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THE CINDERELLA COMPLEX, ADVERSE CHILDHOOD EXPERIENCES, AND THE MEANING AND PURPOSE OF LIFE IN WOMEN: A WEB-BASED CROSS-SECTIONAL STUDY

Habibe Bay Özçalık, Ayşe Nur Ataş, and Sema Dereli Yılmaz

Abstract: This study aimed to investigate the correlations between the Cinderella complex — the desire in a woman sto be cared for and protected by another person, particularly a man — and each of two factors: adverse childhood experiences (ACEs) and the meaning and purpose of life. Designed as web-based cross-sectional research, the study was conducted from March 2022 to June 2022. The data were collected via social media platforms, with 356 women participating. The instruments used were a personal information form, the Cinderella Complex Scale, the Turkish ACE-TR questionnaire, and the Meaning and Purpose of Life Scale. Means of scores obtained by participant women from the Cinderella Complex Scale, the ACE-TR questionnaire, and the Meaning and Purpose of Life Scale were successively 66.37±22.77, 1.28±1.71, and 65.13±10.35 points. Women's average scores on the Cinderella Complex Scale and ACE-TR Scale were low, and their average scores on the Meaning and Purpose of Life Scale were high. Participants' descriptive characteristics — education level, employment status, spouse's education level, and family type — affected their Cinderella Complex Scale scores, while their ACE-TR scores had no statistically significant effect. There is a significant relationship between scores on the Cinderella Complex Scale and scores on the Meaning and Purpose of Life Scale. To avoid developing a Cinderella complex, it is recommended that women adopt a wider perspective on life, continually upgrade their skills, become more independent in their thoughts and actions, and create a personal space where they can spend quality time in order to find more meaning in life.

Keywords: woman, Cinderella complex, childhood experiences, meaning of life, purpose of life

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Data Sharing

The data that support the findings of this study are available from the corresponding author upon reasonable request.

The famous European folk tale, Cinderella, is a variant of a tale known around the world in which the common element is a heroine of humble birth who is rescued by a prince from her evil stepmother and stepsisters. The notion of a "Cinderella complex" was first cited by Colette Dowling (1981) in her book, *The Cinderella complex: Women's hidden fear of independence* and further explored by Joseph and colleagues (2021), who undertook a meta-analytic review of six research studies. Dowling defined the Cinderella complex as a woman's psychological dependence: the desire to be cared for and protected by another person, particularly a man. When individuals are taught that womanhood and dependence are inseparably connected, it paves the way for the creation of a society where women are not equal to men (Chastine & Darmasetiawan, 2019; Fatimah & Istiani, 2020; Joseph et al., 2021; Saha & Safri, 2016). In other words, the Cinderella complex is a patriarchal weapon that produces and nurtures psychological dependence in women (Joseph et al., 2021). The fairy tale of Cinderella provides women with a role model who needs to be rescued by a man to have a happy, respectful, and beautiful life. Although some versions state otherwise (Tzitzikas & Marketakis, 2018; Bernier, 2022), ın many versions of the story Cinderella bears no grudge despite all the wrongs committed against her; the lesson is that if a woman is patient and well-meaning in the face of all wrongdoing she will be rewarded by a man coming to save her in the end. This is the education that young women receive on the topic of dependence (Demir et al., 2021; Joseph et al., 2021; Saha & Safri, 2016; Yıldırım, 2018). In their study investigating the effects of the Cinderella complex, Chastine and Darmasetiawan (2019) concluded that the Cinderella complex may cause women to become addicted to dependence, to stay in abusive relationships, and to give up their careers (Chastine & Darmasetiawan, 2019).

Dowling (1981) stated that the childhood period is the time when a Cinderella complex begins to manifest, since girls' interactions with their parents during this period will shape their future (Vashisht et al., 2022). However, even if it is thought that dependence problems in women can stem from overprotective parents (Joseph et al., 2021; Saha & Safri, 2016), the literature also emphasizes that being socially conditioned is important to the development of a Cinderella complex in women (Vashisht et al., 2022). Therefore, the evaluation of the Cinderella complex in association with women's childhood experiences can be of importance.

One of the factors that is significant to the development of a Cinderella complex in a woman is whether she feels that her life has meaning (Vashisht et al., 2022). The feeling that there is a meaning or purpose to an individual's life (Ulu, 2018) can be a primary source of strength (Kim et al., 2022; Upenieks, 2022). Studies have shown that individuals with a strong feeling of purpose are apt to find more happiness, self-esteem, and meaning, and to cope more comfortably with stressful and challenging conditions in life, than those who lack such a feeling (Goodman et al., 2018; Sutin et al., 2020)

We therefore posited that a woman with meaning and purpose in her life is likely to live more happily and with higher self-esteem than one without them, and that adverse childhood experiences

(ACEs) could limit her ability to have healthy societal relationships without dependence problems. In this context, it is considered that addressing the ways that the Cinderella complex is associated with women's understanding of the meaning of life and the number of ACEs they have endured is essential to the improvement of their overall physical and psychological health.

