- COVID-19-Related Institutional Betrayal Among A Sample of Undergraduate Students
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Abstract

One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of **more detailed background**, comprehensible to scientists in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words "here we show" or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible to a scientist in any discipline.

28 Keywords: institutional betrayal, institutional courage, trauma symptoms, COVID-19

29 Word count: X

COVID-19-Related Institutional Betrayal Among A Sample of Undergraduate Students

31 Methods

Participants

Participants were recruited from the Human Subjects Pool at a large, public university in the Northwest United States. The university's Human Subjects Pool contains undergraduate students currently enrolled in introductory psychology and linguistics 35 courses, and these students receive course credit for their participation in research studies. Students are not aware of the topic of any given study prior to signing up, which reduces 37 self-selection bias (although they do have the option to end participation during the informed consent process or at any time throughout the study). A total of 346 undergraduate students signed up and consented to participate in the present study. Participants who failed to correctly answer at least four out of five "attention check" questions randomly located throughout the survey (e.g. "please choose "strongly agree" if you are paying attention) were removed prior to data analysis (n = 37). The final sample used for data analysis consisted of 309 participants (71.5% women, 26.5% men, 1.9% non-binary/gender-nonconforming). The majority of participants were White (63.4%), and the average age of participants was 19.39 (SD = 1.45).

These data were collected during the fall 2020 term of the academic year, during which COVID-19 infections were steadily climbing at the university, local, and national level. The university at the focus of the current investigation adopted a largely remote learning environment. However, the university required all first-year students to live in dormitories on campus, and a minority of classes were held in person.

Method

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COVID-19-Related Institutional Betrayal. COVID-19-related institutional 53 betrayal was measured using an adapted version of the Institutional Betrayal Questionnaire (IBQ; Smith and Freyd (2013), Smith and Freyd (2017)). The IBQ consists of 12 items 55 listing actions or inactions by an institution in reponse to a traumatic event, and it has been established as a valid measure of institutional betrayal. Although originally designed to assess the university's responses to instances of sexual violence, the measure was 58 adapted to apply to the university's responses to the COVID-19 pandemic. Participants were instructed to answer each item (e.g., "did your university create an environment in which COVID-19 infection and safety violations seemed more likely?") by selecting "Yes," 61 "No," or "Not Applicable." "Yes" responses were coded as 1 and were summed to create a total IBQ score ranging from 0 to 12. The distribution was skewed (1.38) and kurtotic (1.31), but within the range in which the assumption of normality can be maintained without transformation. At the end of the scale, students were asked to rate the extent to which they identified with the institution both prior to and since the COVID-19 pandemic. Trauma-related symptoms. General trauma-related symptoms were measured 67 using the Trauma Symptoms Checklist (Elliott and Briere (1992)), which is a valid, standard measure of various symptoms that may be related to traumatic experiences. The 69 scale consists of several subscales, including Dissociation subscale, Sleep Disturbance subscale, Sexual Problems subscale, Anxiety subscale, Depression subscale, and the Sexual Abuse Trauma Index subscale. For the present study, only the total overall TSC score was used for analysis, and items were summed and averaged to create an "average" TSC score for each participant. Participants were asked to rate the frequency of various symptoms in the past two months, using the anchors ranging from 0 ("Never") to 3 ("Often"). The scale demonstrated satisfactory reliability in this current study (alpha = .94).

COVID-19-specific trauma cognitions. COVID-19-specific trauma cognitions

- were measured using an adapted version of the Impact of Events Scale (IES; Horowitz,
- Wilner, and Alvarez (1979)) that has been adapted to COVID-19 (ref). This scale
- specifically measures avoidance and intrusion cognitions related to COVID-19. Avoidance
- and intrusive symptoms often occur following exposure to a specific traumatic event.
- Participants were asked to rate the frequency of each symptom (e.g., "I had trouble falling
- asleep because thoughts about COVID-19 came into my mind") in the past week, using
- anchors ranging from 0 ("Never") to 3 ("Often"). Items were summed and averaged to
- create an "average" IES score for each participant. The scale demonstrated satisfactory
- reliability in this current study (alpha = .90).

