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The Relationship between Addiction Severity and Codependency Level in Individuals with Substance Use Disorder

Madde Kullanım Bozukluğu Olan Bireylerde Bağımlılık Şiddeti İle Eşbağımlılık Düzeyi Arasındaki İlişki

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Abstract

Objective: This study aimed to examine the relationship between the addiction severity of individuals diagnosed with substance use disorder and the spouse addiction levels of family members.
Method: Data were collected from 146 individuals and 146 family members who received addiction treatment at the adult detoxification center of a mental health hospital in Istanbul. Data were collected using sociodemographic information forms, the Addiction Profile Index (API), and the Codependency in Addiction Assessment Form (CAAF).
Results: Of the 146 study participants, 128 (87.7%) were male; 84 of them (57.5%) were between the ages of 26 and 45 years. A total of 86 (58.9%) were primary school graduates and 70 (47.9%) were married. The average score of the male participants on API (X = 6.87) was higher than the average score of the female participants (X = 5.91). Of the relatives, 96 (65%) were women, 42 (28.8%) were mothers, and 71 (48.6%) were between the ages of 45 and 65 years. It was observed that whether the participants had low, medium, or high addiction severity did not make a difference in the scores they received from the CAAF scale.
Conclusion: Women, those with children, those with chronic illnesses, those with a primary school education, those who were divorced, and those aged 45–65 had higher levels of codependence. These data show that families also need support when working with people with alcohol- or substance-use disorder.

Keywords: Alcohol use disorder, addiction severity, codependency, family, substance use disorder

Öz

Amaç: Bu araştırmada madde kullanım bozukluğu tanılı bireylerin bağımlılık şiddeti ile aile üyelerinin eş bağımlılık düzeyleri arasındaki ilişkinin incelenmesi amaçlanmıştır.
Yöntem: Veriler İstanbul'da ruh sağlığı alanında hizmet veren bir hastanenin Erişkin Arındırma Merkezinde bağımlılık tedavisi gören 146 birey ve 146 aile üyesi ile gerçekleştirilmiştir. Veriler Sosyo-Demografik Bilgi Formu, Bağımlılık Profil İndeksi (BAPİ) ve Bağımlılıkta Eş Bağımlılık Faktörü Ölçeği (BEŞF) ile toplanmıştır.
Bulgular: Çalışmaya katılanların 128'i (%87,7) erkek; 84'ü (%57,5) 26-45 yaş aralığındadır. 86 kişi (%58,9) ilköğretim mezunu, 70 kişi (%47,9) evlidir. Erkek katılımcıların BAPİ den aldıkları puan ortalaması (X=6,87) kadın katılımcıların aldıkları puan ortalamalarından (X=5,91) daha yüksektir. Yakınların 96'sı (%65) kadın, 42'si (%28,8) annesi, 71 kişi (%48,6) 45-65 yaş aralığındadır. Katılımcıların düşük orta ya da yüksek bağımlılık şiddetine sahip olma durumlarının BEŞF ölçeğinden aldıkları puanlarda farklılaşma yaratmadığı görülmüştür.
Sonuç: Kadınların, çocuk sahibi olanların, kronik hastalığı olanların, ilkokul mezunu olanların, boşanmışların ve 45-65 yaş aralığında olanların eş bağımlılık düzeyinin daha yüksek olduğu sonucuna ulaşılmıştır. Bağımlılık şiddeti ile eş bağımlılık arasında ise bir ilişki saptanamamıştır. Bağımlılık şiddeti ile eş bağımlılık düzeyinin alt ölçeği olan "ses çıkarmama" arasında pozitif yönde bir ilişki saptanmıştır.

Anahtar kelimeler: Alkol kullanım bozukluğu, madde kullanım bozukluğu, bağımlılık şiddeti, eş bağımlılık, aile

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Introduction

Substance-use disorders are a prevalent family illness characterized by dysfunctional and harmful use of alcohol or drugs, often resulting in impairments in the medical, legal, social, interpersonal, and occupational domains. These disorders are accompanied by mental health issues and social problems such as poverty and homelessness and are marked by recurrent relapses (1-4). This disease also poses an urgent public health challenge that requires clinicians and scientists to identify the best treatment practices. For this purpose, the combination of pharmacological and behavioral interventions is widely accepted as the standard approach in the long-term treatment of addiction (5).

