\beta = .19$ ,  $p = .012$ ), indicating full mediation (see Table 5). The indirect effects of stress and anxiety were not statistically significant.

**Table 4**  
*Standardized coefficients of the structural model (N= 102)*

Predictor	Criterion	$\beta$	SE	p	95% CI
BIS-11	RCBS	.51	.08	$\leq .001$	[.35, .65]
Stress	RCBS	-.14	.12	.255	[-.39, .10]
Anxiety	RCBS	.09	.12	.461	[-.14, .31]
Depression	RCBS	.05	.13	.721	[-.22, .28]
Stress	BIS-11	.09	.14	.542	[-.18, .37]
Anxiety	BIS-11	-.08	.13	.518	[-.32, .18]
Depression	BIS-11	.37	.14	.007	[.08, .62]

Note.  $\beta$  – standardized coefficient; SE – standard error; CI – confidence interval.

**Table 5**  
Standardized Indirect Effects ( $N=102$ )

Way	$\beta$	SE	p	95% CI
Stress $\rightarrow$ BIS-11 $\rightarrow$ RCBS	.04	.07	.551	[-.09, .20]
Anxiety $\rightarrow$ BIS-11 $\rightarrow$ RCBS	-.04	.07	.524	[-.18, .09]
Depression $\rightarrow$ BIS-11 $\rightarrow$ RCBS	.19	.07	.012	[.04, .33]

Note. Standardized indirect effects are shown. CI – 95% confidence interval.

Thus, the results obtained clarify the initial conclusions: emotional distress overall does not have a direct impact on impulsive online shopping behavior; however, depressive symptoms contribute to an increase in personality impulsivity, which, in turn, predicts a tendency toward impulsive online shopping.

These results are consistent with the assumption that negative affect reduces self-regulation and increases the tendency for impulsive reactions (Billieux et al., 2008). However, within the scope of this study, this mechanism was empirically confirmed primarily for depressive symptoms.

### Conclusion

The aim of this study was to identify the psychological determinants of impulsive online purchasing behavior among young people, specifically the relationship between emotional distress (depression, anxiety, stress), personality impulsivity, and impulsive buying. A quantitative cross-sectional design was employed, involving 102 students aged 18–21 years. The methods included the DASS-21 scale, the Barratt Impulsiveness Scale (BIS-11), and the Richmond Compulsive Buying Scale (RCBS). Data analysis comprised descriptive statistics, Spearman correlation analysis, multiple regression, and mediation analysis.

In the first stage, correlation analysis did not reveal any statistically significant relationships between impulsive purchasing behavior indicators (RCBS) and components of emotional distress depression ( $r = .19$ ,  $p \geq .05$ ), anxiety ( $r = .11$ ,  $p \geq .05$ ), and stress ( $r = .07$ ,  $p \geq .05$ ). Thus, no direct linear relationships between emotional states and impulsive online purchases were found. At the same time, a pronounced positive correlation was identified between overall personality impulsivity (BIS-11) and impulsive purchases ( $r = .49$ ,  $p \leq .001$ ), indicating a significant role of impulsivity as an individual psychological characteristic of consumer behavior.

Additional analysis of the relationships between impulsivity measures and the DASS-21 scales revealed a significant positive correlation between depression and the level of personality impulsivity ( $r = .42$ ,  $p \leq .001$ ), while the connections with anxiety and stress were less pronounced. This suggests that emotional distress may be indirectly related to consumer behavior through personality mechanisms of self-regulation. Trait impulsivity stands out as the main psychological factor influencing impulsive online shopping. In the regression analysis, it was the sole significant predictor, accounting for a large portion of the variance in impulsive buying behavior. The high standardized effect ( $\beta = .51$ ) and the large effect size ( $f^2 = .35$ ) suggest that impulsivity is not just one of many factors but a key explanatory element in the model.

To test the hypothesis of a possible indirect mechanism, a mediational analysis was conducted. Its results clarified the identified patterns. Personal impulsivity maintains a stable and statistically significant influence on impulsive online purchases, while the direct effects of depression, anxiety, and stress remain insignificant. At the same time, depressive symptoms show a significant positive impact on the level of personal impulsivity, and their indirect effect on impulsive online purchases through impulsivity is statistically significant. This indicates full mediation: the influence of depressive symptoms is realized solely through an increase in personal impulsivity. For anxiety and stress, such a mechanism of empirical confirmation was not obtained.

Personality impulsivity is the central psychological mechanism underlying impulsive online shopping among youth. Emotional distress, particularly depression, does not directly trigger impulsive purchases but may increase vulnerability to impulsive buying by elevating trait impulsivity. These findings support a hierarchical model in which emotional distress influences maladaptive consumer behavior indirectly through self-regulatory personality traits.

The results can be applied in: (1) university psychoeducation programs to increase awareness of impulsive online shopping risks; (2) digital literacy courses teaching self-regulation strategies; (3) psychological counseling for young people with problematic buying behavior; (4) the development of preventive interventions focusing on impulse control training (e.g., delayed gratification exercises, budgeting skills). Future research should test this mediation model using longitudinal designs and structural equation modeling (SEM) with larger, more diverse samples.

