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A majority of the literature on borderline personality disorder (BPD) focuses on its occurrence in women or does not specifically assess for gender differences in clinical presentations. Some studies report that men with BPD may be more likely to be diagnosed with substance use disorders, as well as paranoid, passive-aggressive, narcissistic, sadistic, and antisocial personality disorders (PDs). Additionally, women with BPD appear to be more likely to report histories of adult physical and sexual abuse and to meet diagnostic criteria for post-traumatic stress disorder (PTSD) and eating disorders. The purpose of the present study was to further examine gender differences in BPD. Using baseline data from the Collaborative Longitudinal Personality Disorders Study (CLPS), men and women who met criteria for BPD were compared on current axis I and II disorders, BPD diagnostic criteria, childhood trauma histories, psychosocial functioning, temperament, and personality traits. Men with BPD were more likely to present with substance use disorders, and with schizotypal, narcissistic, and antisocial PDs, while women with BPD were more likely to present with PTSD, eating disorders, and the BPD criterion of identity disturbance. Generally speaking, women and men with BPD displayed more similarities than differences in clinical presentations. The differences that did emerge are consistent with those found in epidemiological studies of psychopathology and therefore do not appear unique to BPD. Additionally, many gender differences traditionally found in epidemiological samples did not emerge in BPD subjects. For example, no difference was found in rates of major depressive disorder, a condition that is more prevalent in females. Thus, BPD pathology may be a prevailing characterization that can attenuate usual gender-based distinctions.
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BORDERLINE personality disorder (BPD) is associated with significant morbidity and frequent use of mental health resources.[1-3] Studies cite BPD rates of approximately 0.4% to 1.8% among community samples,[4-7] and 10% to 25% among clinical samples.[8,9] BPD is more often diagnosed in women, with estimates that approximately two thirds to three quarters of those diagnosed with BPD are women.[6,9-12] Consequently, a majority of the literature on BPD focuses on its occurrence in women[13] or does not incorporate gender as a separate variable, therefore not addressing possible gender differences in clinical presentations.[14,15] Thus, little is known regarding potential gender differences in persons with BPD that may impact the manifestation, course, and treatment of BPD in both men and women.

Although BPD is believed to occur more frequently in women, research findings on the prevalence of BPD in men and women are inconsistent. In some studies, when significant differences in rates of personality disorders (PD) are found, rates are usually higher among men.[16-19] One of the more methodologically sound community studies[7] found that men had higher rates of antisocial, obsessive-compulsive, and passive-aggressive PDs, whereas women did not have higher rates of any PD, including BPD. In addition, some studies with treatment-seeking populations have not found higher rates of BPD in women than in men,[20,21] in contrast to the studies reported above. Although sampling issues may account for discrepancies in findings, these studies highlight the need to further investigate BPD in men and gender differences within this disorder.

To date, there has been very little research specifically investigating the occurrence of BPD in men. This issue has been explored in the context of domestic violence, where multiple studies report higher percentages of BPD features or diagnoses in male batterers compared to nonabusive men[22,23] or found relationships between borderline pathology and degree of abusiveness in samples of male batterers.[24,25] Research comparing men with BPD to those with other PDs replicate findings with women. For example, men with BPD have shown more dissociative symptomatology,[26,27] more frequent use of maladaptive and image-distorting defenses,[28] higher frequencies of childhood sexual abuse, more severe childhood sexual abuse, a longer duration of physical abuse, increased rates of early separation or loss, and higher paternal control[29] than men with other PDs. Additionally, research findings with male BPD samples are similar to those reported in female BPD samples. For example, dissociation, childhood physical abuse, and childhood sexual abuse were not found to differentiate between men who self-mutilated and those who did not in a sample of men with BPD.[30] Such similarities in findings suggest that men and women with BPD may have similar clinical presentations. However, research providing direct comparisons of men and women with BPD is necessary to address possible differences.

