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Research article

Compulsive buying-shopping symptoms in a Greek sample and their association with anxiety, stress, and depression: A cross-sectional online study

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ABSTRACT

Symptoms of compulsive buying-shopping disorder (CBSD) are relatively common and have been associated with increased psychopathology, particularly mood and anxiety symptoms. However, relevant data are limited for the Greek population. We aimed to investigate the presence of CBSD symptoms in a Greek general population sample, and their potential association with anxiety, stress, depression, and demographic variables. A cross-sectional online study was carried out (October 2022 – November 2022) on 379 adults (females=254, 67%) from the general population from all over Greece. Participants were recruited using the snowball sampling method and completed a battery of questionnaires via Google Forms, including: (a) the "Compulsive Buying Scale" (CBS); (b) the 21-item "Depression Anxiety and Stress Scale" (DASS-21); and (c) the "Demographic Characteristics Questionnaire" – developed for the present research. Up to 19.5% of the sample's subjects (N=74; females=60, 81.1%) demonstrated severe CBSD symptoms (CBS score>42.2) and were designated as belonging to the "high-CBSD-symptoms" group. The rest of the participants (N=305) demonstrated less severe CBSD manifestations (CBS score≤42.2) and were included in the "low-CBSD-symptoms" group. The mean age of subjects of the "high-CBSD-symptoms" group was 27 years (±12.13 years). Significant positive correlations were found between CBS scores and all three DASS-21 subscales (stress, anxiety, depression). Particularly, subjects of the "high-CBSD-symptoms" group demonstrated significantly higher mean scores in all three DASS-21 subscales, compared to the "low-CBSD-symptoms" group. In regression analysis, higher stress levels, female gender, younger age, and residence in non-metropolitan areas significantly predicted more severe CBSD symptoms. The overrepresentation of women may limit generalizability. Furthermore, this study is cross-sectional, and therefore, it cannot assert that compulsive-buying symptomatology is a cause or consequence of anxiety, stress, or depressive symptoms. Finally, due to the nature of the study (online survey), no clinical data regarding psychiatric or medical history were collected. The present study suggests that severe CBSD symptoms may be prevalent in a significant proportion of the Greek population, especially in younger women, and are significantly associated with symptoms of anxiety, stress, and depression. Female gender, more intense stress, younger age, and living in non-metropolitan centers were predictors of more severe CBSD manifestations.

KEYWORDS: Anxiety, compulsive buying disorder, depression, stress, symptoms.

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Introduction

Purchasing goods is an integral part of everyday life; however, in certain circumstances, purchasing behavior is associated with excessive distress and other psychopathological manifestations and may evolve into compulsive buying-shopping disorder (CBSD). Müller et al (2021) has demonstrated that psychopathological features of CBSD include time-consuming buying-shopping activities and consequent excessive spending, either online or in-person. The consumer items are essentially useless for the subject or are not utilized for the intended purposes. The subject has diminished control over these buying-shopping activities, which therefore persist despite the negative consequences; moreover, they interfere with other interests, leisure activities, and professional duties and cause significant distress and impairment in their personal, relational, professional, and other life domains, including the incurrence and escalation of financial debt.[1–6]

According to Maraz et al (2016), the most recent meta-analysis estimated the prevalence rate of compulsive buying in general adult representative populations to be 4.9%.[7] Female gender, younger age, and low-to-moderate income are factors associated with a higher prevalence of CBSD symptoms.[8–11] There are indications that CBSD symptoms are associated with other psychopathological manifestations, including stress, anxiety, and depression levels.[12] For example, the presence of a CBSD episode was associated with a greater number of stress-inducing daily events compared to other days[13] and with a reduction, at least temporarily, of high levels of anxiety.[14] Regarding etiology, symptoms of CBSD may share in common with other addictive disorders, the psychobiological mechanisms of reward.[6,15]