Substance addiction not only affects the individual using substances but also impacts the family environment, leading to changes in the daily routines and behaviors of family members. Many families struggle to free themselves from the negative consequences of addiction, a situation commonly referred to in the literature as “codependency” or “enabling.” Codependency is a set of pathological behaviors and thought patterns specific to individuals living with or in close proximity to someone experiencing substance dependence. It is a condition characterized by learned, conditioning-based behaviors that reinforce the maladaptive behavioral patterns of the dependent individual, leading to emotional and behavioral challenges that hinder the development of a healthy and mutually satisfying relationship. This concept was first defined as a disease by Cermak and there is still no consensus among experts on a clear definition (6).

The codependent individual establishes a dysfunctional relationship with family members, hides his/her own emotional reactions, and maintains his/her behavior on this basis. Codependency is a process of dependent communication with another person (7-10). The concept of codependency, developed in the 1970s, addresses the unintentional facilitation of substance use disorder’s persistence and emotional, psychological, and behavioral problems exhibited by partners or close family members of individuals with substance use disorder (11). Whether willingly or unwillingly, family members nurturing, protecting, and supporting the addictive behavior of an individual with substance-use disorder not only impact the individual but the entire family as well (12). This transforms addiction from an individual problem to an issue that affects all family members (11). When a person has a substance-use disorder, especially involving alcohol or other substances, it is likely that their spouse or family members feel the need to control them (11). Often, this behavior facilitates the continuation of the addictive cycle for the individual with the substance-use disorder (12). Codependent family members, particularly spouses, unintentionally play a facilitating role due to their excessive control and focus on the individual with substance-use disorder, inadvertently reinforcing their substance-use behaviors (11).

The presence of a person with a substance-use disorder in the family is an extremely challenging experience that affects the social, economic, physical, and psychological well-being of the entire family. Therefore, one of the crucial steps in creating a healthy environment for both the individual with substance-use disorder and family members is to identify and prevent such enabling behaviors. To achieve this, it is essential for family members to learn to avoid these behaviors (12). Consequently, freeing family members from codependency is beneficial for the treatment of individuals with substance-use disorders (11). The spouse of a patient diagnosed with alcohol-use disorder preparing an alcohol table at home to prevent the patient from being harmed can be considered as a concrete example of codependency.

Despite the absence of a specific definition for codependency in the International Classification of Diseases 11th Revision (ICD-11) and Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR), the literature has indicated that substance addiction can impact family members as well. It is important to recognize that family members may require professional care not only in terms of their interaction with the addicted individual throughout their life but also because the addicted person significantly alters their relationships and lifestyle with others (13). The severity of addiction can be determined by the biopsychosocial variables of each patient, and this assessment is crucial in terms of the services to be provided to the patient (14, 15). The number of symptoms forming the criteria for addiction diagnosis, the individual’s substance-use characteristics (type of substance used, quantity and duration of substance use), the impact of substance

use on the individual's life, the intensity of substance cravings, and the level of treatment motivation are all considered indicators of addiction severity (16, 17). Individuals with high addiction severity require a more intensive and prolonged treatment strategy. Therefore, identifying and measuring the severity of addiction is a crucial aspect of the treatment process (17).

Addiction is acknowledged as a family disease, and it is believed that the changes and developmental processes in family members directly and indirectly influence the addiction process of individuals with substance-use disorder. However, there is a lack of studies examining the impact of codependency, a familial factor thought to be influential in the continuation of addiction and addiction severity, as well as the relationship between addiction severity and codependency levels. The aim of this study is to examine the codependency level of individuals diagnosed with substance-use disorder according to a number of demographic variables as well as to examine the relationship between addiction severity and codependency level.

Method

Sample

The research was conducted at the adult detoxification center of a mental health hospital in Istanbul. The determination of the sample size was calculated for ANOVA, using the G*Power 3.1.10 program to achieve an acceptable power level. Data were collected from a total of 292 individuals, including 146 from the group of alcohol- and substance-dependent individuals and their families.