Research Questions

This study asked the following research questions:

1. What is the relationship between the Cinderella complex and two factors: ACEs, and meaning and purpose in women's lives?
2. What factors link the Cinderella complex, ACEs, and the meaning and purpose of life in women's lives?

Method

Study Design

This study is cross-sectional and correlational. The research was conducted from March 2022 to June 2022. The survey was created using the online survey system Surveey.com and distributed via social media platforms (Instagram, Twitter, Facebook, etc.), WhatsApp, and email. In order to control multiple participation, internet protocol (IP) addresses were audited by Surveey.com.

Sample

Using a one-point deviation from a known mean of the Meaning and Purpose of Life Scale scores (61.5±6.29 points), a margin of error of 0.05, an effect size of 0.15, and a power of 90%, the required sample size for the research was calculated to be 341 participants by means of the G*Power 3.1.9.2 software (Ünlü et al., 2021). The research was completed with 356 women who were aged 18 years or above, were literate, could communicate in Turkish, and volunteered to participate in the study.

Measures

The research data were collected with a personal information form, the Cinderella Complex Scale (CSS), the ACE-TR questionnaire, and the Meaning and Purpose of Life Scale (MPLS).

The Cinderella Complex Scale: The purpose of the CSS is to identify women who have a fear of being independent. Demir et al. (2021) developed the CSS by designing it as a five-point Likert scale with 15 items. The CSS comprises three factors: *sexist attitude, escape from responsibility*, and *quitting career*. It has no reverse-scored items. The minimum and maximum scores obtainable from the CSS are 25 and 125 points, with a higher score indicating a higher degree of Cinderella complex. Cronbach's alpha reliability coefficient is .94 (Demir et al., 2021).

The ACE-TR questionnaire: The ACE-TR questionnaire, which was developed in Turkish by Gündüz et al. (2018) and tested by them for validity and reliability, examines an individual's

adverse experiences before the age of 18. Designed as a self-report measure, the ACE-TR has 10 items, and its items are answered dichotomously — either yes or no. The minimum and maximum scores obtainable from the ACE-TR, which has no cut-off point, are 0 and 10 points. A larger ACE-TR score points to exposure to more childhood traumas; its Cronbach's alpha reliability coefficient is .74 (Gündüz et al., 2018).

The Meaning and Purpose of Life Scale: The MPLS, which was developed by Aydın et al. in 2015, measures the meaning that individuals find in life. Composed of 17 items, the MPLS has two sub-scales: *the meaning and purpose of life* and *the lack of meaning and purpose in life*. The minimum and maximum scores obtainable from the MPLS, which employs a five-point Likert scale, are 17 and 85 points. A higher MPLS score shows that the respondent imputes a greater degree of meaning to life; its Cronbach's alpha reliability coefficient is .91 (Aydın et al., 2015).

Data Analysis

The research data were analyzed with the Statistical Package for the Social Sciences (SPSS) 25.0. In order to test the assumption of normal distribution, skewness and kurtosis values were examined. As these values were found to be acceptable (between -1.5 and +1.5), parametric tests were used in the analyses (Tabachnick & Fidell, 2013). Parametric tests, namely, the independent samples *t*-test, one-way analysis of variance (ANOVA), linear regression, and Tukey's test, were used in the evaluation of research data, as well as the number and percentage distributions, means, and standard deviations. Statistical significance was identified if the *p*-value was below .05.

Ethics

Ethical endorsement for the research was obtained from the Non-Invasive Clinical Trials Ethics Committee of Selcuk University in Turkey (No. 2022/192). Participants were not required to type personally identifiable information on the survey form. Information about the study was presented on the first page of the survey along with an informed consent form that all participants agreed to.

Findings

Upon review of the means of scores obtained by participants from each scale used in the study, it was observed that the mean CSS, ACE-TR, and MPLS scores were successively 66.37±22.77, 1.28±1.71, and 65.13±10.35 points (Table 1). Women's average scores on the Cinderella Complex Scale and ACE-TR Scale were low, and their average scores on the Meaning and Purpose of Life Scale were high.

Table 1. *CSS, ACE-TR, and MPLS Mean Scores, With Cronbach's Alpha Coefficients*

Scale	*M*	*SD*	Min–Max	Cronbach's α
Cinderella Complex Scale	66.37	22.77	25–125	.955
ACE-TR questionnaire	1.28	1.71	0–10	.738
Meaning and Purpose of Life Scale	65.13	10.35	17–85	.875

Table 2. *Participants' Descriptive Characteristics and Comparisons of CSS, ACE-TR, and MPLS Mean Scores by Characteristic*