Although international research has increasingly focused on the clinical and psychosocial correlates of Compulsive Buying–Shopping Disorder (CBSD), data from Southern European countries remain scarce, particularly from Greece. The current study aims to address this gap by providing preliminary epidemiological data on CBSD symptomatology in a Greek general population sample. While the mere absence of national data does not inherently justify a study, the value of culturally specific data lies in the known variability of compulsive buying behavior across countries due to sociocultural, economic, and psychological factors. Previous studies have demonstrated significant differences in the prevalence and expression of CBSD between countries with divergent economic trajectories, such as Greece and Turkey, and highlighted the role of national macroeconomic conditions in shaping compulsive consumption patterns.[16,17] Furthermore, a recent meta-analysis estimated the prevalence of CBSD at 4.9% in the general adult population, but acknowledged substantial heterogeneity across studies and regions. Given Greece's unique recent history of prolonged economic crisis and austerity, the psychological burden of financial stress, and shifting consumption norms, investigating CBSD in this cultural and socioeconomic context is both timely and necessary. Our study, therefore, aims to contribute not only to national awareness and public health planning but also to the broader cross-cultural understanding of CBSD.[8] Moreover, we investigated the potential associations of CBSD symptoms with demographic/socio-economic and clinical parameters – including manifestations of anxiety, stress, and depression. We hypothesized that there would be significant positive associations between CBSD symptoms and all three clinical dimensions.

Material and Method

Procedure

This was a cross-sectional online study from October 9 to October 31, 2022. The study's protocol was approved by the Ethics Committee of Eginition Hospital. All subjects provided informed consent. Sampling was based on convenience and the snowball method.[18] Information sheets and questionnaires were created online using Google Forms and distributed through groups on the online platforms Facebook and Instagram. After reading the participation invitation and confirming their consent, individuals proceeded to complete the questionnaire. The study was anonymous, and participants disclosed only the personal information required by the study. All subjects were required to declare that they were 18 years of age or older. Inclusion criteria were: age ≥18 years old and voluntary agreement to participate in the research. Exclusion criteria were poor knowledge of the Greek language and not providing informed consent.

1. Demographic Characteristics Questionnaire (DCQ): This was created by the authors for this research; it concerns demographic/socio-economic parameters, including gender, age, place of residence, marital status, educational level, employment status, and monthly family income.
2. Depression Anxiety Stress Scale (DASS-21)[19]: The DASS-21 comprises three self-report scales – each comprising 7 items – designed to measure negative emotional states, including depression, anxiety, and stress, respectively. Each item is rated on a 4-point Likert scale ("0=not applicable to me at all" to "3=ap-

plicable to me very much or most of the time"). The total score is derived by doubling the scores of the subscales (total score range: 0-126). Higher scores indicate more intense symptomatology. The scale has been adapted to the Greek language by Lyrakos et al.[20] The internal consistency reliability for the entire scale is Cronbach's α=0.965.

3. Compulsive Buying Scale (CBS)[14]: This is a 13-item self-report scale that measures thoughts, emotions, and behaviors related to compulsive buying. To our knowledge, no validated Greek version of the Compulsive Buying Scale (CBS) has been published to date. As the CBS is in the public domain and no formal permission is required for its translation or adaptation for research purposes, no additional authorization was necessary. The Greek version of the scale was administered to participants. The original English version of the questionnaire was translated into Greek by the first author. The translated version was then reviewed and revised by an expert in the field to ensure conceptual and linguistic accuracy. The scale has good reliability and validity. It utilizes a Likert-type scale (1= "Strongly disagree" to 5= "Strongly agree"). The total score ranges from 13-65. The CBS cut-off score commonly used in previous studies is 42.2;21 a score higher than 42.2 indicates that the person potentially suffers from CBSD.

Statistical analysis

All statistical analyses were conducted using the statistical package SPSS v.28. Means and standard deviations (SD) were used to describe quantitative variables. Absolute (N) and relative (%) frequencies were used to describe qualitative variables. The Spearman's rank correlation coefficient (r) was used to assess the relationship between two quantitative variables.

To assess whether the quantitative variables followed a normal distribution, the Kolmogorov–Smirnov test was initially performed. In addition, the Shapiro–Wilk test was applied to Age, DASS-21 Stress, DASS-21 Anxiety, DASS-21 Depression, and CBS score. In all cases, the Shapiro–Wilk test yielded p-values <0.05, indicating a violation of the normality assumption. Therefore, non-parametric tests (e.g., Mann–Whitney U) were applied for group comparisons.