87 Procedure

In the present study, all participants reviewed an informed consent form before
participation. After consenting to participate, participants completed questionnaires
through an online survey hosted on *Qualtrics* from a personal electronic device in a private
location of their choosing. Participants had the option to leave items blank and to
discontinue participation at any time. Upon completion of the survey, participants
reviewed a debriefing form and received course credit for their participation. All study
procedures were approved by the university's Office of Research Compliance (Institutional
Review Board).

96 Data analysis

We used R (Version 4.0.2; R Core Team, 2020) and the R-packages apaTables

(Version 2.0.5; Stanley, 2018), corx (Version 1.0.6.1; Conigrave, 2020), dplyr (Version 1.0.4;

Wickham, François, Henry, & Müller, 2021), forcats (Version 0.5.0; Wickham, 2020a),

ggplot2 (Version 3.3.2; Wickham, 2016), here (Version 0.1; Müller, 2017), papaja (Version 0.1.0.9997; Aust & Barth, 2020), psych (Version 2.0.7; Revelle, 2020), purrr (Version 0.3.4;

Henry & Wickham, 2020), readr (Version 1.3.1; Wickham, Hester, & Francois, 2018), rio

(Version 0.5.16; Chan, Chan, Leeper, & Becker, 2018), skimr (Version 2.1.2; Waring et al., 2020), stringr (Version 1.4.0; Wickham, 2019), tibble (Version 3.0.6; Müller & Wickham, 2021), tidyr (Version 1.1.2; Wickham, 2020b), and tidyverse (Version 1.3.0; Wickham et al., 2019) for all our analyses.

The majority of students (66.34%) reported at least one type of COVID-19-related

107 Results

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institutional betrayal. The most common types of institutional betrayal reported were 109 "creating an environment in which COVID-19 transmission was more common or seemed 110 normal" and "failure to prevent COVID-19 transmission" (See Figure 1). There were no 111 significant differences in COVID-19-related institutional betrayal by gender (See Figure 2). 112 Institutional betrayal was significantly associated with both general trauma-related 113 symptoms and COVID-19 specific avoidance and intrusion symptoms, p < .001 (see Table 114 1). Institutional betrayal was associated with unique variance in COVID-19 specific 115 avoidance and intrusion symptoms, p = .01 (see Table 2), even when controlling for gender, 116 knowing someone close with COVID-19, and non-specific trauma-related distress. 117

Discussion

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Table 1 $Example \ corr \ matrix$

| | 1 | 2 | M | SD |
|---------------------------------|--------|--------|------|------|
| 1. Institutional Betrayal Score | - | | 2.47 | 2.90 |
| 2. Trauma Symptom Score | .22*** | - | 0.87 | 0.53 |
| 3. Impact of Event Score | .21*** | .44*** | 1.07 | 0.64 |

Note. * p < 0.05; ** p < 0.01; *** p < 0.001



$$\label{eq:alpha} \begin{split} & \text{Table 2} \\ & \textit{A full regression table.} \end{split}$$

| Predictor | b | 95% CI | t(276) | p |
|---------------------------------------|------|---------------|--------|--------|
| Intercept | 0.33 | [0.16, 0.50] | 3.78 | < .001 |
| GenderWoman | 0.19 | [0.04, 0.34] | 2.54 | .012 |
| GenderTrans/Non-conforming/Non-binary | 0.33 | [-0.13, 0.79] | 1.43 | .154 |
| Covid19know someone with covid | 0.21 | [0.07, 0.35] | 3.00 | .003 |
| Tsc mean | 0.40 | [0.27, 0.53] | 6.18 | < .001 |
| Ibq sum | 0.03 | [0.00, 0.05] | 2.39 | .017 |

Note. * p < 0.05; ** p < 0.01; *** p < 0.001

Table 3

A full regression table.