Characteristic	*n*	%	CSS factor: *Escape from responsibility* *M±SD*	CSS factor: *Quitting career* *Mean±SD*	CSS factor: *Sexist attitude* *Mean±SD*	CSS *Mean±SD*	ACE-TR *Mean±SD*	MPLS sub-scale: *Has meaning and purpose in life* *Mean±SD*	MPLS sub-scale: *Lack of meaning and purpose in life* *Mean±SD*	MPLS *Mean±SD*
Age group										
18-27 years	118	33.1	20.21±8.14	15.78±6.72	30.02±12.50	66.02±26.15	1.10±1.59	43.76±7.26	22.46±5.01	66.22±10.28
28-37 years	122	34.3	20.90±6.88	14.97±6.03	30.90±10.97	66.78±22.18	1.09±1.57	42.40±7.53	21.77±5.60	64.17±10.59
38-47 years	72	20.2	19.56±5.70	15.00±5.73	30.06±9.17	64.63±19.29	1.56±1.79	43.83±6.59	21.47±5.28	65.30±9.86
48-57 years	30	8.4	20.10±5.93	14.80±5.77	27.83±10.37	62.73±19.55	1.93±2.0	43.93±8.36	21.06±4.47	65.00±11.12
58-67 years	10	2.8	23.20±4.56	19.88±5.51	36.90±5.34	79.90±14.25	2.00±2.30	45.20±4.51	19.80±5.61	65.00±7.46
68 years or above	4	1.1	29.75±2.21	19.75±5.90	39.00±8.90	88.50±15.19	1.25±1.71	36.00±14.53	24.50±5.32	60.50±15.75
F			2.104	1.732	1.601	1.729	2.234	1.494	1.043	0.637
p			.064	.127	.159	.127	.051	.191	.392	.672
Education level										
Literate/Primary school	162	45.5	22.22±6.58	17.08±6.19	33.16±10.54	72.46±21.56	1.38±1.75	41.93±8.6	21.19±5.17	63.13±10.97
High school	89	25.0	21.58±6.76	16.48±5.92	32.96±10.51	71.03±21.52	1.38±1.87	43.38±5.84	22.05±5.08	65.43±9.32
University	105	29.5	16.91±6.64	11.97±5.04	24.12±9.73	53.00±20.31	1.05±1.46	45.25±5.95	22.70±5.44	67.96±9.57
F			21.936	26.589	28.038	29.950	1.375	6.637	2.725	7.215
p			< .001	< .001	< .001	< .001	.254	.001	.067	.001
Marital status										
Single	36	10.1	19.58±6.95	13.11±5.19	26.13±10.23	58.83±20.79	2.02±1.85	42.16±7.72	19.38±5.87	61.55±12.41
Married	320	89.9	20.60±7.04	15.68±6.27	30.93±11.06	67.21±22.85	1.20±1.67	43.40±7.35	22.13±5.12	65.53±10.03
p			.410	.018	.014	.036	.006	.342	.003	.071
Employment										
Working	88	24.7	16.61±5.52	12.44±4.59	24.54±7.79	53.60±16.34	1.30±1.71	44.11±6.59	21.38±5.65	65.50±10.48
Not working	268	75.3	21.77±7.00	16.40±6.37	32.38±11.30	70.56±23.04	1.28±1.71	43.00±7.62	22.01±5.12	65.01±10.32
p			< .001	< .001	< .001	< .001	.912	.222	.335	.704
Has a child										
Yes	277	77.8	20.97±6.69	15.80±6.14	31.21±10.54	67.99±21.80	1.21±1.64	43.05±7.68	21.88±5.24	64.93±10.40
No	79	22.2	18.83±7.91	14.10±6.30	27.74±12.39	60.68±25.19	1.54±1.90	44.07±6.24	21.75±5.35	65.83±10.20
p			.031	.032	.025	.012	.133	.277	.853	.496
Spouse's age group										
18-27 years	76	21.3		15.88±6.60	29.89±13.09	65.63±2723	1.18±1.71	43.77±7.00	22.28±5.49	66.06±10.61
28-37 years	132	37.1		14.65±6.32	30.06±11.30	65.32±23.12	1.03±1.53	42.44±7.43	22.30±5.06	64.75±10.01
38-47 years	77	21.6		16.10±5.72	32.05±9.07	69.03±19.04	1.45±1.80	43.48±7.76	21.35±6.35	64.83±10.99
48-57 years	51	14.3		14.64±5.79	28.66±10.07	62.45±20.57	1.47±1.78	44.29±6.57	21.11±5.14	65.41±9.83
58-67 years	13	3.7		17.61±6.38	31.92±11.30	73.15±19.23	2.46±1.98	44.92±7.18	20.61±5.82	65.53±10.98
68 years or above	7	2.0		19.00±6.21	36.28±7.29	80.71±16.65	2.00±2.00	40.85±12.06	22.00±5.68	62.85±11.92
F			1.782	1.626	1.096	1.379	2.431	0.885	0.780	0.249
p			.116	.152	.362	.232	.305	.492	.565	.940
Spouse's employment										
Working	318	89.3	20.15±7.05	15.24±6.18	30.19±11.04	65.59±22.81	1.16±1.61	43.52±6.92	21.98±5.21	65.51±9.86
Not working	38	10.7	23.39±6.20	16.94±6.32	32.52±11.10	72.86±21.57	2.28±2.16	41.18±10.40	20.78±5.60	61.97±13.55
p			.007	.110	.221	.063	.004	.183	.186	.126