Comparisons between groups for quantitative variables were performed using the Mann-Whitney U test, as the sample did not follow a normal distribution. Additionally, regression analysis was conducted to determine whether any of the variable(s) studied significantly predict the presence of CBSD symptoms. The level of statistical significance was set at p≤0.05.

In the present study, subjects with a CBS score >42.2 were included in the "high-CBSD-symptoms" group – i.e., a group with more severe CBSD symptoms, potentially meeting the criteria for a CBSD diagnosis –, while those with a CBS score ≤42.2 were designated as members of the "low-CBSD-symptoms" group.

Results

Demographic characteristics of the total sample

For research purposes, the participants' place of residence was recoded into two categories: metropolitan centers with a population exceeding 1 million inhabitants (including Athens and Thessaloniki, capital and co-capital of Greece, respectively) and non-metropolitan centers (including smaller urban and rural [towns, villages] centers).

A total of 379 participants from the general population of Greece took part in the study. Descriptive statistics for the total sample, as well as for the two subgroups based on compulsive buying symptoms (CBS score >42.2 vs. ≤42.2), are presented in table 1. Specifically, demographic characteristics (gender, age, place of residence, education, marital status, employment status, and monthly income) are reported for both the "high-CBSD-symptoms" and "low-CBSD-symptoms" groups. Between-group comparisons were conducted using Mann–Whitney U tests for continuous variables and chi-square tests for categorical variables.

Associations with depression, anxiety, and stress

The mean values and standard deviations of the CBS and the DASS-21 subscales "anxiety", "stress", and "depression" concerning all patients, and the "high-CBSD-symptoms" and "low-CBSD-symptoms" subgroups are presented in table 2.

Associations between CBSD symptoms and clinical and demographic parameters

A series of Spearman correlation analyses was conducted to examine the relationships between CBSD symptoms, as measured by the CBS score, and symptoms of depression, anxiety, and stress as measured by the respective subscales of the DASS-21. The results revealed statistically significant positive correlations across all dimensions. Specifically, CBSD symptoms were positively correlated with depressive symptoms (ρ=0.248, p<.001), anxiety symptoms (ρ=0.297, p<.001), and stress symptoms (ρ=0.295, p<.001). These findings suggest that higher levels of compulsive buying-shopping tendencies are associated with increased psychological distress across multiple domains (table 3).

Table 1. Comparison of Demographic and Clinical Characteristics between Participants with Low and High Compulsive Buying-Shopping Disorder (CBSD) Symptoms.

Characteristic	Low-CBSD Symptoms (N=305) N (%)	High-CBSD Symptoms (N=74) N (%)	Statistic x^2 (DF)	p
Gender				
Female	194 (63.6%)	60 (81.1%)	7.46 (1)	0.006
Male	111 (36.4%)	14 (18.9%)		
Place of Residence				
Metropolitan Center	206 (67.5%)	45 (60.8%)	0.92 (1)	0.336
Non-Metropolitan Center	99 (32.5%)	29 (39.2%)		
Education Level				
Postgraduate degree	60 (19.7%)	13 (17.6%)		
University degree	121 (39.7%)	29 (39.2%)		
Post-secondary education	29 (9.5%)	5 (6.8%)	1.80 (5)	0.875
High school graduate	93 (30.5%)	27 (36.5%)		
Elementary school graduate	1 (0.3%)	0 (0.0%)		
PhD	1 (0.3%)	0 (0.0%)		
Marital Status				
Single	190 (62.3%)	42 (56.8%)		
Married	89 (29.2%)	21 (28.4%)	3.37 (4)	0.498
Cohabiting	13 (4.3%)	6 (8.1%)		
Divorced	12 (3.9%)	5 (6.8%)		
Widowed	1 (0.3%)	0 (0.0%)		
Employment Status				
Unemployed	18 (5.9%)	7 (9.5%)		
Civil servant	66 (21.6%)	13 (17.6%)		
Private employee	104 (34.1%)	26 (35.1%)	1.71 (6)	0.944
Self-employed	31 (10.2%)	8 (10.8%)		
Retired	4 (1.3%)	1 (1.4%)		
Homemaker	5 (1.6%)	1 (1.4%)		
Student	77 (25.2%)	18 (24.3%)		
Monthly Income				
No income	50 (16.4%)	10 (13.5%)		
0-500 euros	91 (29.8%)	27 (36.5%)	3.61 (4)	0.461
501-1000 euros	62 (20.3%)	19 (25.7%)		
1001-2000 euros	88 (28.9%)	15 (20.3%)		
>2000 euros	14 (4.6%)	3 (4.1%)		