| Predictor | b | 95% CI | t(301) | p |
|--------------------------------------|-------|----------------|--------|------|
| Intercept | 0.07 | [-0.08, 0.21] | 0.89 | .377 |
| Scaleid 1before | 0.21 | [0.06, 0.35] | 2.79 | .006 |
| Ibq sum | -0.02 | [-0.06, 0.02] | -0.86 | .390 |
| Scaleid 1 before \times Ibq sum | -0.06 | [-0.10, -0.02] | -2.86 | .005 |

Note. * p < 0.05; ** p < 0.01; *** p < 0.001

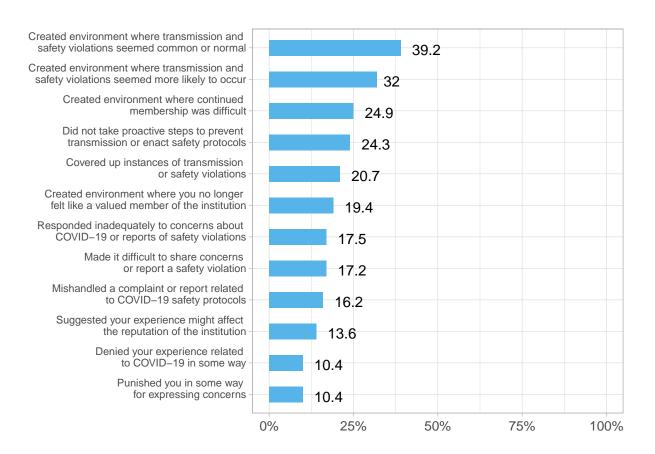


Figure 1. Percentage of Students Endorsing Institutional Betrayal



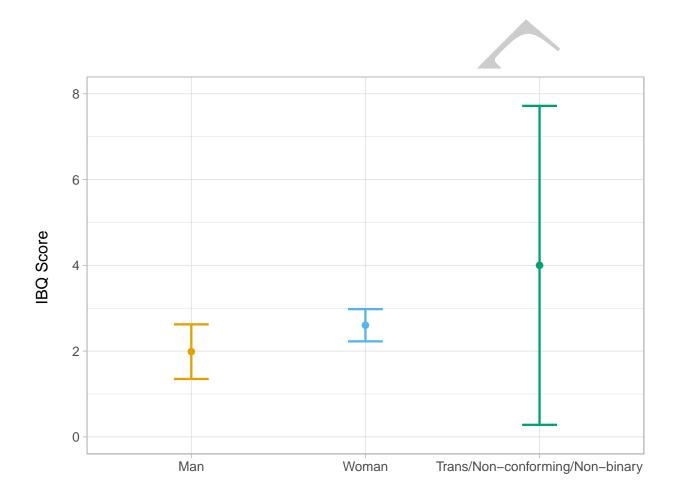


Figure 2. Institutional Betrayal Score by Gender (N = 309)

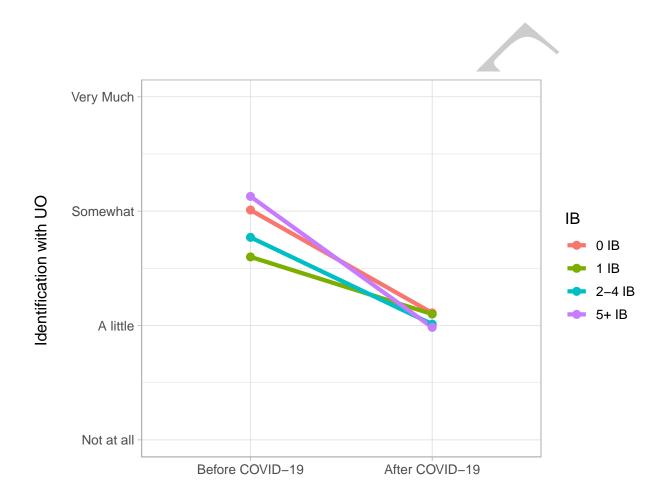


Figure 3. Institutional Identity by Institutional Betrayal (N = 309)