### Limitations

The problem of impulsive shopping behavior is an under-researched area in Kazakhstani psychology. This study is among the first to address this issue. Because of this, the research is limited to a cultural context and a single age group. The cross-sectional design used in this study does not allow for causal conclusions. Additionally, because self-report methods were used, there is a risk of systematic error. A promising direction is to test a mediational model using structural equation modeling (SEM) and to expand the sample size.

### Author Contributions

*Berkinbay Rakhilya – Conceptualization (ideas, formulation of research goals), Investigation (conducting the research process, data collection), Writing – original draft (preparation and writing of the initial manuscript), Formal analysis (application of statistical methods).*

*Sakhiyeva Farida – Methodology (development of research methodology), Validation (verification of reproducibility of results), Writing – review & editing (critical review and revision of the manuscript).*

*Kukubayeva Asiya – Supervision (oversight and leadership of research activity), Resources (provision of study materials and tools), Writing – review & editing.*

*Berdibayeva Sveta – Project administration (management and coordination of research planning), Funding acquisition (obtaining financial support), Writing – review & editing.*

*Garber Alena – Data curation (data management, cleaning, and maintenance), Visualization (preparation and presentation of data, figures, tables), Writing – review & editing.*

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**Information about the authors:**

Berkinbay Rakhilya – Doctoral student in the Department of General and Applied Psychology at Farabi University (Almaty, Kazakhstan, e-mail: rahilya2310@gmail.com).

Sakhiyeva Farida – Phd, Associate Professor, M. Auezov South Kazakhstan University (Shymkent, Kazakhstan, e-mail: farida777-84@mail.ru).

Kukubayeva Assiya – Doctor of Psychological Science, Professor, A. Myrzakhmetov Kokchetau University (Kokchetau, Kazakhstan, e-mail: kukubaeva\_2011@mail.ru).

Berdibayeva Sveta (corresponding author) – Doctor of Psychological Science, Professor, Department of General and Applied Psychology at Farabi University (Almaty, Kazakhstan, e-mail: berdibayeva.sveta1@mail.ru).

Garber Alena – Dr. Phd, Associate Professor, Rehabilitation Clinic “Reinhardshöhe” (Bad Wildungen, Hessen, Germany, e-mail: alena.garber@gmx.de).

**Авторлар туралы мәлімет:**

Беркінбай Рахилия Меңдіғалиқызы – жалпы және қолданбалы психология кафедрасының докторанты, Әл-Фараби атындағы Қазақ ұлттық университеті (Алматы, Қазақстан, e-mail: rahilya2310@gmail.com).

Сахиева Фарида Әбубақирқызы – Phd, қауымдастырылған профессор, М. Әуезов атындағы Оңтүстік Қазақстан университеті (Шымкент, Қазақстан, e-mail: farida777-84@mail.ru).

Қукубаева Асия Хайрушевна – психология ғылымдарының докторы, профессор, А. Мырзахметов атындағы Көкшетау университеті (Көкшетау, Қазақстан, e-mail: kukubaeva\_2011@mail.ru).

Бердибаева Света Кыдырбековна (автор-корреспондент) – психология ғылымдарының докторы, жалпы және қолданбалы психология кафедрасы профессоры, Әл-Фараби атындағы Қазақ ұлттық университеті (Алматы, Қазақстан, e-mail: berdibayeva.sveta1@mail.ru).

Гарбер Алёна Ильинична – Phd, қауымдастырылған профессор, «Reinhardshöhe» оңалту клиникасы (Бад-Вильдунген, Гессен, Германия, e-mail: alena.garber@gmx.de).

**Сведения об авторах:**

Беркінбай Рахилия Меңдіғалиқызы – докторант Phd кафедрасы обшей и прикладной психологии, Казахский национальный университет имени аль-Фараби (Алматы, Казахстан, e-mail: rahilya2310@gmail.com).

Сахиева Фарида Абубакировна – Phd, ассоциированный профессор, Южно-Казахстанский университет имени М. Ауэзова (Шымкент, Казахстан, e-mail: farida777-84@mail.ru).

Қукубаева Асия Хайрушевна – доктор психологических наук, профессор Кокшетауского университета имени Абая Мырзахметова (Кокшетау, Казахстан, e-mail: kukubaeva\_2011@mail.ru).

Бердибаева Света Кыдырбековна (автор-корреспондент) – доктор психологических наук, профессор кафедры обшей и прикладной психологии, Казахский национальный университет имени аль-Фараби (Алматы, Казахстан, e-mail: berdibayeva.sveta1@mail.ru).

Гарбер Алёна Ильинична – доктор Phd, ассоциированный профессор, реабилитационная клиника «Reinhardshöhe» (Бад-Вильдунген, Гессен, Германия, e-mail: alena.garber@gmx.de).

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