Characteristic	*n*	%	CSS factor: *Escape from responsibility* *M±SD*	CSS factor: *Quitting career* *Mean±SD*	CSS factor: *Sexist attitude* *Mean±SD*	CSS *Mean±SD*	ACE-TR *Mean±SD*	MPLS sub-scale: *Has meaning and purpose in life* *Mean±SD*	MPLS sub-scale: *Lack of meaning and purpose in life* *Mean±SD*	MPLS *Mean±SD*
Spouse's education level										
Literate/Primary school	161	45.2	22.16±6.88	16.80±6.29	33.08±10.81	72.06±22.40	1.43±1.84	42.30±8.30	20.99±5.38	63.29±10.86
High school	97	27.2	20.16±6.72	15.87±5.92	31.06±10.91	67.10±22.06	1.25±1.73	43.41±7.47	21.94±4.66	66.36±10.57
University	98	27.6	18.09±6.87	12.70±5.52	25.50±10.01	56.29±20.76	1.08±1.41	44.74±5.20	22.19±5.42	66.93±8.75
F			10.979	14.676	15.739	15.903	1.323	3.387	4.543	4.801
p			< .001	< .001	< .001	< .001	.268	.035	.011	.009
Family type										
Nuclear family	317	89.0	20.13±6.86	15.18±6.09	29.81±10.78	65.14±22.22	1.27±1.65	43.18±7.49	21.91±5.25	65.10±10.36
Extended family	39	11.0	23.43±7.68	17.33±6.93	35.56±12.10	76.33±24.91	1.41±2.11	44.00±6.57	21.35±5.32	65.35±10.36
p			.006	.042	.002	.004	.641	.519	.532	.886
Income level										
Income < expenses	56	15.7	21.05±5.68	15.44±6.25	30.46±39.30	66.96±18.87	1.83±1.70	43.19±7.60	20.50±5.22	63.69±10.35
Income = expenses	266	74.7	20.61±7.17	15.54±6.21	30.63±11.25	66.79±23.19	1.25±1.73	43.08±7.18	21.89±5.25	64.97±10.14
Income > expenses	34	9.6	18.67±7.72	14.44±6.38	28.94±12.34	62.05±25.38	0.67±1.27	44.91±8.59	23.85±4.87	23.82±4.87
F			1.357	0.474	0.352	0.674	5.261	0.923	4.321	2.651
p			.259	.623	.703	.510	.006	.398	.054	.072
Smokes cigarettes										
Yes	53	14.9	21.50±8.54	15.33±6.60	30.94±12.88	67.79±26.77	1.77±1.82	42.88±9.22	20.81±6.01	63.69±12.58
No	303	85.1	20.32±6.72	15.43±6.15	30.35±10.73	66.12±22.03	1.20±1.67	43.34±7.03	22.03±5.10	65.38±9.91
p			.341	.915	.756	.669	.038	.677	.166	.357
Consumes alcohol										
Yes	10	2.8	14.20±6.92	12.80±7.19	22.70±12.36	49.70±25.87	3.40±1.57	41.80±4.46	17.40±6.70	59.20±9.84
No	346	97.2	20.68±6.95	15.50±6.18	30.67±10.96	66.85±22.53	1.22±1.67	43.32±7.45	21.98±5.16	65.30±10.33
p			.004	.176	.024	.019	< .001	.522	.006	.066
Spouse smokes cigarettes										
Yes	187	52.5	20.72±7.16	15.62±6.38	30.78±11.46	67.12±23.56	1.21±1.59	43.16±6.47	21.62±5.20	64.78±9.76
No	169	47.5	20.25±6.88	15.20±6.03	30.07±10.62	65.53±21.86	1.36±1.83	43.40±8.31	22.11±5.32	65.52±10.98
p			.532	.532	.543	.510	.417	.753	.384	.507
Spouse consumes alcohol										
Yes	25	7.0	17.88±8.37	14.16±7.31	27.60±12.41	59.64±26.76	1.36±1.93	43.84±8.28	21.88±6.19	65.72±13.05
No	331	93.0	20.69±6.89	15.51±6.12	30.66±10.94	68.87±22.40	1.28±1.69	43.23±7.33	21.85±5.19	65.09±10.14
p			.053	.292	.182	.126	.831	.694	.982	.815
Chronic disease										
Yes	55	15.4	20.89±6.29	15.25±5.48	30.18±8.20	66.32±18.08	1.65±1.91	44.10±7.27	20.76±5.35	64.87±10.80
No	301	84.6	20.42±7.16	15.45±6.34	30.49±11.51	66.37±23.55	1.22±1.66	43.12±7.41	22.05±5.23	65.18±10.28
p			.654	.826	.809	.985	.085	.365	.094	.839
Uses drugs constantly										
Yes	62	17.4	20.12±6.95	14.25±5.92	28.58±10.41	62.69±21.35	1.91±1.85	44.38±7.38	20.67±5.47	65.06±10.77
No	294	82.6	20.57±7.05	15.97±6.25	30.84±11.17	67.08±23.02	1.15±1.65	43.04±7.38	22.10±5.19	65.14±10.28
p			.648	.104	.144	.196	.001	.194	.052	.953
Total	356	100								