Procedure

This research study is descriptive, cross-sectional, and quantitative in design, utilizing a survey model. All individuals diagnosed with alcohol- and substance-use disorder who were receiving inpatient treatment at the adult detoxification center where the research was conducted were invited to participate in the study. Those individuals with psychotic disorders, mental disability, or who were living alone or on the streets were excluded from the study. Individuals over 18 years of age, who had been hospitalized by a specialist physician with a diagnosis of alcohol- or substance-use disorder, who had the cognitive competence to perceive and answer the research questions, and who were not in the stage of intoxication or withdrawal were enrolled in the study with informed consent. Families of individuals who voluntarily agreed to participate were included in the study through weekly visits, awareness meetings, or by special invitation. The convenience sampling method was chosen as the goal was to include anyone willing to participate in the study. The researchers completed the scales, believing they could not be filled out reliably by the participants. Ethical approval and institutional permission were obtained from the relevant authorities to implement the data collection tools used in the research. The data were collected between January and June 2023 following the ethical approval decision obtained from the Bakırköy Dr. Sadi Konuk Training and Research Hospital Clinical Research Ethics Committee on 7th December 2022 (approval number 2002/385).

Data Collection Tools

Sociodemographic Information Form

Two separate sociodemographic information forms were developed by the researchers. The first form is a 10-item questionnaire targeting the individual with alcohol- or substance-use disorder, including information such as age and gender. The second form is a 12-item questionnaire targeting the family member responsible for the individual's admission to the clinic, including information such as age, gender, and education.

Codependency in Addiction Assessment Form (CAAF)

Developed by Şimşek and colleagues in 2020, this scale is designed to assess codependency in individuals close to those with alcohol- and substance-use disorders, exhibiting a five-factor structure. The factors are

"concern for others," "anxiety," "silence," "avoidance," and "guilt." The assessment of codependency consists of 14 predicted items, with responses in a five-point Likert scale format: "never," "rarely," "sometimes," "often," and "almost always." Responses are scored between 0 and 4 points, with a total score ranging from 0 to 56. There are no reverse-coded items in the scoring. The internal consistency Cronbach's alpha coefficient for the entire scale is 0.76. Permission to use the scale was obtained from the developers.

Addiction Profile Index

This scale, developed by Ögel and colleagues in 2015, consists of 22 questions that can assess the risk of addiction in the population where the research is conducted by providing a certain degree of ranking. The Cronbach's alpha coefficient for the entire scale is 0.89. It consists of three factors: "substance use characteristics," "diagnosis," and "impact on life." Response options were created as 0/1/2. Below 1.6 points is categorized as low severity of dependency, between 1.6 and 4.6 points as moderate severity of dependency, and above 4.6 points as high severity of dependency. For academic use of the scale, researchers have statements indicating that they can use it without permission as long as the source is cited.

Statistical Analysis

Descriptive statistics (frequencies, percentages, means, and ranges) were derived using the Statistical Package for the Social Sciences 26.0 (SPSS Inc.; Chicago, IL, USA) program to determine the profiles of the participants. The Kolmogorov–Smirnov normality test, which was performed to determine whether or not the data were normally distributed, showed that the variables had values between $p = .07$ and $p = .20$; therefore, it was assumed that the data were normally distributed with the assumption of $p > 0.05$. Independent sample t-tests were applied for two-group comparisons using parametric tests, and one-way analysis of variance (ANOVA) was used for comparisons involving more than two groups. Post-hoc analysis was performed in case of a significant difference between the groups to determine which group the difference originated from. Pearson correlation analysis was used for relational analyses. The correlation coefficient takes values between -1 and +1, and values between 0.01 and 0.29 indicate a low level of relationship while values between 0.71 and 0.99 indicate a high level of relationship (18). The confidence interval was set at 95%, and statistical significance was defined as $p < 0.05$.

The determination of the sample size was calculated for ANOVA, using the G*Power 3.1.10 program to achieve an acceptable power level. In this context, considering a moderate effect size targeting ($f2 = .25$), an α error probability of 0.05, and a 1-β error probability of 0.95, the required minimum sample size was calculated. For ANOVA analysis, it was deemed sufficient to reach a minimum sample size of 251 for analysis with a power of 0.95 (critical $f = 3.032$) when it includes similar numbers of individuals in more than two groups. Data were collected from a total of 292 individuals, including 146 from the group of alcohol- and substance-dependent individuals and their families.

Results

The data regarding the demographic characteristics of individuals with substance-use disorder who participated in the study are presented in Table 1. Of the 146 participants, 128 (87.7%) were male, while 84 (57.5%) were in the age range of 26–45 years. A total of 86 individuals (58.9%) were primary school graduates, while 11 individuals (7.5%) were university graduates. Among the participants, 70 individuals (62.3%) reported having sought addiction treatment previously, whereas 55 individuals (37.7%) stated that they were undergoing inpatient treatment for the first time.