Such research is sparse, at best. Available data suggest that men and women with BPD may display some clinical differences in comorbid axis I and axis II symptomatology and trauma histories. For example, Zanarini et al[12] found that female patients diagnosed with BPD reported a higher incidence of adult physical and sexual abuse than did male patients diagnosed with BPD. Additionally, men with BPD were more likely to be diagnosed with substance use disorders, while a significantly higher proportion of women with BPD were diagnosed with eating disorders and post-traumatic stress disorder (PTSD).[31] Also, a significantly higher proportion of men with BPD than women with BPD have been found to meet criteria for paranoid, passive-aggressive, narcissistic, sadistic, and antisocial personality disorders.[32] Zlotnick et al.[33] reported similar findings, where women with BPD displayed higher rates of eating disorders, while men displayed higher rates of substance use disorders, intermittent explosive disor-

der, and antisocial PD. Consistently, in a study of 100 Hispanic psychiatric outpatients with substance abuse histories assessed with a diagnostic interview for DSM-IV PDs, Grilo et al.[18] reported significant comorbidity with BPD for antisocial, avoidant, and depressive PD. This study also found a gender effect. While no significant comorbidity with any PD with BPD was observed in women, significant comorbidity with antisocial, avoidant, and depressive PDs was observed in men. In another study, Grilo et al. reported significant BPD co-occurrence with avoidant and depressive PD in both men and women, but only antisocial PD for men, and only obsessive-compulsive PD for women.[34] These findings seem to suggest that men and women may present with different pattern of symptoms and issues. Specifically, men and women with BPD may display impulsivity differently, in that men may tend to externalize, while women may be more likely to internalize their impulsivity.[31-33]

The purpose of the current study was to expand upon prior research[12,18,31-34] and to further examine gender differences in BPD. Gender differences in BPD were explored in those areas where differences have already been identified, as well as in other clinically relevant areas that have yet to be systematically investigated. Specifically, differences between women and men with BPD are examined across the following areas: (1) co-occurring axis I and axis II diagnoses, (2) specific BPD diagnostic criteria, (3) childhood trauma histories, (4) psychosocial and global dysfunction, and (5) trait and temperament personality variables. To our knowledge, this is the first study to comprehensively investigate gender differences in BPD through the inclusion of personality and psychosocial functioning variables.

METHOD

The present investigation is part of a larger study of the longitudinal course of PDs, the Collaborative Longitudinal Personality Disorders Study (CLPS). The aims, methods, and sample of CLPS have been extensively described elsewhere.[35,36] Briefly, participants between the ages of 18 and 45 were eligible to participate if they met criteria for schizotypal PD, borderline PD, avoidant PD, obsessive-compulsive PD, or a comparison group of major depressive disorder and no PD. Participants were excluded if they were currently psychotic; presented with a history of schizophrenia, schizophreniform, schizoaffective disorders, acute substance intoxication, or withdrawal; cognitive impairment; or had an IQ below 85. The current study includes the baseline data from a subgroup of those participants

in CLPS who met diagnostic criteria for BPD. Prior to their participation, all participants were provided with a full explanation of study procedures and signed a written informed consent form. Below is a description of the measures and procedures relevant to the present report.

Assessment

Personality disorders. The Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV)[37] was used to assess the presence or absence of DSM-IV PDs. The DIPD-IV is a semistructured interview in which clinicians rate participants' responses to each PD diagnostic criterion on a three-point scale (0 = absent or clinically insignificant; 1 = present but of uncertain clinical significance; 2 = present and of clinical significance). The DIPD-IV was found to have generally good reliability in the CLPS with median kappas of .68 for interrater reliability and .69 for test-retest reliability for BPD.[38] All participants in the current report met DIPD-IV criteria for BPD.

Axis I disorders and trauma history. The Structured Clinical Interview for DSM-IV Axis I Disorders–Patient Version (SCID-I/P)[39] was used to assess axis I disorders. The SCID-I/P identifies lifetime and current occurrences of DSM-IV axis I disorders. Within the CLPS, reliability of SCID-I/P diagnoses ranged from .57 to 1.00, with a median kappa of .76. Test-retest reliability ranged from .35 to .78, with a median kappa of .64.[38] Additionally, an addendum adapted from the Trauma Assessment for Adults[40] was created for the SCID-I/P section on PTSD to assess DSM-IV criterion A (i.e., exposure to actual or threatened death, serious injury, or physical integrity) traumatic events. This clinician-administered measure assesses participants' report of 10 specific criterion A traumatic events, other extraordinary events, as well as each event's age at first occurrence, age at most recent occurrence, and whether the participants believed they could be killed or seriously injured as a result of each event. The current research focused on childhood traumatic events (i.e., childhood sexual abuse, childhood physical abuse, childhood witnessing of abuse) and current axis I disorders. No corroborative evidence of childhood abuse was obtained.