Table 2 displays the participants' descriptive characteristics and provides comparisons of the means of their scale scores for each characteristic. For the variables of the woman's education level and spouse's education level, statistically significant differences were identified in the participants' mean scores from the CSS and its factors ($p < .001$). In post hoc analysis of the education level, the statistically significant differences were found to stem from the group of women with university education; thus, as education level increased, Cinderella complex level decreased. Regarding the variable of marital status, there were statistically significant differences in participants' mean scores from the CSS and its factors of *quitting career* and *sexist attitude*. Married women had higher Cinderella complex levels than their unmarried peers. Working women obtained lower mean scores from the CSS and its factors than women who were not working, and these differences were statistically significant. Women who had children and women who had extended families obtained higher mean scores from the CSS and its factors than did other groups of women. With regard to alcohol consumption status, there were statistically significant differences in participants' mean scores from the CSS and its factors of escape from responsibility and sexist attitude. CSS scores are observed to be higher in women who do not consume alcohol.

Table 2 shows that single women obtained a higher mean score from the ACE-TR than married women, and this difference was statistically significant. Likewise, it was found that women whose spouses were not working had a higher mean score from the ACE-TR than women whose spouses were working, and this difference was again statistically significant. Comparing the means of participants' ACE-TR scores for the variable of income level also revealed a statistically significant difference. Post hoc analysis showed that this stemmed from the group of women with incomes above their expenses, a group who also had fewer ACEs. With regard to cigarette smoking, alcohol consumption, and constant drug use, statistically significant differences were identified in the means of the participants' ACE-TR scores, with an increase in the ACE-TR score indicating that the participant had suffered a greater number of adverse childhood experiences.

Table 2 shows that statistically significant differences were found when comparing the means of women's overall MPLS and MPLS sub-scale scores in regard to the variables of education level and spouse's education level. Post hoc analysis showed that the statistically significant differences stemmed from two groups: women with university education and those with university graduate spouses. It can be said that, as the education level increased, women found more meaning and purpose in life. Married women obtained a higher mean score from the MPLS *lack of meaning and purpose in life* sub-scale than single women; this difference between the two groups was statistically significant. Likewise, it was found that women not consuming alcohol obtained a higher mean score from the MPLS *lack of meaning and purpose in life* sub-scale than women consuming alcohol, and this difference was again statistically significant.

Table 3 shows the results of the multiple linear regression analysis conducted to identify the factors affecting the means of participants' CSS, ACE-TR, and MPLS scores. According to Model 1, which concerned the effect of ACEs on overall CSS and CSS factor scores, the predictor variable of ACEs had no statistically significant effect on the predicted variable of Cinderella complex

($p > .05$). In Model 2, which concerned the effect of the meaning and purpose of life on overall CSS and CSS factor scores, the predictor variable of the meaning and purpose of life had a statistically significant effect on the predicted variable of Cinderella complex, accounting for 7.8% of the variance in Cinderella complex ($p < .001$, $R^2 = .078$). Model 3, which looked at the effects of education level, marital and employment status, status of having a child, spouse's employment

Table 3. *Results of the Multiple Linear Regression Analysis Conducted to Identify the Factors Affecting the Means of Women's CSS, ACE-TR, and MPLS Scores*

Model	*β*	*t*	*p*	%95 CI
Model 1				
Escape from responsibility factor	-0.170	-1.063	.288	[-0.118, 0.035]
Quitting career factor	-0.083	-0.565	.573	[-0.102, 0.057]
Sexist attitude factor	0.212	0.938	.349	[-0.036, 0.102]
CSS	0.192	.763	.446	[-0.023, 0.052]
Model 2				
Escape from responsibility factor	0.013	0.136	.892	[-0.258, 0.296]
Quitting career factor	-0.399	-4.362	< .001*	[-0.965, -0.365]
Sexist attitude factor	0.151	1.286	.199	[-0.075, 0.358]
CSS	-0.200	-3.831	< .001*	[-0.137, -0.044]
Model 3				
Woman's education level	-0.334	-6.645	< .001*	[-11.548, -6.274]
Marital status	0.062	1.122	.263	[-3.507, 12.814]
Woman's employment status	0.267	5.277	< .001*	[8.839, 19.344]
Status of having a child	-0.020	-0.379	.705	[-6.781, 4.591]
Spouse's employment status	0.092	1.788	.075	[-0.683, 14.294]
Spouse's education level	-0.175	-3.335	.001*	[-7.572, -1.954]
Family type	0.103	2.059	.040*	[0.334, 14.622]
Woman's status of alcohol consumption	0.092	1.832	.068	[-0.932, 26.361]
Model 4				
Marital status	-0.043	-0.796	.427	[-0.846, 0.359]
Spouse's employment status	0.132	2.451	.015*	[0.145, 1.321]
Income level	-0.122	-2.321	.019*	[-0.764, -0.068]
Woman's status of cigarette smoking	-0.042	-0.773	.440	[-0.711, 0.310]
Woman's status of alcohol consumption	-.0167	-3.121	.002*	[-2.819, -0.640]
Status of constantly using drugs	-0.099	-1.877	.061	[-0.911, 0.021]
Model 5				
Woman's education level	0.196	2.937	.004*	[0.789, 3.984]
Marital status	0.128	2.422	.016*	[0.828, 7.974]
Woman's status of alcohol consumption	0.094	1.795	.074	[-0.565, 12.353]
Spouse's education level	0.042	0.636	.525	[-1.096, 2.143]