Demographic data for the families of individuals with substance-use disorder included in the study are provided in Table 2. According to the data, 96 participants (65.8%) were female; 71 participants (48.6%) were aged between 45 and 65 years. A total of 81 individuals (55.5%) were primary school graduates, and 40 individuals (7.5%) were high school graduates. It was observed that 125 individuals (85.6%) were

married. Regarding the degree of proximity to the individual undergoing treatment among the participants, it was expressed that 42 (28.8%) were mothers and 38 (26.0%) were spouses/partners.

Table 1. Socio-demographic characteristics of individuals with substance use disorder

Characteristics		**Number**	**Percentage**
Gender	Female	18	12.3
	Male	128	87.7
Age	18-25	30	20.6
	26-45	84	57.5
	45-65	31	21.2
	66+	1	.7
Education Level	Literate	6	4.1
	Primary School	86	58.9
	High School	43	29.5
	University	11	7.5
Marital Status	Married	58	39.7
	Single	70	47.9
	Divorced/Separated	18	12.4
Children Status	Yes	68	46.6
	No	78	53.4
Number of Children	None	78	53.4
	1-2	45	30.9
	3-4	23	15.7
Number of Siblings	Only Child	2	1.4
	2-4 Siblings	95	65.1
	4+ Siblings	49	33.5
Employment Status	Employed	59	40.4
	Unemployed	87	59.6
Living Situation	Alone	7	4.8
	With Spouse and Children	61	41.8
	With Parents	74	50.7
	With Relatives	4	2.7
Previous Addiction Treatment	Yes	91	62.3
	No	55	37.7
Total		146	100.0

The average scores of the Addiction Profile Index (API) scale, the Codependency in Addiction Assessment Form (CAAF), and their sub-dimensions are provided in Table 3. The reliability coefficient of the API scale is 84.3, with reliability coefficients for the sub-dimensions ranging between 72.5 and 79.1. The reliability coefficient of the CAAF scale is 72.9, while reliability coefficients for the sub-dimensions range between 61.1 and 69.9.

Table 2. Socio-demographic characteristics of families

Characteristics		**Number**	**Percentage**
Gender	Female	96	65.8
	Male	50	34.2
Relationship to Patient	Mother	42	28.8
	Father	28	19.2
	Spouse/Partner	38	26.0
	Sibling	30	20.5
	Child	8	5.5
Age	18-25	9	6.2
	26-45	61	41.8
	45-65	71	48.6
	66+	5	3.4
Education Level	Literate	10	6.8
	Primary School	81	55.5
	High School	40	27.4
	University	15	10.3
Marital Status	Married	125	85.6
	Single	14	9.6
	Divorced/Separated	7	4.8
Children Status	Yes	121	82.9
	No	25	17.1
Number of Children	None	23	15.8
	1-2	52	35.6
	3-4	69	47.3
Number of Siblings	Only Child	5	3.4
	2-4 Siblings	141	96.6
	4+ Siblings	0	0.0
Employment Status	Employed	67	45.9
	Unemployed	79	54.1
Other Dependent in Family	Yes	26	17.8
	No	120	82.2
Number of People in Same Household	2-4 People	99	67.8
	5-7 People	43	29.5
	8+ People	4	2.7
Ooing Patient Treatment	Yes	39	27.7
	No	107	73.3
Total		146	100.0

Table 3. Descriptive statistics of scale and sub-dimensions

Scale	Min	Max	Mean	Std. Deviation	Number of Items	Cronbach's Alpha
API-Total	.42	10.25	6.75	1.72	22	84.2
Substance Use Characteristics	1.00	23.00	6.30	5.09	12	78.8
Diagnosis	.00	8.00	6.01	1.80	4	72.5
Impaction Life	.00	10.00	8.29	2.06	5	79.1
CAAF-Total	5	83	35.93	9.85	14	72.9
Enabling	3	43.00	12.80	3.85	4	64.3
Anxiety	.00	12.00	8.81	2.70	3	66.5
Silence	.00	12.00	5.51	2.86	3	63.7
Avoidance	.00	13.00	4.60	2.42	2	61.1
Guilt	.00	8.00	4.19	2.50	2	69.9

Table 4. Comparison of scores obtained from the Addiction Profile Index (API) Scale and its Sub-dimensions based on gender, parenthood status, and history of addiction treatment