Abbreviations: CBSD=compulsive buying-shopping disorder; DF=Degrees of Freedom

To investigate whether the mean scores of the DASS-21 subscales of stress, anxiety, and depression differ between the "high-CBSD-symptoms" group and the "low-CBSD-symptoms" group, the non-parametric Mann-Whitney U test was used, as the variables do not follow a normal distribution. The analysis revealed that subjects of the "high-CBSD-symptoms" group demonstrate significantly higher mean scores in all three examined DASS-21 subscales, compared to those of the "low-CBSD-symptoms" group (table 2).

Subsequently, a series of linear regression analyses were conducted to investigate potential predictors of compulsive buying-shopping disorder (CBSD) symptoms, as measured by CBS scores. Three models were developed.

First, table 3 presents the results of a multivariate regression analysis in which the independent variables were the severity scores of the DASS-21 subscales for stress, anxiety, and depression. The model accounted for 10.1% of the variance in CBS scores (R^2=0.101). Among the predictors, only stress was a statistically significant contributor: for every additional unit increase in the "stress" subscale score, the CBS score increased by 0.217 units, holding all other factors constant. The

Table 2. Mean (± Standard Deviation) scores for CBS and DASS-21 subscales (Stress, Anxiety, Depression) for all participants, and for "Low-CBSD-symptoms" (CBS score ≤42.2) and 'High-CBSD-symptoms' (CBS score >42.2) groups. P-values from Mann-Whitney U tests compare DASS-21 subscale scores between the 'Low-' and 'High-CBSD-symptoms' groups.

	"Low-CBSD-symptoms" group (N=305)		"High-CBSD-symptoms" group (N=74)		Mann-Whitney results	
Group	Mean	SD	Mean	SD	U statistic	p
CBS	29.21	7.465	50.24	5.077	<0.001	<0.001
Stress (DASS-21)	14.22	9.771	19.08	10.332	8243.00	<0.001
Anxiety (DASS-21)	8.22	8.589	12.51	10.531	8538.50	0.001
Depression (DASS-SS-21)	10.98	10.329	14.54	10.800	8876.00	0.004

Abbreviations: CBS=compulsive buying scale; CBSD=compulsive buying-shopping disorder; DASS-21= Depression Anxiety Stress Scale-21

Table 3. Multivariate Regression Analysis of CBSD Symptom Severity. This table presents a multivariate regression model with CBSD symptom severity (CBS scores) as the dependent variable. Independent variables include the severity of stress, anxiety, and depression, as measured by their respective DASS-21 subscale scores. Spearman correlation coefficients (ρ) between CBS scores and DASS–21 subscale scores are also presented.

	Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Spearman correlation	
	B	Std. Error	Beta	t	p	Lower Bound	Upper Bound	Coefficients (ρ)	p (2–tailed)
Stress	0.217	0.092	0.199	2.367	0.018	0.037	0.397	0.295**	<0.001
Anxiety	0.177	0.093	0.148	1.897	0.059	–0.006	0.360	0.297**	<0.001
Depression	–0.011	0.082	–0.010	–0.131	0.895	–0.171	0.150	0.248**	<0.001

R^2 =0,101

**Correlation is significant at the level 0.01 (2–tailed)

Abbreviations: CBS=compulsive buying scale; CBSD=compulsive buying–shopping disorder; DASS–21= Depression Anxiety Stress Scale-21

scores for the "anxiety" and "depression" subscales were not statistically significant in the multivariate model.