Note. Model 1: The effect of ACEs on women's overall CSS and CSS factor scores.
Model 2: The effect of the meaning and purpose of life on women's overall CSS and CSS factor scores.
Model 3: Effects of education level, marital status, employment status, status of having a child, spouse's employment status, spouse's education level, family type, and alcohol consumption status on women's overall CSS and CSS factor scores.
Model 4: Effects of marital status, spouse's employment status, income level, cigarette smoking status, alcohol consumption status, and status of constantly using drugs on women's ACE-TR scores.
Model 5: Effects of education level, marital status, alcohol consumption status, and spouse's education level on women's MPLS scores.
*$p < .05$.

status, spouse's education level, family type, and alcohol consumption status on overall CSS and CSS factor scores, showed that the predictor variables of education level, employment status, spouse's education level, and family type had statistically significant effects on the predicted variable of Cinderella complex *(p* < .001). In Model 4, which concerned the effects on ACE-TR scores of marital status, spouse's employment status, income level, cigarette smoking status, alcohol consumption status, and status of constantly using drugs, it was found that the predictor variables of the spouse's employment status, income level, and the woman's alcohol consumption status had statistically significant effects on the predicted variable of ACEs ($p < .0001$). Model 5 looked at the effects of the education level, marital status, alcohol consumption status, and spouse's education level on MPLS scores, and showed that the predictor variables of the woman's education level and marital status had statistically significant effects on the predicted variable of the meaning and purpose of life ($p < .001$).

Discussion

Today, modernization has transformed women's beliefs regarding their role in society as they struggle to emerge from their traditional roles by fighting for gender equality. Women can now aspire to higher levels of education, better jobs, economic independence, self-development, and an equal chance of achieving independence (Himawan et al., 2019). In our study, both those women who were university graduates and those with university graduate spouses were found to have lower levels of Cinderella complex. We posit that the decrease in the Cinderella complex level was caused by the increase in education level, concurrent with the increase in the entry of women into professional jobs, breaking up the prevailing gender stereotypes that were noted in Xu et al.'s (2019) study of word embeddings in movies and books. Similarly, Çakır et al. (2023) found that women in Turkey with university degrees had lower scores for the Cinderella complex than women with lower levels of education. On the other hand, Saha and Safri (2016), in a study with Hindi participants, argued that a woman could have a Cinderella complex irrespective of social class, color, employment status, marital status, or education level, since this situation could arise from internalized conflicts and past experiences. The difference in research findings is considered to have stemmed from differences in the cultural identity and religious beliefs of the societies where the studies were carried out.

In patriarchal societies, beliefs about femininity and masculinity affect the roles, tasks, and responsibilities assigned to the woman and the man in relationships (Demir et al., 2021). In our study, women who were living in extended families were found to have higher levels of Cinderella complex. This could be due to a patriarchal family structure being dominant in the extended family, with grandparents expecting everyone to live according to traditional gender roles; in the Turkish social structure, the oldest individual in an extended family is accorded the greatest respect. This is consistent with a study by Chastine and Darmasetiawan (2019), in which the Cinderella complex in Indonesian married working women was associated with the "parenting pattern" that they were raised with: parents served as role models in women's decisions about working (p. 104). They also

found that participants' careers could be "hampered due to family factors" (p. 105), such as preferring to comply with parents' recommendations rather than finding a better career opportunity or working in a more interesting field.

Additionally, we found that working women were less inclined to Cinderella complex than women who were not working. We speculate that this stems from several factors: working women may feel more independent because they earn their own living, they make use of their spare time to engage in activities that interest them, and they work at acquiring more knowledge to increase their achievements. On the other hand, the Cinderella complex is not observed solely in women who have no awareness of the possibility of independence, or have no job outside the home (i.e., housewives). It can also be detected in women who are ambitious and earn a high income (Sneha & Rahmath, 2018). From the early days of their lives, society teaches girls that to become women means to work at "female jobs", become housewives, have children, and establish families; therefore, even if women occupy very high positions, their primary motivation is usually not money (Sneha & Rahmath, 2018). The Cinderella complex can also manifest in the context of women who have worked to gain economic independence but still experience a need for dependence in other areas (Yıldırım, 2018).