Variables	Groups	N	X	SS	t	sd	p
API General	Female	18	5.91	2.17	>0.05	>0.05	<0.05
	Male	128	6.87	1.63			
	Have Children	66	6.44	1.85	>0.05	>0.05	<0.05
	No Children	78	7.03	1.57			
	Received Treatment	91	7.09	1.56	>0.05	>0.05	<0.05
	No Treatment	55	6.20	1.85			
Substance Use Frequency	Female	18	.39	.36	>0.05	>0.05	>0.05
	Male	128	.56	.47			
	Have Children	66	.46	.45	>0.05	>0.05	<0.05
	No Children	78	.61	.46			
	Received Treatment	91	0.61	0.45	>0.05	>0.05	<0.05
	No Treatment	55	0.41	0.44			
Diagnosis	Female	18	1.36	.50	>0.05	>0.05	>0.05
	Male	128	1.52	.44			
	Have Children	66	142.	.50	>0.05	>0.05	<0.05
	No Children	78	1.57	.39			
	Received Treatment	91	1.56	0.44	>0.05	>0.05	<0.05
	No Treatment	55	1.40	0.45			
Impact on Life	Female	18	1.60	.48	>0.05	>0.05	>0.05
	Male	128	1.66	.40			
	Have Children	66	1.63	.47	>0.05	>0.05	<0.05
	No Children	78	1.68	.36			
	Received Treatment	91	1.71	0.37	>0.05	>0.05	<0.05
	No Treatment	55	1.57	0.46			

Table 4 presents the relationship between the API scale and its sub-dimensions and a number of variables. A t-test was conducted to determine the relationship between the scores obtained from the API scale and its sub-dimensions and variables. When Table 4 is examined, it can be observed that the scores participants obtained from API differed based on gender ($t = -2.253$; $p < .05$). The mean score obtained by male participants from API ($X = 6.87$) was higher than the mean score obtained by female participants ($X = 5.91$). However, no significant difference was found in the scores obtained from API sub-dimensions based on gender. Similarly, it is observed that the scores participants obtained from API differed based on whether they had children or not ($t = -2.090$; $p < .05$). The mean score obtained by participants without children from API ($X = 7.03$) was higher than the mean score obtained by participants with children ($X = 6.44$). Moreover, the scores obtained from API sub-dimensions followed a similar pattern, with participants without children scoring higher than participants with children.

Table 5. Comparison of Co-Dependency Assessment Factor Scale (CAAF) and its subscale scores by gender, parenthood, and presence of chronic illness

Variables		Groups	N	X	SS	t	Sd	P
CAAF Total	Gender	Female	96	2.66	0.59	2.428	144	<0.05
		Male	50	2.37	0.85			
	Parenthood	Yes	123	2.65	0.71	2.978	140	<0.05
		No	23	2.19	0.43			
	Chronic Illness	Yes	39	2.86	0.70	3.199	144	<0.01
		No	107	2.45	0.67			
	Addiction Severity	Moderate	19	2.39	0.65	0.700	144	>0.05
		High	127	2.59	0.70			
Enabling	Gender	Female	96	3.21	0.71	0.154	144	>0.05
		Male	50	3.18	1.32			
	Parenthood	Yes	119	3.27	0.99	1.670	140	>0.05
		No	23	2.91	0.69			
	Chronic Illness	Yes	39	3.52	1.34	2.389	144	<0.05
		No	107	3.08	0.75			
Anxiety	Gender	Female	96	3.03	0.83	1.869	144	>0.05
		Male	50	2.74	1.09			
	Parenthood	Yes	119	3.02	1.00	1.715	140	<0.05
		No	23	2.68	0.69			
	Chronic Illness	Yes	39	3.11	0.84	1.472	144	>0.05
		No	107	2.87	0.91			
Silence	Gender	Female	96	2.04	0.91	3.864	144	<0.05
		Male	50	1.43	0.91			
	Parenthood	Yes	119	1.89	1.00	1.597	140	<0.05
		No	23	1.55	0.64			
	Chronic Illness	Yes	39	2.10	0.95	2.042	144	<0.05
		No	107	1.74	0.94			
Avoidance	Gender	Female	96	2.45	1.12	2.032	144	<0.05
		Male	50	2.01	1.33			
	Parenthood	Yes	119	2.42	1.23	2.364	140	<0.05
		No	23	1.78	0.98			
	Chronic Illness	Yes	39	2.65	1.24	2.125	144	<0.05
		No	107	2.17	1.17			
Guilt	Gender	Female	96	2.16	1.26	0.874	144	<0.05
		Male	50	1.97	1.23			
	Parenthood	Yes	119	2.24	1.19	2.991	140	<0.05
		No	23	1.41	1.37			
	Chronic Illness	Yes	39	2.55	1.20	2.705	140	<0.05
		No	107	1.92	1.23			