It is important to note that the predictor variables were moderately intercorrelated, and thus multicollinearity was present in the model. This is not unexpected, given that anxiety, depression, and stress are conceptually related psychological constructs, as reflected in their significant bivariate correlations. Therefore, the unique contribution of each variable in the regression model must be interpreted with caution, as multicollinearity may suppress or inflate individual effects.

Next, two hierarchical models were constructed to examine the predictive power of demographic variables. In table 4, all available demographic characteristics—gender, age, place of residence, education level, marital status, employment status, and monthly income—were entered simultaneously into a multiple linear regression model. This full model explained 6.5% of the variance in CBS scores (R^2=0.065). All predictors were retained in the model, regardless of their statistical significance in bivariate analyses, to assess the unique contribution of each factor while controlling for the potential influence of the others. The methodology section and the caption of table 4 have been revised accordingly to reflect this analytical decision.

Additionally, bivariate associations between each demographic variable and CBS scores are also presented in table 4, using Spearman's rank correlation for continuous variables (e.g., age). This dual presentation allows for a more comprehensive interpretation of the data by comparing unadjusted and adjusted relationships.

Discussion

The present study is the first, to the best of our knowledge, to investigate compulsive buying-shopping symptoms in a sample drawn from the general population of Greece, and to explore their potential association with psychopathological manifestations –including symptoms of stress, anxiety, and depression– and demographic parameters.

Almost 1 out of 5 (19.5%; N=74) participants of the study demonstrated significant CBSD symptoms and potentially suffered from CBSD (CBS score >42.2; "high-

Table 4. Multivariate regression analysis with dependent variable: CBSD symptoms (CBS scores) and independent variables: all demographic characteristics, and bivariate correlation between dependent and independent variables.

	Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlation*	
	B	Std. Error	Beta	T	p	Lower Bound	Upper Bound	Statistic	p (2-tailed)
Gender	–3.829	1.236	–0.165	–3.097	0.002	–6.260	–1.398	–0.161	0.002
Age	–0.140	0.060	–0.165	–2.326	0.021	–0.259	–0.022	–0.122	0.018
Place of Residence	–2.824	1.168	–0.122	–2.417	0.016	–5.120	–0.527	–0.127	0.013
Education Level	0.566	0.566	0.060	0.999	0.318	–0.547	1.679	–0.060	0.247
Marital status	0.673	0.817	0.050	0.824	0.411	–0.934	2.280	0.070	0.174
Employment status	–0.396	0.353	–0.073	–1.125	0.261	–1.090	0.297	0.033	0.527
Monthly income	–0.023	0.567	–0.002	–0.040	0.968	–1.137	1.091	–0.097	0.060

R^2=0.065
Abbreviations: CBS=compulsive buying scale; CBSD=compulsive buying-shopping disorder
Demographic variable representation: Sex: 0: Female, 1: Male, Place of Residence 0: Non Metropolitan Center, 1: Metropolitan Center, Education level: 0: Postgraduate degree, 1: University degree, 2: Post-secondary education, 3: High school graduate, 4: Elementary school graduate, 5: PhD, Marital status: 0: Single, 1: Married, 2: Cohabiting 3: Divorced, 4: Widowed, Employment status: 0: Unemployed, 1: Public sector employee, 2: Private sector employee, 3: Self-employed, 4: Retiree, 5: Homemaker, 6: Student, Monthly income: 0: No income, 1: 0-500 euros, 2: 501-1000 euros, 3: 1001-2000 euros, 4: >2000 euros
*Spearman correlation used

CBSD-symptoms" group). Concerning all 379 patients of the sample, significant positive correlations emerged between the severity of CBSD symptoms (CBS score) on the one hand and the intensity of symptoms of stress, anxiety, and depression on the other (scores on the respective DASS-21 subscales). Particularly, subjects of the "high-CBSD-symptoms" group demonstrated more severe symptoms of stress, anxiety, and depression compared to those of the "low-CBSD-symptoms" group. Furthermore, higher stress levels (DASS-21) (but not those of anxiety or depression), female gender, younger age, and living in non-metropolitan centers predicted more severe CBSD symptoms.