In the relevant literature, the Cinderella complex was often associated with inner conflicts and emotional problems that emerged mostly in the childhood period (e.g., Vashisht et al., 2022). In our study, there was no statistically significant relationship between women's ACE-TR and CSS scores. On the other hand, Çakır et al. (2023) found in their study that the CSS scores of women whose parents were separated or deceased were higher, and that women who have not lived with their parents for a long time may be more dependent in their relationships with men. Puspıtasarı's (2019) study in Indonesia underlines that ACEs, and the bad memories generated by them, may lead to Cinderella complex in women. Likewise, a study in India by Vashisht et al. (2022) states that the pattern of interactions between girls and their parents could indicate how girls will behave in the future. Although such studies have reported that the Cinderella complex is the outcome of the child-rearing style and ACEs, this problem can nonetheless emerge in association with a person's psychological state. The difference in research results is thought to stem from this fact.

According to Vashisht et al., factors affecting the development of the Cinderella complex in women include the feeling of being emotionally safe, economic need, psychological dependence, fear of independence, acute nutritional need, and whether life is perceived as having meaning. The regression analysis conducted in our study shows that the MPLS score and the CSS score affected each other. Likewise, *quitting career* was found to be associated with attitudes towards the meaning and purpose of life. Çakır et al. (2023) reported that there was a significant positive correlation between giving up on a career, having a sexist attitude, avoiding responsibility, anxious–ambivalent attachment, and developing a Cinderella complex. In the study by Chastine and Darmasetiawan (2019), women with a Cinderella complex were defined as individuals who were dependent on other people, were open to abusive relationships, and gave up not only their careers but control over their own lives. The findings of our study are in a similar vein to findings

in the international literature; for example, in a study conducted in 14 countries, Sutin et al. (2020) found that individual perceptions of the meaning in life were associated with the development of a consistent feeling of identity in the person. Also, Aydın et al. (2015), in studying the validity and reliability of the MPLS, asserted that individuals who reported having a life purpose also felt that they held on to life more firmly, and were better able to fight against challenges, produce solutions to problems, and maintain good health.

Strengths and Limitations of the Research

This research is the first web-based study performed on this topic with a large population. However, as it was a web-based study, only women with access to social media could be contacted for the research. Also, the possible effects of social desirability constitute a limitation of the research, as women may have been reluctant to disclose certain behaviors, such as using alcohol and drugs. On the other hand, a strength of this research is the use of a scale that is specific to the Cinderella complex. Also, it is considered that this research, which draws attention to the degree of dependence on men that many women feel, will make a strong contribution to the relevant literature.

Conclusion

In this study, we found that the degree to which women were inclined toward the Cinderella complex was affected by numerous factors, such as education level, employment status, spouse's education level, and family type. Also, the tendency to manifest the Cinderella complex was associated with women's views of the meaning and purpose of life.

Despite the passage of 40 years since its discovery, the concept of the Cinderella complex continues to have validity in today's society. To the extent that there is a consensus that women are naturally dependent on men, and while the negative consequences of such dependence are unnoticed or ignored, it is of importance to encourage studies that draw attention to the Cinderella complex, particularly in patriarchal societies. As a corrective to the circumstances that give rise to the Cinderella complex, it is recommended that women adopt a wider perspective on life, continually upgrade their skills, become more independent in their thoughts and actions, and create a personal space where they can spend quality time in order to find more meaning in life.

References

Aydın, C., Kaya, M., & Peker, H. (2015). Hayatın Anlam ve Amacı Ölçeği: Geçerlik ve güvenirlik çalişmasi [Meaning and Purpose of Life Scale: The study of its validity and reliability]. *Journal of Ondokuz Mayıs University Faculty of Theology, 38*, 39–55. https://dergipark.org.tr/en/pub/omuifd/issue/20317/215746

Bernier, C. S. (2022). *The cult of Cinderella: A perennial princess in fourth-wave feminist America* [Doctoral dissertation, Middle Tennessee State University]. https://jewlscholar.mtsu.edu/items/fa9fe804-58f1-493c-bf7e-0f23b501ac38

Chastine, V., & Darmasetiawan, N. K. (2019). Cinderella complex on working women. *Advances in Social Science, Education, and Humanities Research, 308*, 103–106. https://doi.org/10.2991/insyma-19.2019.26

Çakır, E. A., Vural Batık, M., & Çakır, E. (2023). Kadinlarda bağlanma stilleri ve sinderella sendromu [Cinderella syndrome and attachment styles in women]. *Electronic Journal of Social Sciences, 22*(88), 1653–1666. https://doi.org/10.17755/esosder.1276457

Demir, M., Kaya, L., Turan, M., & Vural Batık, M. (2021). Cinderella syndrome "Women with fear of independence": Developing a scale. *International Journal of Psychology and Educational Studies, 8*(1), 166–173. https://doi.org/10.17220/ijpes.2021.8.1.236

Dowling, C. (1981). *The Cinderella complex: Women's hidden fear of independence*. Pocket Books.

