



BRIEF REPORT



Event-related clinical distress in college students: Responses to the 2016 U.S. Presidential election

Melissa J. Hagan, PhD, MPH^{a,b} , Michael R. Sladek, PhD^c , Linda J. Luecken, PhD^c, and Leah D. Doane, PhD^c

^aDepartment of Psychology, San Francisco State University, San Francisco, CA, USA; ^bDepartment of Psychiatry, University of California, San Francisco, CA, USA; ^cDepartment of Psychology, Arizona State University, Tempe, AZ, USA

ABSTRACT

Objectives: College students have cited the 2016 U.S. presidential election as a significant source of stress. The current study examined the prevalence and demographic correlates of clinically significant election-related avoidance and intrusion symptoms among college students 2–3 months after the election. **Participants:** College students attending a large public university ($N = 769$; $M_{age} = 19.19$; 48.2% female; 58.4% White) were surveyed in January and February 2017. **Methods:** Participants completed a validated measure of clinically significant event-related distress symptoms (eg, intrusive thoughts, avoidance) and demographic questions. **Results:** One out of four students met criteria for clinically significant symptoms related to the election. Regression analyses suggested that sex, political party, religion, and perceived impact of the election on relationships were more useful predictors of stress symptoms than race or social class. **Conclusions:** The high level of event-related distress is concerning because elevated symptoms of event-related stress are predictive of future distress and subsequent PTSD diagnoses.

ARTICLE HISTORY

Received 14 June 2018
Revised 4 August 2018
Accepted 20 August 2018

KEYWORDS

Avoidance; college student; election; event-related distress; intrusion

Although U.S. presidential elections occur every four years, the 2016 election was perhaps the most polarizing and emotionally evocative political event for young people in recent history.¹ Reports of widespread discontent with both candidates, the unanticipated election outcome, and heightened intergroup conflict may have heightened emotional distress following the election.^{2–5} Based on feedback from mental health professionals, the American Psychological Association added election-related questions to their annual *Stress in America* national survey in 2016 and 2017.⁶ Results indicated that 50% of adults rated the election outcome as a significant source of stress, and this rate was higher among college attendees and those below the age of 35.⁶ Recently published qualitative and quantitative investigations have also reported elevated anxiety among youth prior to and following the 2016 election.^{1,2,7} Notably, the physical toll of election-related stress for youth was evidenced by increases in biological stress system activity from pre- to post-election.²

The extent to which election-related distress translated into clinically significant symptomatology in

college students is unknown. In addition to interfering with daily life tasks, stress-related symptoms interfere with academic performance and increase the risk of physical and psychiatric disorders.^{8,9} Identifying rates and correlates of clinically meaningful distress related to this national event can inform screening and treatment practices in college health clinics. For example, querying students about the broader sociopolitical climate as a source of stress may lead to more targeted approaches to treatment.

The current study surveyed a diverse sample of college students 2–3 months after the election to examine: (1) perceived impact of the election on close relationships; (2) prevalence of subclinical and clinical election-related distress symptoms, including intrusion and avoidance; (3) demographic differences in these symptoms. Based on previous qualitative studies of the election impact on youth^{1,7} we expected that event-related intrusion and avoidance symptoms would be higher among women and students who reported that the election had a negative impact on their close relationships. We further explored whether symptoms varied by race.⁴

53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104

Method

Participants and procedure

Undergraduate introductory psychology students at a public university in the southwestern U.S. completed questionnaires in January or February 2017 for course credit. This time period was chosen to avoid capturing immediate postelection emotional reactions and potential confounding by end-of-semester academic stress. The university Institutional Review Board approved all study procedures. Of 829 participants, nine were excluded due to age, and 51 failed attention check items, leaving a final sample of 769 participants. See Table 1 for sample demographics.

Measures

Satisfaction, distress, and relationship impact

Three items were developed to contextualize responses to the election: (1) their satisfaction with election results (from 1 = *completely satisfied* to 4 = *completely dissatisfied*), (2) the extent to which they were upset by the outcome of the election (from 1 = *not at all* to 5 = *extremely*), and (3) how the election results

Table 1. Sample demographics and event-related distress scores on the IES.