The scores participants obtained from API also differed based on whether they had received addiction treatment in the past ($t = 3.096$; $p < .05$). The mean score obtained by participants who had received addiction treatment in the past from API ($X = 7.09$) was higher than the mean score obtained by participants who had not previously received addiction treatment ($X = 6.20$). Participants who had previously received addiction treatment had higher addiction severity than those who had not. The scores obtained from the API sub-dimensions followed a similar pattern, with participants who had received addiction treatment in the past scoring higher than those who had not received addiction treatment. The scores participants obtained from API in general and the sub-dimensions specifically did not differ based on their employment status. The results of the ANOVA test are shown in Table 4. According to the results, the mean scores of the overall API and its sub-dimensions do not differ based on marital status, the number of children, the number of siblings, or living arrangements. However, it was found that individuals who are literate but not attending formal education have lower addiction severity scores compared to those with other levels of education.

The relationship between the Codependency in Addiction Assessment Form (CAAF) and its subscale scores to a range of variables is presented in Table 5. A t-test was conducted to determine the association between the CAAF scale and its subscale scores with different variables. Upon examination of Table 5, it is observed that participants' scores on the CAAF scale differ according to gender ($t = 2.428$; $p < .05$). The mean score for female participants on the CAAF scale ($X = 2.66$) is higher than that of male participants ($X = 2.37$). Female participants also have higher mean scores on the "silence," "avoidance," and "guilt" subscales of the CAAF scale. Additionally, it is noted that participants' scores on the CAAF scale differ depending on whether they have children or not ($t = 2.978$; $p < .05$). Participants with children have a higher mean score on the CAAF scale ($X = 2.65$) compared to those without children ($X = 2.19$). Except for "enabling," participants with children have higher mean scores on all other subscales, suggesting that individuals with children have higher levels of co-dependency. Furthermore, the scores on the CAAF scale vary based on whether participants have a chronic illness ($t = 3.199$; $p < .05$). Participants with chronic illness have a higher mean score on the CAAF scale ($X = 2.86$) compared to those without chronic illness ($X = 2.45$). It was found that individuals with chronic illness have higher mean scores on all subscales except for the "anxiety" subscale. The scores on the CAAF scale do not differ based on participants' employment status ($t = -1.183$; $p > .05$) or whether there are other dependent individuals in the family ($t = -,926$; $p > .05$). Moreover, the t-test examining whether the scores on the CAAF scale differ based on the severity of addiction shows no significant difference ($t = -,700$; $p > 0.05$). Thus, it is concluded that the severity of addiction does not correlate with the level of codependency among individuals living together.

Table 6. Analysis of Variance (ANOVA) table for comparing the mean scores of the CAAF Scale with marital status, age, and number of siblings variables

Variable	Source	Sum of Squares Total	Sd	Mean Square	F	P
Marital Status	Inter-group	844.623	2	422.311	4.563	<0.05
	Intra-group	13233.822	143	92.544		
	Total	14078.445	145			
Education Level	Inter-group	5.910	4	1.477	3.160	<0.05
	Intra-group	65.919	141	.468		
	Total	71.829	145			
Age	Inter-group	1.261	3	.420	.846	>0.05
	Intra-group	70.567	142	.497		
	Total	71.829	145			
Number of Siblings	Inter-group	529.303	3	176.434	1.849	>0.05
	Intra-group	13549.142	142	95.416		
	Total	14078.445	145			

The ANOVA test conducted to compare the mean scores of the CAAF scale across various variables is presented in Table 6. When Table 6 is examined, it is found that there is no significant difference in the level of codependency based on age and number of siblings ($p > .05$), while there is a statistically significant difference between marital status and education level ($p < .05$). a post-hoc Tukey test, conducted to determine which groups differ, revealed that divorced individuals exhibit higher levels of codependency compared to singles, and primary school graduates have higher levels of codependency compared to university graduates.

To determine the relationship between addiction severity and codependency, Pearson correlation analysis was employed, and the findings are presented in Table 7. In the correlation analysis conducted to determine the relationship between addiction severity and codependency, no significant relationship was found. Upon examining the relationship between addiction severity and the sub-scale of the codependency scale, "silence," a weak positive correlation was observed.