Fatimah, E., & Istiani, I. (2020). Cinderella syndrome of working women in cyber literature. *E-Structural (English Studies on Translation, Culture, Literature, and Linguistics), 3*(2), 131–144. https://doi.org/10.33633/es.v3i02.4338

Goodman, F. R, Doorley, J. D., & Kashdan, T. B. (2018). Well-being and psychopathology: A deep exploration into positive emotions, meaning and purpose in life, and social relationships. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* (pp. 447–471). DEF.

Gündüz, A., Yaşar, A., Gündoğmuş, İ., & Konuk, E. (2018). Adverse Childhood Events Turkish Form: Validity and reliability study. *Anatolian Journal of Psychiatry, 19*(1), 68–75. https://doi.org/10.5455/apd.294158

Himawan, K. K., Bambling, M., & Edirippulige, S. (2019). Modernization and singlehood in Indonesia: Psychological and social impacts. *Kasetsart Journal of Social Sciences, 40*(2), 499–506. https://doi.org/10.1016/j.kjss.2017.09.008

Joseph, J. B., Jayesh, S., & Thomas, S. (2021). Cınderella complex: A meta-analytic review. *EPRA International Journal of Multidisciplinary Research (IJMR), 7*(5), 324–329. https://doi.org/10.36713/epra6596

Kim, J., Holte, P., Martela, F., Shanahan, C., Li, Z., Zhang, H., Eisenbeck, N., Carreno, D. F., Schlegel, R. J., & Hicks, J. A. (2022). Experiential appreciation as a pathway to meaning in life. *Nature Human Behaviour, 6*(5), 677–690. https://doi.org/10.1038/s41562-021-01283-6

Puspitasari, R. (2019). *A Cinderella complex issue in female protagonists of Bronte's Jane Eyre and Meyer's Twilight: A psychoanalytic study* [Unpublished doctoral dissertation]. Universitas Sanata Dharma, Yogyakarta, Indonesia. https://repository.usd.ac.id/34605/

Saha, S., & Safri, T. S. (2016). Cinderella complex: Theoretical roots to psychological dependency syndrome in women. *The International Journal of Indian Psychology, 3*(3), 118–122.

Sneha, S., & Rahmath, F. (2018). A study of relationship between Cinderella complex and personal growth among young females. *Indian Journal of Psychological Science, 10*(1), 102–107.

Sutin, A. R., Luchetti, M., Stephan, Y., & Terracciano, A. (2020). Meaning in life and risk of cognitive impairment: A 9-year prospective study in 14 countries. *Archives of Gerontology and Geriatrics, 88*, Article 104033. https://doi.org/10.1016/j.archger.2020.104033

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson.

Tzitzikas, Y., & Marketakis, Y. (2018). The fairy tale of Cinderella. In Y. Tzitzikas & Y. Marketakis, *Cinderella's stick* (pp. 13–14). Springer. https://doi.org/10.1007/978-3-319-98488-9_2

Ulu, M. (2018). Hayatı anlamlandirma ile kişilik özellikleri arasindaki ilişki üzerine [On the relationship between the quest for meaning and personality traits]. *Bilimname, 2018*(36), 165–187. https://doi.org/10.28949/bilimname.459247

Upenieks, L. (2022). Searching for meaning: Religious transitions as correlates of life meaning and purpose in emerging adulthood. *Mental Health, Religion & Culture, 25*(4), 414–434. https://doi.org/10.1080/13674676.2022.2045264

Ünlü, Ç., Akyol, G., & Bülbül, A. (2021). Hayatın anlam ve amaci: spor yöneticiliği bölümü öğrencileri ile ilişkilendirilmesi [The meaning and purpose of life: Relating to the students of sports management department]. *Journal of Sports Education, 5*(1), 38–51. https://dergipark.org.tr/en/pub/seder/issue/59585/862351

Vashisht, S., Shahi, S., & Goswami, P. (2022). Development and validation of women's psychological syndrome "Cinderella Complex Scale – Revised". *Turkish Online Journal of Qualitative Inquiry (TOJQI), 13*(1), 543–563. https://www.tojqi.net/index.php/journal/article/view/8821

Xu, H., Zhang, Z., Wu, L., & Wang, C.-J. (2019). The Cinderella complex: Word embeddings reveal gender stereotypes in movies and books. *PLoS One, 14*(11), Article e0225385. https://doi.org/10.1371/journal.pone.0225385

Yıldırım, S. (2018). Sindrella kompleksi: Çağdaş kadinda bağimsizlik korkusu [Cindrella complex: Fear of independence in contemporary women]. *Anasay,* (6), 111–115. https://doi.org/10.33404/anasay.485095