Psychosocial functioning. The Longitudinal Interval Follow-Up Evaluation Base-Line Version (LIFE-BASE)[41] is a semistructured interview that assesses participants' psychosocial functioning at study intake. Information obtained from the LIFE-BASE in this study includes employment status; impairment ratings for employment, household duties, student work, and recreation; global assessment of satisfaction; global social adjustment; and the DSM-IV[8] Global Assessment of Functioning Scale (GAF). Ratings of the participants' typical functioning in the month prior to evaluation are used in the current report.

Personality traits and temperament. The Schedule for Nonadaptive and Adaptive Personality (SNAP)[42] is a 395 true-false item, self-report instrument that includes 13 standardized scales for DSM-III-R–based personality dimensions, as well as 15 trait and temperament scales. The current report used the raw scores for the following SNAP trait and temperament scales: negative temperament, mistrust, manipulativeness, aggression, self-harm, eccentric perceptions, dependency, positive temperament, exhibitionism, entitlement, detachment, disinhibition, impulsivity, propriety, and workaholism. These scales have demon-

strated good internal consistency (medians of .76 to .84) and test/retest reliability (medians of .79 to .81).[42]

Data analysis. Due to the multiple comparisons contained within this report, a Bonferroni corrected alpha level was used for each comparison within a group of analyses (e.g., all analyses pertaining to co-occurring axis I disorders). Yates-corrected chi-square analyses were used for all categorical data where cell size was sufficient (i.e., five or more in each cell). Gender comparisons on continuous data were evaluated with t tests.

RESULTS

Demographics

Of the total CLPS sample of 668 subjects, 240 participants (175 women and 65 men) met DIPD-IV criteria for BPD. No significant difference was found for subjects' age (mean [SD], = 31.55 [8.14] for women, 32.78 [7.57] for men). A summary of the remaining demographics for each gender is found in Table 1. No significant differences were found between men and women on these demographic variables ($P > .05$).

Gender Differences in Co-Occurring Axis I Disorders

The frequencies of co-occurring current axis I disorders for men and women are displayed in

Table 1. Demographics of Subjects by Gender

Demographic	Subjects Who Self-Identified			
	Females (n = 175)		Males (n = 65)	
	N	%	N	%
Racial affiliation				
White	124	70.9%	47	72.3%
African American	21	12.0%	5	7.7%
Hispanic	24	13.7%	12	18.5%
Asian	5	2.9%	0	0%
Other racial group	1	0.6%	1	0.6%
Marital status				
Single	104	59.4%	34	52.3%
Married	33	18.9%	8	12.3%
Live together	7	4.0%	7	10.8%
Separated	11	6.3%	5	7.7%
Divorced	18	10.3%	10	15.4%
Widowed	2	1.1%	1	1.5%
Employment status				
Full-time	30	17.1%	11	16.9%
Part-time	27	15.4%	4	6.2%
Unemployed	118	67.4%	50	76.9%

NOTE. Values for racial affiliation, martial status, and employment status do not significantly differ at $P \leq .05$.

Table 2. Gender Differences for Axis I Lifetime Diagnoses

| Diagnosis | Subjects Meeting Diagnostic Criteria | | | | χ^2 | P |
| | Females (n = 175) | | Males (n = 65) | | | |
	N	%	N	%		
Major depression	135	77.1%	46	70.8%	1.04	.308
Dysthymic disorder	35	20.0%	13	20.0%	.000	1.00
Any Bipolar disorder	32	18.3%	14	21.5%	.324	.569
Panic disorder	72	41.1%	17	26.2%	4.56	.033
Social Phobia	35	20.0%	22	33.8%	5.02	.025
Obsessive-compulsive disorder	28	16.0%	12	18.5%	.207	.649
PTSD*	89	50.9%	20	30.8%	7.72	.005
Generalized anxiety disorder	36	20.6%	17	26.2%	.858	.354
Eating disorder*	73	41.7%	12	18.5%	11.20	.0001
Substance disorder*	102	58.3%	55	84.6%	14.52	.0001

*Significant with Bonferroni correction of .005.