The prevalence of CBSD reported in prior studies ranges between 1.8% and 8%, but may be as high as 16.2% in shopper-specific samples.[1,11] The high percentage (19.5%) of subjects showing severe CBSD symptoms in our study may be because it corresponds to symptoms and not to the disorder per se. We do not know how many subjects of the "high-CBSD-symptoms" actually met the ICD-11 criteria for the diagnosis of CBSD.

Other reasons for the high percentage of subjects with severe CBSD symptoms in our study include the method of sampling, which was based on convenience and the snowball method, and the reduced representation of male subjects in the research (33% of the sample). Additionally, it is noteworthy that the sample mainly consisted of young individuals, who are more exposed to markets according to social norms.

In our study, the mean age of subjects of the "high-CBSD-symptoms" group is 27 years, in line with previous research, which indicates that the mean age of subjects demonstrating intense CBSD manifestations typically ranges between 18 and 30 years.[22] Additionally, the high percentage of females included in our study's "high-CBSD-symptoms" group (81.1%) is also in line with percentages of females – up to 80–94% – previously found in samples of subjects with severe CBSD psychopathology.[11,23] Moreover, according to our results, female gender is a predictive factor for the occurrence of more severe CBSD symptoms. This finding may be due to the fact that in females, buying and shopping behaviors are more linked to their recreational and social activities, compared to males, and thus they have a stronger symbolic and emotional role for the former compared to the latter.[22,23]

Recent studies have also raised concerns about possible gender bias in the psychometric properties of compulsive buying-shopping scales. Found that certain items in the commonly used CBS scale may function differently across genders, potentially inflating female scores or underestimating male symptoms.

Although such analyses have not yet been conducted in Greece, similar item bias may exist in the Greek version of the CBS.[24,25]

Regarding all patients of our sample, positive associations emerged between CBSD symptoms' severity and levels of anxiety, stress, and depression. This seems to be due to the significantly more severe symptoms of anxiety, stress, and depression of subjects of the "high-CBSD-symptoms" group compared to subjects of the "low-CBSD-symptoms" group.

Previous findings may help explain our study's results. Thus, a broad array of psychopathological manifestations, including symptoms of anxiety, depression, anger, loneliness, irritability, uncontrolled eating, and workaholism, has been associated and may potentially precipitate the emergence of compulsive buying.[12,24–28] In these clinical contexts, compulsive buying may serve as a maladaptive means of relieving negative emotions in various situations.[9,25,29] Indeed, a high percentage of compulsive buyers reported a positive change in their mood after making a purchase.[30] Thus, compulsive buying may serve as a strategy of mood regulation.[21] On the other hand, it has been posited that most individuals with CBSD symptoms experience subjective distress in part because they feel unable to adequately control their behavior.[11] Notably, in a recent report, anxiety and emotion dysregulation consistently mediated the relationship between adverse childhood experiences and CBSD symptoms, while anxiety was a stronger predictor of CBSD symptoms compared to depression.[31] From a biological perspective, pathological functioning of brain networks underlying reward processing, executive functioning, salience attribution, and habit formation, and of neurochemical systems including dopamine, serotonin, opioids, and other neurotransmitters, may contribute to the pathophysiology of CBSD symptoms.[2] Many of these neurobiological pathways may be common with those that underlie stress, anxiety, and mood manifestations.[32]

Although all psychopathological dimensions (anxiety, stress, and depression) investigated in our study were positively associated with compulsive buying, only the stress levels in particular proved to predict the severity of CBSD symptoms. This is in line with the theoretical view that stress is closely related to addictive behavior, since it triggers "craving" reactions toward addiction-related stimuli; this "craving" contributes to the emergence of a habitual/compulsive behavior to rapidly provide relief, instead of a behavior under greater cognitive control.[13,33,34] However, this relief is transitory and is replaced by an increase in anxiety or depression.[35,36] Indeed, compulsive buying and shopping are potentially a mediating factor for depression and other distress reactions.[30,37] These ineffective mechanisms of coping contribute to the pathogenesis of compulsive buying as a behavioral addiction.[28] Despite these theoretical views, whether stress is an antecedent or a clinical correlate of CBSD is still not known.