	<i>N</i>	IES Total <i>M</i> (<i>SD</i>)	Mean difference test
Total	769	18.65 (15.72)	
Sex			
Male	396	15.08 (14.06)	$t = 6.55, p < .001$
Female	371	22.30 (16.43)	
Race			
Caucasian	449	16.02 (14.93) ^a	Welch's $F = 8.188,$ $p < .001$
African American	36	27.56 (18.59) ^b	
Hispanic/Latino	132	22.01 (14.69) ^b	
Asian American	109	21.76 (16.59) ^b	
Other	43	20.47 (16.26)	
Social class			
Upper/Upper-Middle	322	16.97 (16.12) ^a	Welch's $F = 5.124,$ $p = .006$
Middle	310	18.94 (15.20)	
Lower-Middle/Working	133	22.13 (15.51) ^b	
Political party			
Democrat	253	26.22 (16.34) ^a	Welch's $F = 52.71,$ $p < .001$
Republican	276	10.97 (11.84) ^b	
Independent	145	18.70 (14.58) ^c	
Other	90	20.61 (15.41) ^c	
Religious affiliation			
Christian	445	16.92 (15.30) ^a	Welch's $F = 6.56,$ $p = .002$
Non-Christian Religion	97	20.90 (16.02)	
Non-Religious	218	21.22 (16.05) ^b	
Sexual orientation			
Heterosexual	701	17.83 (15.43)	$t = 4.70, p < .001$
Sexual minority	68	27.09 (16.26)	

Note. For demographic categories with more than 2 subgroups, Tukey's HSD post hoc tests were conducted to assess mean differences. Different superscripts within a category denote significant mean differences between those subgroups in that category, $p < .05$. For example, Caucasians scored significantly lower than African-American, Hispanic/Latino, and Asian-American individuals and there were no significant differences among the other three subgroups.

impacted their relationships with family, friends, and significant others (from 1 = *very negatively* to 5 = *very positively*).

Election-related clinical distress symptoms

Participants responded to the 15-item Impact of Event Scale (IES),¹⁰ a measure of stress responses to a significant life event. Prompted to keep the U.S. presidential election in mind, participants indicated how frequently each statement was true for them since the election, with response options from 1 (*not true at all*) to 4 (*often true*). Responses were recoded to 0, 1, 3, and 5, and a total event-related distress score was calculated by summing all items ($\alpha = .90$).¹⁰ The *intrusion* subscale was the sum of 7 items ($\alpha = .87$; eg, "I think about it when I don't mean to"), and the *avoidance* subscale was the sum of 8 items ($\alpha = .86$; eg, "I stay away from reminders of it"). The IES has demonstrated reliability in clinical and healthy samples.^{10,11} IES scores have been associated with PTSD in veteran and community samples.^{12,13} Symptoms were considered clinically significant if the total score was 30 or higher.¹⁰

Results

Satisfaction, upset, and relationship impact

There was considerable variability in satisfaction with election results: 18.5% of the sample reported being completely satisfied, 25.0% somewhat satisfied, 19.2% somewhat dissatisfied, and 37.2% completely dissatisfied. Thirty-nine percent were either considerably or extremely upset by the election outcome, 15.6% moderately upset, 16.8% slightly upset, and 28.5% not at all upset. Regarding the impact of the election on close relationships, 65% of participants reported no impact, 24.2% reported a slight or very negative impact, and 10.4% reported a positive impact.

Election-related distress symptoms

Although total IES scores *on average* did not exceed clinically significant levels ($M = 18.65$, $SD = 15.72$, Range: 0–69), 25.0% of students ($n = 192$) were above the cutoff for clinically significant event-related distress. Avoidance and intrusion subscale scores were positively correlated, $r = .59$, $p < .001$, but participants reported significantly higher avoidant symptoms compared to intrusion symptoms, $t(768) = 9.77$, $p < .001$.

ANOVA was used to evaluate group differences in IES scores. Religious affiliation was categorized into 3

groups to facilitate comparison: Christian ($n = 445$), non-Christian religion ($n = 97$), and nonreligious ($n = 218$). See Table 1 for descriptives and mean difference tests across demographic characteristics. Significant differences in election-related distress symptoms were observed in every demographic category.

We next used multiple regression with dummy coding to test whether particular characteristics were associated with greater event-related distress while statistically adjusting for all other characteristics. Political party affiliation was categorized into Democrat ($n = 253$), Republican ($n = 276$), and other ($n = 235$). Race was categorized into White ($n = 449$) and non-White ($n = 320$), and religion was categorized into Christian ($n = 445$) and non-Christian ($n = 315$). The overall model accounted for significant variance in event-related distress, $F(10, 738) = 30.83$, $p < .001$, $R^2 = .30$. Significant predictors of event-related distress included being female (compared to male; $b = 4.02$, $p < .001$), Democrat (compared to Republican; $b = 6.22$, $p < .001$), Independent or other party (compared to Republican; $b = 3.61$, $p < .01$), dissatisfied with the outcome ($b = 9.17$, $p < .001$), non-Christian or no religious affiliation (compared to Christian; $b = 2.17$, $p = .036$), and reporting either a positive ($b = 3.26$, $p = .05$) or negative ($b = 7.60$, $p < .001$) impact of the election on close relationships. Characteristics not significantly associated with event-related distress included being a racial minority student (compared to non-Hispanic White; $b = 0.34$, $p = .751$) or middle ($b = 0.50$, $p = .726$) or upper ($b = 0.50$, $p = .729$) social class (compared to lower-middle/working classes).