Table 2. With a Bonferroni correction for 10 comparisons ($P \geq$ .005), significant differences were found for PTSD, eating disorders, and substance use disorders. Specifically, men with BPD tended to have higher rates of substance use disorders (84.6% v 58.3%), while women with BPD tended to have higher rates of PTSD (50.9% v 30.8%) and eating disorders (41.7% v 18.5%). Women and men did not significantly differ in their average number of co-occurring axis I diagnoses (mean [SD]= 2.60 [1.59] and 2.66 [1.71]; respectively, $P >$ .05). Results of a power analysis indicate that there was sufficient power (>.80) to detect true differences.

Gender Differences in Co-occurring Axis II Disorders

The frequencies for co-occurring axis II disorders other than BPD are displayed in Table 3. With a Bonferroni correction for nine comparisons ($P \leq$ .006), significant differences were found for antisocial, narcissistic, and schizotypal PDs. Men displayed higher rates of these disorders than did women (29.7% v 10.3%, 21.9% v 4.6%, and 24.6% v 10.3%; respectively). No significant difference was found between women and men in their average number of co-occurring axis II diagnoses (mean [SD] = 2.14 [1.79] and 2.57 [1.82], respectively; $P >$ .05).

Gender Differences in BPD Diagnostic Criteria

The frequencies of women and men who met each specific DIPD-IV diagnostic criteria for BPD are reported in Table 4. With a Bonferroni correction for nine comparisons ($P \leq$ .006), a significant difference was found only for the DIPD-IV BPD criterion of identity disturbance. Proportionally more women endorsed this criterion (67.4%) than

Table 3. Gender Differences for Axis II Diagnoses

| Diagnosis | Subjects Meeting Diagnostic Criteria | | | | χ^2 | P |
| | Females (n = 175) | | Males (n = 65) | | | |
	N	%	N	%		
Paranoid	30	17.1%	13	20.3%	.319	.572
Schizotypal*	18	10.3%	16	24.6%	8.004	.005
Avoidant	101	57.7%	31	47.7%	1.923	.165
Dependent	32	18.4%	6	9.4%	2.835	.092
Obsessive compulsive	57	32.6%	20	30.8%	.071	.790
Depressive	71	40.8%	29	45.3%	.390	.532
Passive aggressive	25	14.4%	17	26.6%	4.788	.029
Narcissistic*	8	4.6%	14	21.9%	16.649	.0001
Antisocial*	18	10.3%	19	29.7%	13.333	.0001

NOTE. Schizoid and histrionic PDs not reported because number of patients was insufficient for chi-square analyses.
*Significant with Bonferroni correction of .006.

Table 4. Gender Differences for Borderline PD Diagnostic Criteria on DIPD

| | Subjects Meeting Diagnostic Criteria | | | | | |
| | Females (n = 175) | | Males (n = 65) | | | |
Criterion	N	%	N	%	χ^2	P
Intense anger	145	82.9%	58	89.2%	1.477	.224
Affective instability	169	96.6%	58	89.2%	4.985	.026
Chronic emptiness	122	69.7%	48	73.8%	0.392	.531
Identity disturbance*	118	67.4%	31	47.7%	7.843	.005
Paranoid/dissociation	123	70.3%	39	60.0%	2.286	.131
Avoid abandonment	111	63.4%	33	50.8%	3.165	.075
Self-injury/suicide	103	58.9%	38	58.5%	0.003	.956
Impulsivity	139	79.4%	57	87.7%	2.162	.141
Unstable relationships	148	84.6%	48	73.8%	3.641	.056

*Significant with Bonferroni correction of .006.

did men (47.7%). Women and men did not differ in mean numbers of BPD criteria (mean [SD] = 6.73 [1.37] and 6.31 [1.29], respectively; $P > .01$).