Table 7. Pearson correlation analysis on the relationship between addiction severity and codependency

Variable		1	2	3	4	5	6	7	8	9	10
API Total	r	1									
	p										
CAAF Total	r	.065	1								
	p	.434									
SUC	r	.545**	.199*	1							
	p	.000	.016								
Diagnosis	r	.805*	.078	.379*	1						
	p	.000	.347	.000							
IL	r	.723*	.010	.283**	.583*	1					
	p	.000	.904	.001	.000						
Enabling	r	.025	.768*	.126	-.004	-.004	1				
	p	.768	.000	.130	.966	.961					
Anxiety	r	.049	.639*	.138	.056	-.004	.389*	1			
	p	.560	.000	.096	.505	.964	.000				
Silence	r	.180*	.698*	.216*	.213*	.080	.382	.200	1		
	p	.030	.000	.009	.010	.335	.000	.016			
Avoidance	r	-.087	.736*	.105	-.021	-.038	.464*	.387	.472	1	
	p	.298	.000	.205	.803	.653	.000	.000	.000		
Guilt	r	.044	.548*	.089	.030	-.006	.175*	.229	.340	.255*	1
	p	.599	.000	.287	.720	.946	.035	.005	.000	.002	

* The correlation is significant at the 0.05 leve; (API: Addiction Profile Index, CAAF: Codependency in Addiction Assessment Form, SUC: Substance Use Characteristics, IL: Impaction Life

Discussion

Family, which is one of the most important factors affecting addiction, has an important role in the onset and continuation of alcohol substance use disorder. At the same time, alcohol substance use of individuals can also negatively affect the family (19). Co-dependence, which is one of these critical situations that families experience in the addiction process, leads to the continuation of addiction rather than its reduction (20).

In contrast to the findings of this study, Kaplan and Özbaran (2024) found that there was a significant positive correlation between the severity of addiction and the level of codependency in families (19). Similarly,

Harkness et al. (2001) found that codependency was an important factor in the families of people with alcohol- or substance-use disorder (21). In addition, Rusnakova's (2014) qualitative study with the families of people with alcohol-use disorder showed that focusing on the experiences and behaviors of codependent family members was effective in influencing the alcohol-use behaviors of people with alcohol-use disorder (22). Çakır et al. (2022) emphasized in their study that the family factor is effective at every stage of addiction and that family experiences, such as the development of codependency, come to the fore in the addiction process (20). It is emphasized that families should be involved in the addiction treatment process and that the family's compliance with treatment should be supported.

Vederhus et al. (2019) assessed the level of codependency using different assessment tools than the Codependency in Addiction Assessment Form (CAAF) and found increased dysfunction and decreased quality of life in families with high levels of codependency (23). Pant et al. (2022) found that most families of dependent individuals had severe codependency (50%) (24). Although the results of the study were limited to correlational rather than progressional analyses, it does point to the family as an important factor in the development of codependency (6).

In this study, contrary to the findings in the literature, no relationship was found between the severity of addiction of individuals with alcohol- or substance-use disorder and the codependency levels of family members. When the sociodemographic characteristics of the participants are analyzed, it is seen that the majority of the individuals with substance-use disorder are single, and the degree of closeness of the participants to the person who is in treatment is the mother in the majority of cases. It can be considered that there is a difference in terms of the participation of families in treatment according to the degree of closeness and that mothers may be more patient toward the process and, consequently, the addicted individual is impacted by this.

Makvand et al. (2009), in a study conducted with spouses of opiate users, found that codependence symptoms in spouses were observed together with the anxiety factor (25). A qualitative study using in-depth interviews with relatives of alcoholics showed that codependency was shaped around the concepts of "denial, anger, savior, grief, and hatred" (22, 26). In Potter-Efron's (1989) study, factors such as fear, shame, guilt, hopelessness, and denial, and in Fischer and Spann's (1991) study factors such as difficulty in self-expression and focusing too much on others other than oneself were shown to be prominent (26). It can be said that the findings of Rusnakova's (2014) study are similar to the "avoidance" factor, and the findings of Fischer and Spann's (1991) study are similar to the "enabling" factor (22, 26). In this study, the finding that the "silence" factor—which includes questions about giving the relative money when they know they are going to buy alcohol or other substances, cleaning up when the relative makes a mess, and turning a blind eye when the relative uses at home—has a weak positive relationship with addiction severity is interpreted as meaning that the level of endurance of life events that families are exposed to may increase as the severity of addiction increases.