Finally, two multiple regression models separately tested predictors of intrusion ($M = 7.32$, $SD = 7.81$, $Min = 0$, $Max = 31$) and avoidance symptoms ($M = 11.34$, $SD = 9.77$, $Min = 0$, $Max = 40$). Results were similar to those for the total distress score with a few exceptions. Intrusion symptoms were significantly greater (by 3.3 points) for those reporting a positive impact relative to no impact, $t(738) = 3.75$, $p < .001$, but avoidance symptoms were not, $t(738) = -0.02$, $p = .98$. Intrusion symptoms were significantly greater (by 1.5 points) in non-Christian students relative to Christian students, $t(738) = 2.74$, $p = .006$, but avoidance symptoms did not differ, $t(738) = .68$, $p = .30$. Finally, avoidance symptoms were significantly lower in Republican students compared to students in other political parties, $t(738) = 2.95$, $p = .003$, but intrusion symptoms were not significantly different, $t(738) = 1.44$, $p = .151$.

Comment

National survey and small-scale multimethod studies indicate that the 2016 U.S. presidential election was a significant source of stress for many adolescents and young adults,⁷ highlighting the need to investigate the health-relevant psychological toll of the election among college students. The current study examined the prevalence of event-related distress in a large, diverse sample of students 2–3 months following the election. We identified a high rate of event-related distress symptoms, with certain groups reporting particularly high intrusion and/or avoidance symptoms related to the election. Findings have important implications for young adult college students who, by virtue of their age, are at heightened risk of developing a psychological disorder following a stressful life event,¹⁴ especially given strong associations between scores on the event-related distress measure used here (IES) and subsequent post-traumatic stress symptomatology.¹⁵

Despite considerable variability, 56.4% of students reported dissatisfaction with the election outcome. One fourth of participants were above the scale-suggested cutoff for clinically significant avoidance and intrusion symptoms in response to the election. When examined independently, females, racial minorities, those from the working and lower-middle social classes, Democrats, non-Christians, and sexual minorities reported significantly more event-related distress. However, when the covariation among these characteristics was taken into consideration, sex, political party, religion, and perceived impact of the election on relationships were more useful predictors of election-related distress symptoms than race or social class. Election-related distress differences by party affiliation appeared to be driven by avoidance symptoms, whereas intrusion symptoms appeared to drive the greater level of distress reported by non-Christian students and those who reported that the election had a positive impact on their close relationships.

Our data do not allow us to identify the cause of the relatively high rate of symptoms; however, we speculate that issues of identity and social inequality prominent in election-related rhetoric may have been particularly salient to these groups of students.⁴ Repeated exposure to visual stimuli and words relevant to one's social identity, when perceived to be threatening or priming negative stereotypes regarding social group membership, can negatively impact psychological well-being.¹⁶ Among all participants, exposure to negative election-related discourse in the media or online may have contributed to elevations in event-

264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316

related distress. Young adults (ages 18-29) report high social media use, and cited social media as the primary source for learning about the 2016 election.¹⁷

This study is strengthened by a large sample that was relatively diverse with respect to race, subjective social class, and political affiliations. The findings have important implications for campus health and wellness programing. The high rate of clinical distress symptoms suggests that college health practitioners be aware of the potential for the state of U.S. politics to profoundly affect students' emotional health and consider this possibility when interfacing with students about the causes and consequences of stress. In addition to providing health practitioners with information on sources of student distress, inquiring about students' affective responses to larger social events can be instructional for college students who may not realize the role national events can play in creating emotional distress. Indeed, the stigma of mental health problems remains a critical barrier to health-care utilization, particularly among college students¹⁸; situating student distress in a larger cultural and social context may be an effective way to engage them in treatment.

Limitations

The study has several limitations. The survey was given approximately 2-3 months after the election suggesting that distress symptoms remained high across the period from the election to the inauguration; however, we cannot rule out the potential impact of other intermediate events, and we cannot know the long-term consequences for mental or physical health of this postevent distress. We were not able to assess pre-event symptomatology, but it is interesting to compare symptom levels to other samples. For example, lower event-related avoidance in response to general stressful life events ($M=8.90$) have been documented in otherwise healthy college student populations,¹⁹ compared to average avoidance symptoms in the present sample ($M=11.34$).

Conclusion

This study contributes to a better understanding of the psychological impact of the 2016 U.S. presidential election on college students. The election was associated with clinically relevant distress symptoms for many students. Approximately one-fourth of the sample met suggested criteria for clinically significant distress, which is concerning because elevated event-

related stress is predictive of future distress and subsequent PTSD diagnoses.⁹ These results may help identify populations experiencing significant election-related distress and guide the development of preventive interventions with vulnerable groups of college students to mitigate the risk of long-term clinical disorder.