Gender Differences in History of Traumatic Events

Three trauma variables most relevant to this population (i.e., participant-reported child sexual abuse, child physical abuse, and childhood witnessing of abuse) from the SCID trauma addendum were examined. In the current report, childhood sexual abuse is defined as physical force or threat of force for an unwanted sexual activity prior to age 18; childhood physical abuse is defined as being attacked with the intent to kill or seriously injure (i.e., with or without a weapon) prior to the age of 18; and childhood witnessing of abuse is defined as seeing someone seriously injured, violently killed, sexually abused, or sexually assaulted prior to the age of 18.*

With a Bonferroni correction for three comparisons ($P \leq .016$), no significant differences were found for childhood physical abuse ($\chi^2 = 2.120$, $P = .145$), childhood sexual abuse ($\chi^2 = 2.016$, $P = .149$), or childhood witnessing of abuse ($\chi^2 = 2.831$, $P = .092$). Women displayed similar rates of childhood physical abuse (32.5%) as men (42.9%), sexual abuse (40.4% v 30.2%), as well as

similar rates of childhood witnessing of abuse (19.0% v 29.2%).

Gender Differences in Psychosocial Functioning and Personality Variables

No significant differences were found between men and women's GAF scores; dysfunction in employment, household duties, student work; or recreation, reported level of satisfaction, and overall social adjustment (all P's > .05). Additionally, no significant differences were found between women and men on any of the SNAP trait and temperament scales (i.e., negative temperament, mistrust, manipulativeness, aggression, self-harm, eccentric perceptions, dependency, positive temperament, exhibitionism, entitlement, detachment, disinhibition, impulsivity, propriety, workaholism) ($P > .05$).

DISCUSSION

Overall, relatively few gender differences emerged in a sample of BPD participants that was sufficiently large to detect meaningful differences. Women with BPD were more likely to have co-occurring diagnoses of PTSD and eating disorders, while men were more likely to have co-occurring diagnoses of substance use disorders, as well as schizotypal, narcissistic, and antisocial PDs. Additionally, proportionally more women then men met the borderline diagnostic criterion for identity disturbance. To elucidate these findings, it is helpful to compare the results of the current study to other findings with BPD samples, as well as to findings reported in other populations.

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*Data from the SCID trauma addendum were not available for 10 women in the BPD subgroup used in this report, reducing the N to 165 women with BPD. Missing age of onset for traumatic events led to subsequent missing values. Ns are 224 (161 women and 63 men) for child sexual abuse, 223 (160 women and 63 men) for child physical abuse, and 228 (163 women and 65 men) for child witnessing of abuse.

Comparison to Other Findings With BPD Samples

In general, the findings presented in this report are consistent with prior research on gender differences in BPD.[18,31-34] Zanarini et al.[31] hypothesized that the gender differences found in BPD may be a function of impulsivity, in that men and women may differ in the specific type of "disorder of impulse" that they predominately display. For example, women may be more likely to use food (i.e., internalizing behaviors) and men alcohol or drugs and acting out against others (e.g., externalizing behaviors) in a self-destructive manner. The findings of the current report are consistent with the suggestion of others[31,33] that impulsivity in men and women with BPD may be manifested through qualitatively different means. However, the results from the SNAP suggest equivalence of the trait of impulsivity at a more basic level than that found in the varying criteria of the DSM-IV. Given the apparent inconsistency of these findings, and the lack of well-defined research on gender differences in this area, further research is needed to clarify the relationships between gender, impulsivity, and BPD.

Childhood abuse in general, and childhood sexual abuse in particular, have long been hypothesized etiological components of BPD, most notably in women.[11-14,43] A finding of high rates of participant report of childhood abuse in men with BPD, comparable to that found in women with BPD, is consistent with other findings[29] that childhood abuse may be an important risk factor for the development of BPD in men, as well as in women. However, although the rates of reported childhood abuse found here is higher than that of the general population,[44-46] the high percentage of subjects who do not report childhood abuse support the notion that other etiological pathways exist for the development of BPD in both men and women.[47,48]

The fact we found relatively few gender differences within our sample of BPD participants is consistent with previous findings in male BPD samples[26-30] identifying similar characteristics to those identified in female BPD samples. Taken together, the research findings on men with BPD, as well as those that specifically assess gender differences in BPD, suggest that men and women with BPD are more similar in their clinical presentations than they are different.