It has been reported in the literature that many female spouses are negatively affected by the consequences of a substance-use disorder (11). Sabater found that spouses of people with alcohol-use disorders were more codependent than women who were not married to people with alcohol-use disorders (27). Pant et al also found higher levels of codependency among women (spouses) (24). In the study by Salonia et al. which assessed the degree of codependence of spouses of drug users and the severity of addiction among drug users, it was found that all the spouses participating in the study were women, had co-dependence, and 60% of them had a higher degree of codependence (12).

Similarly, studies show that codependency is more common in the wives of men with alcohol- and substance-use disorders (26, 28). In the study by Şimşek et al. (2020), it was found that the majority of participants were parents of people with alcohol- and substance-use disorders (26). When considering the degree of closeness to the person with the substance-use disorder, the fact that the majority of participants in this study were the parents of the person with the disorder is similar to the findings of the study by Şimşek et al. (2020). This situation limits the generalization of whether codependency is more common among parents or spouses and also suggests that this difference is due to the profile of applicants at the center

where the study was conducted. In addition, contrary to the literature, this study found higher levels of codependency among divorced individuals. It can be said that the weakened social support systems of individuals after divorce are effective in increasing the level of codependency.

Studies show that codependency often develops among families, especially spouses, that codependency is a contributing factor to the maintenance of substance-use behavior in addicted individuals (22), and that family members of addicted individuals should be knowledgeable about addiction (12). In a study evaluating the effectiveness of family support therapy in treating codependency, it was reported that such support groups are an important educational tool that provides the family with an opportunity to reflect on and change codependency attitudes and behaviors, and that professionals working in this field can make more effective interventions if they are trained in codependency (29).

Looking at the literature, some studies show that women develop codependency more than men (26, 30,31,32). The findings of Sabater, Pant et al., and Salonia et al. regarding the high level of codependency among women are similar to the findings of our study (12, 24, 27). Thus, the results of the present study seem to be consistent with the literature. In our study, the majority of the sample consists of women. The fact that the number of male relatives of people with substance-use disorders is rather low limits the evaluation of the concept of codependence in terms of gender. However, our findings suggest that the high levels of codependency among women may be related to a cultural belief that men should be the breadwinners in the family and that the responsibility for caring for the dependent individual is placed on women.

In the present study, it was found that those who had children, those who had a chronic illness, and those in the 45 to 65 years age group had higher levels of codependency. No previous study was found that used the Codependency in the Addiction Assessment Form (CAFF) to compare individuals having or not having children, having or not having a chronic disease, or by age group. In this study, the finding that codependency levels were higher in the 45 to 65 years age group is thought to be influenced by the fact that family members' hopes that the person with a substance-use disorder will "kick the habit" at a younger age and return to a normal life one day become exhausted as they get older. The finding that the level of codependency was higher among those with children and chronic illness may be related to the increasing caring responsibilities in families and the decreasing ability of families to maintain care for the person with a substance-use disorder as the persistence associated with the chronic illness decreases.

The limitations of this study include the small sample size, the fact that the study was conducted in a single center, and the unequal distributions of gender and proximity of the participants' family members. In future studies, it is planned to study with a larger sample size, to repeat the study with families who come to outpatient clinic follow-up and who have just learned about alcohol- and substance-use, and to conduct different studies with participants from different centers and with a similar number of participants according to the gender and proximity of the participants' family members. The strengths of this study include the fact that it was conducted in a field where the number of studies is relatively small, that it included both addicted individuals and their families in the same study, and that the sample was large with addicts who received inpatient treatment. However, the small number of similar studies made it difficult to elaborate the discussion section further.

As a result of this study, it was concluded that men, those without children, and those who had previously received addiction treatment had higher levels of addiction severity, while women, those with children, those with chronic illnesses, those with primary school education, those who were divorced, and those aged 45–65 had higher levels of codependence. No relationship was found between the severity of addiction and the level of codependency. A positive correlation was found between the severity of codependency and the "silence" subscale of codependency. The analysis of the sociodemographic variables of the families show that preventive and effective measures should be taken for the problems of families of individuals with alcohol- and substance-use disorders and that appropriate care needs to be provided. It is thought that treatment interventions for families will reduce the impact of the burden of care caused by codependency on the families. It also supports the importance and necessity of including other family members, such as

spouses, children, or parents of people with substance-use disorders in treatment plans, regardless of their willingness to change and recover from codependence. It would also be useful to conduct further research on family members with codependency problems. In this context, the study needs to be repeated with a larger sample in order to generalize the results.

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