Conflict of interest disclosure

The authors have no conflicts of interest to report. The authors confirm that the research presented in this article met the ethical guidelines, including adherence to the legal requirements, of United States and received approval from Arizona State University.

Funding

No funding was used to support this research and/or the preparation of the manuscript.

ORCID

Melissa J. Hagan  <https://orcid.org/0000-0001-5294-7878>
Michael R. Sladek  <http://orcid.org/0000-0003-1697-438X>

References

1. Sondel B, Baggett HC, Dunn AH. For millions of people, this is real trauma: a pedagogy of political trauma in the wake of the 2016 U.S. Presidential election. *Teach Educ.* 2018;70:175-185. doi:10.1016/j.tate.2017.11.017
2. Hoyt LT, Zeiders KH, Chaku N, Toomey RB, Nair RL. Young adults' psychological and physiological reactions to the 2016 U.S. presidential election. *Psychoneuroendocrinology.* 2018;92:162-169.
3. Valentino NA, King JL, Hill WW. Polling and prediction in the 2016 presidential election. *Computers.* 2017; 50(5):110-115.
4. Williams DR, Medlock MM. Health effects of dramatic societal Events - Ramifications of the Recent Presidential Election. *N Engl J Med.* 2017;376(23): 2295-2299.
5. Geiger A. 2016. "For Many Voters, It's Not Which Presidential Candidate They're for but Which They're Against." Retrieved from: <http://www.pewresearch.org/fact-tank/2016/09/02/for-many-voters-its-not-which-presidential-candidate-theyre-for-but-which-theyre-against/>.
6. American Psychological Association, 2017. Stress in America: Coping with Change. Stress in AmericaTM Survey.
7. DeJonckheere M, Fisher A, Chang T. How has the presidential election affected young Americans? *Child Adolesc Psychiatry Ment Health.* 2018;12(1):1-4.

- 423 8. Hartley MT. Examining the relationships between
424 resilience, mental health, and academic persistence in
425 undergraduate college students. *J Am Coll Health*.
426 2011;59(7):596–604.
- 427 9. Keyes CM, Eisenberg D, Perry GS, Dube SR, Kroenke
428 K, Dhingra SS. The relationship of level of positive
429 mental health with current mental disorders in pre-
430 dicting suicidal behavior and academic impairment in
431 college students. *J Am Coll Health*. 2012;60(2):
432 126–133.
- 433 10. Horowitz M, Wilner N, Alvarez W. Impact of Event
434 Scale: a measure of subjective stress. *Psychosom Med*.
435 1979;41(3):209–218.
- 436 11. Zilberg NJ, Weiss DS, Horowitz MJ. Impact of Event
437 Scale: a cross-validation study and some empirical evi-
438 dence supporting a conceptual model of stress
439 response syndromes. *J Consult Clin Psychol*. 1982;
440 50(3):407–414.
- 441 12. Allen JG, Coyne L, Huntoon J. Trauma pervasively,
442 elevates Brief Symptom Inventory profiles in inpatient
443 women. *Psychol Rep*. 1998;83(2):499–513.
- 444 13. Neal LA, Busuttill W, Rollins J, Herepath R, Strike P,
445 Turnbull G. Convergent validity of measures of post-
446 traumatic stress disorder in a mixed military and
447 civilian population. *J Trauma Stress*. 1994;7(3): 476
448 447–455.
- 449 14. Harkness KL, Alavi N, Monroe SM, Slavich GM,
450 Gotlib IH, Bagby RM. Gender differences in life
451 events prior to onset of major depressive disorder: the
452 moderating effect of age. *J Abnorm Psychol*. 2010;
453 119(4):791–803.
- 454 15. Perry S, Difede J, Musngi G, Francis AJ, Jacobsberg L.
455 Predictors of posttraumatic stress disorder after burn
456 injury. *Am J Psychiatry*. 1992;149(7):931–935.
- 457 16. Spencer SJ, Logel C, Davies PG. Stereotype threat.
458 *Annu Rev Psychol*. 2016;67(1):415–437. doi: 10.1146/
459 annurev-psych-073115-103235
- 460 17. Pew Research Center, February, 2016. The 2016
461 Presidential Campaign – a News Event That’s Hard to
462 Miss.
- 463 18. Lannin DG, Vogel DL, Brenner RE, Abraham WT,
464 Heath PJ. Does self-stigma reduce the probability of
465 seeking mental health information?. *J Couns Psychol*.
466 2016;63(3):351–358. doi:10.1037/cou0000108.
- 467 19. Goldsmith RE, Chesney SA, Heath NM, Barlow MR.
468 Emotion regulation difficulties mediate associations
469 between betrayal trauma and symptoms of posttrau-
470 matic stress, depression and anxiety. *J Traumatic
471 Stress*. 2013;26(3):376–384.
- 472 473 474 475