The finding that stress –but not anxiety or depression– was the only significant predictor of CBSD symptom severity in our regression model warrants further discussion. A possible explanation may be found in the functional role of compulsive shopping as a coping strategy for immediate relief from distress. Individuals with compulsive buying tendencies often report that they engage in shopping to cope with negative emotions, avoid mistakes, and gain short-term emotional rewards. These motivations appear to align more closely with stress relief than with the broader emotional constructs of depression or anxiety. Conversely, it is also plausible that compulsive buying increases stress, due to financial strain, interpersonal conflict, or guilt, thus creating a reinforcing cycle. Longitudinal research is needed to clarify the temporal and potentially bidirectional relationships between stress and compulsive buying behavior.

Investigating the association between CBSD psychopathology and other clinical parameters is important, since anxiety, stress, and depression symptoms may all be targets for standard pharmacological and psychological interventions: their improvement may indirectly improve CBSD manifestations as well.

The limitations of the current study must be taken into consideration. The small number of male participants in the sample results in an overrepresentation of females, making it challenging to generalize the results. The underrepresentation of males may be attributed to the data collection process through Google Forms, where they might be less inclined to respond. However, we must stress that 80–94% of persons with CBSD manifestations in international research are female; more importantly, the results of a survey on the general adult population in the United Kingdom suggest that this gender difference is real and not an artifact of men being underrepresented in clinical samples as has been alleged.[38] Furthermore, this study is cross-sectional, and therefore, it cannot assert that compulsive buying is a cause or consequence of anxiety, stress, or depression. Finally, due to the nature of the study (online survey), no data were obtained regarding clinical and treatment parameters, including history of mental disorders, non-psychiatric medical conditions, alcohol/substance use disorders, and current/past (psycho) pharmacological/psychological treatments. Moreover,

the sample was collected using snowball sampling, which can introduce bias and limit the generalizability of the findings. Future studies should address these limitations and further illuminate the complex association of compulsive buying-shopping psychopathology with symptoms of stress, anxiety, and depression.

Conclusion

The present study suggests that severe CBSD symptoms may be prevalent in a significant portion of the Greek population and are associated with symptoms of anxiety, stress, and depression. Higher stress levels, female gender, younger age, and living in non-metropolitan centers predicted more severe CBSD symptoms. Female gender, younger age, and residence in non-metropolitan areas were significant predictors of more severe symptoms. These findings align with international literature but also highlight the importance of considering cultural and socioeconomic factors, such as Greece's recent economic context. Our results provide preliminary evidence to inform public health strategies and contribute to the broader cross-cultural understanding of CBSD, while future research is needed to confirm and extend these observations.

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Ερευνητική εργασία

Συμπτώματα διαταραχής καταναγκαστικών αγορών σε δείγμα ελληνικού πληθυσμού και η συσχέτισή τους με εκδηλώσεις άγχους, στρες και κατάθλιψης: Συγχρονική διαδικτυακή μελέτη

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ΙΣΤΟΡΙΚΟ ΑΡΘΡΟΥ: Παραλήφθηκε 13 Ιανουαρίου 2025/Αναθεωρήθηκε 3 Ιουνίου 2025/Δημοσιεύθηκε Διαδικτυακά 20 Δεκεμβρίου 2025