Comparison to Findings With Other Populations

To put the current findings into further context, it is important to consider gender differences in psychopathology more broadly. Research with large community samples report higher rates of PTSD in women and adolescent girls[45,49-50] and substance use disorders in men.[51] Additionally, a review of the research on the epidemiology of eating disorders concludes that eating disorders are more prevalent in women than in men.[52] Furthermore, community studies[4,7] also find higher rates of antisocial PD in men than in women. These findings are consistent with the belief of many that males tend to display more externalizing symptoms, while females show more internalizing symptoms.[31-34,53,54] Additionally, finding men to have higher co-occurrences of PDs is consistent with basic differences in women's more relational orientation. Women are socialized to be more interpersonally connected then men.[55,56] A higher percentage of men with BPD having antisocial, narcissistic, and schizotypal PDs shows increased difficulty in relatedness to others, a typical gender difference in a more pathological form in these PDs. Therefore, the significant gender differences found here and by others[31-34] in BPD axis I and II presentations occur in other populations as well, and do not appear to reflect unique gender differences for BPD. However, some differences (e.g., those in social relatedness) may reflect core gender differences in exaggerated forms.

Failure to find gender differences that are consistently found in other populations can be viewed as one of the more interesting findings of the current research, as the current report had sufficient power as defined by Cohen[57] to detect meaningful differences ($>.80$). For example, research with large-scale community samples consistently finds higher rates of affective disorders, anxiety disorders, and nonaffective psychosis in women than in men.[51] However, no differences were found between men and women's rates of depressive disorders, mood disorders, and anxiety disorders (other than PTSD) in both the current and previously published reports.[31,33] Additionally, research with community samples also shows higher rates of childhood sexual abuse in women than in men,[44-46] a difference not found in the current work. Moreover, Clark[42] reported multiple gender differences in the trait and temperament scales of the SNAP.

For example, in a sample comprised of inpatients and outpatients, men scored significantly higher on mistrust, manipulativeness, aggression, entitlement, detachment, and disinhibition, while women scored significantly higher on negative temperament, dependency, and propriety. No gender differences were found in any of the SNAP trait or temperament scales in the current study.

Thus, many gender differences that might be anticipated in light of findings from epidemiological and clinical populations were not found in the present study and other studies that specifically examined gender differences in BPD.[12,31-33] This divergence in gender-related findings between BPD samples and other populations suggests that, perhaps, BPD pathology attenuates usual gender differences. Something unique to BPD may attenuate the gender differences typically found in clinical presentations, trauma history, temperament, and personality traits. However, the specific attributes of BPD that account for this muting of gender differences remain to be elucidated. Comorbid disorders and/or etiological pathways to BPD may contribute to the attenuations of gender differences found here. Additionally, people with BPD may be more likely to seek treatment for their axis I symptoms. Such a bias may cause a higher base-rate of the more common disorders (e.g., major depression) and therefore narrow the clinical presentations of subjects. Research that compares gender differences within different clinical and epidemiological populations is needed to further our understanding of how borderline pathology specifically impacts the presentations of both men and women.

Summary and Conclusions

The results of the present research are consistent with previously published findings on gender differences in BPD.[12,18,31-34] Taken together, these studies suggest that men and women with BPD display very few differences in their clinical presentations and functioning, and that the differences that are found are similar to those found in the general population. Therefore, the gender differences that appear in patients with BPD do not seem to reflect differences unique to BPD. However, some gender differences that typically occur in the general population are not present in persons with BPD. Therefore, BPD pathology may provide something unique in that it attenuates commonly found gender differences in clinical presentations, trauma history, and personality functioning. Finding similar clinical profiles in men and women with BPD has potentially important clinical implications, as it might help to remove some of the biases that contribute to the misdiagnosis of this disorder in men.

The results presented here are preliminary in nature and may not generalize to other populations of BPD. The cross-sectional design, and reliance on retrospective data collection procedures limit our ability to rule out other potential gender differences in BPD or determine potential causes for the attenuated gender differences reported here. Future research is needed to further understand the influence of gender on the manifestation, course, and treatment of BPD. Some variables not measured in the current research may manifest themselves differently in women and men with BPD. For example, given the links found between BPD and the perpetration of domestic violence,[22,23] men with BPD may display more violent behavior then women with BPD. Alternatively, the onset and course of BPD may differ between men and women. However, the results of the current report do provide further evidence that BPD may manifest itself similarly in men and women.

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