ΠΕΡΙΛΗΨΗ

Τα συμπτώματα της διαταραχής καταναγκαστικών αγορών (ΔΚΑ) (compulsive buying-shopping disorder) είναι αρκετά συχνά στον γενικό πληθυσμό και μπορεί να συνδέονται με αύξηση ψυχοπαθολογικών εκδηλώσεων, και ειδικότερα των συμπτωμάτων κατάθλιψης και άγχους. Ωστόσο, δεν υπάρχουν επαρκή δεδομένα για τον ελληνικό πληθυσμό. Σκοπός της μελέτης ήταν η διερεύνηση της παρουσίας συμπτωμάτων της ΔΚΑ σε δείγμα του γενικού πληθυσμού της Ελλάδας και η ενδεχόμενη συσχέτιση τους με συμπτώματα άγχους, στρες και κατάθλιψης και δημογραφικές παραμέτρους. Διεξήχθη συγχρονική μελέτη (Οκτώβριος-Νοέμβριος 2022) και το δείγμα απαρτιζόταν από 379 ενήλικα άτομα (γυναίκες=254, 67%) από τον γενικό πληθυσμό όλης της Ελλάδας. Η δειγματοληψία πραγματοποιήθηκε μέσω της μεθόδου της χιονοστιβάδας και οι συμμετέχοντες συμπλήρωναν μέσω Google forms τις εξής κλινικές-ψυχομετρικές δοκιμασίες: (α) "Compulsive Buying Scale" (CBS), (β) "Depression Anxiety and Stress Scale" – 21 λήμματα (DASS-21) και (γ) "Demographic Characteristics Questionnaire" – το οποίο δημιουργήθηκε για τους σκοπούς της παρούσας μελέτης. Ποσοστό 19,5% των συμμετεχόντων (N=74, γυναίκες=60, 81,1%) παρουσίαζαν σοβαρά συμπτώματα ΔΚΑ (CBS σκορ >42,2) και συμπεριελήφθησαν στην ομάδα «ΔΚΑ-ΝΑΙ». Οι υπόλοιποι συμμετέχοντες (N=305) παρουσίαζαν μικρότερης σοβαρότητας συμπτώματα ΔΚΑ (CBS σκορ ≤42,2) και συμπεριελήφθησαν στην ομάδα «ΔΚΑ-ΟΧΙ». Η μέση ηλικία των ατόμων της «ΔΚΑ-ΝΑΙ» ομάδας ήταν 27 έτη (±12,13 έτη). Παρατηρήθηκαν στατιστικά σημαντικές συσχετίσεις μεταξύ του σκορ στην κλίμακα CBS με τα σκορ και των τριών υποκλιμάκων της DASS-21. Ειδικότερα, άτομα της «ΔΚΑ-ΝΑΙ» ομάδας παρουσίασαν σημαντικά υψηλότερα σκορ και στις τρεις υποκλίμακες της DASS-21 συγκριτικά με άτομα της «ΔΚΑ-ΟΧΙ» ομάδας. Τα υψηλότερα επίπεδα στρες, το γυναικείο φύλο, η μικρότερη ηλικία και η διαμονή σε «μη μητροπολιτικές» περιοχές αποτελούσαν σημαντικούς προγνωστικούς δείκτες παρουσίας σοβαρότερων συμπτωμάτων ΔΚΑ. Περιορισμό αποτελεί η υπεραντιπροσώπευση γυναικών και η συγχρονική φύση της μελέτης, καθώς δεν τεκμηριώνει αιτιακή σχέση των συμπτωμάτων ΔΚΑ και των συμπτωμάτων άγχους, στρες και κατάθλιψης. Επίσης, επειδή η μελέτη διεξήχθη διαδικτυακά, δεν κατέστη δυνατή η συλλογή άλλων κλινικών παραμέτρων. Τα αποτελέσματα της παρούσας μελέτης υποδηλώνουν ότι τα συμπτώματα ΔΚΑ μπορεί να είναι συχνά στον γενικό πληθυσμό και συσχετίζονται σε σημαντικό βαθμό με την παρουσία συμπτωμάτων άγχους, στρες και κατάθλιψης. Τα υψηλότερα επίπεδα στρες, το γυναικείο φύλο, η μικρότερη ηλικία και η διαμονή σε μη μητροπολιτικές περιοχές αποτελούσαν παράγοντες πρόβλεψης σοβαρότερων εκδηλώσεων συμπτωμάτων ΔΚΑ.

ΛΕΞΕΙΣ ΕΥΡΕΤΗΡΙΟΥ: Άγχος, διαταραχή καταναγκαστικών αγορών, κατάθλιψη, στρες, συμπτώματα.

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