ABSTRACT. How do participants feel about trauma history questions in research? We asked 528 undergraduate and community participants to answer three questions about their experience of completing the Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2004), a self-report trauma measure. The questions tapped (1) participants’ experience of whether the trauma history questions were more or less distressing than things encountered in day-to-day life, (2) how important participants believe it is for psychologists to ask about these events, and (3) how good of an idea, according to participants, it is to include such a measure in psychology research. Participants indicated that, on average, questions about trauma are neutral compared to day-to-day experiences. Further, participants reported that research asking about stressful life events is more than “somewhat important,” and that including such measures is

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more than “somewhat good.” These results do not support the assumption that trauma history questions are harmful to participants and suggest that participants, on average, appreciate the inclusion of trauma questions in psychological research.

As trauma-related research has increased over the last two decades, researchers and Institutional Review Boards (IRBs) have been faced with the challenge of evaluating the relative risks and benefits of this research. Guided by the principles outlined in the Belmont Report (1979), researchers have begun to address empirically the question of relative risk and benefit in trauma-related research. Building on this burgeoning literature, the current paper addresses participants’ responses to being asked about trauma compared to other things encountered in day-to-day life. Comparison to day-to-day life is a central component of the definition of “minimal risk” and important to evaluating the costs and benefits of trauma research in light of the Belmont Report.

**Guiding Ethical Principles.** The Belmont Report (1979) stipulates three central principles: respect for the person, beneficence, and justice. The principle of beneficence requires researchers to consider both harm and benefit to the participant. In the tradition of this principle, researchers and IRBs have grappled with how to define the cost-benefit ratio of research, with particular difficulty in quantifying this ratio. As trauma-related research has proliferated, questions about the cost-benefit ratio of asking about trauma have been raised, with particular attention drawn to how trauma survivors may respond to being asked about their trauma histories. IRBs and other entities have raised concerns about potential harm to participants resulting from asking about trauma history, reflecting a pervasive assumption that asking about trauma history—particularly interpersonal violence—is inherently harmful. How participants respond to being asked about trauma history remains an empirical question that has only recently begun to receive attention, leaving IRBs to make judgments about potential harm based on their best educated guesses. Likewise, little is known about the personal benefits gained by
participants who answer questions about their trauma histories, making it even more difficult to examine the cost-benefit ratio.

In the context of the beneficence principle, researchers evaluate whether research meets a “minimal risk” standard. Minimal risk is defined as “the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests” (45 CFR 46.102(i)). Though the minimal risk definition does not specify what degree of distress would rise to the level of harm or discomfort, assessing distress in comparison to other things encountered in daily life will help researchers with ongoing evaluation of the impact of trauma-related questions on participants. To date, research on participant responses has not included comparisons of distress to other things in daily life (Newman & Kaloupek, 2004).

The principle of justice requires researchers to consider who has access to research and to the benefits of research. If IRBs are left in the position of making educated guesses about relative risk and benefits of trauma research, there is a risk that cultural taboos will influence this decision making process in ways that may be detrimental to fulfilling the justice principle. For example, asking about interpersonal violence—particularly incest, sexual assault, and domestic violence—has been taboo in American culture and thought to be particularly sensitive. Interpersonal violence such as sexual assault and abuse by caregivers are not only taboo in our culture, but are also more likely to be experienced by women (e.g., Norris, Foster, & Weissshaar, 2001; Goldberg & Freyd, 2004). Furthermore, these forms of violence are highly related to negative physical and mental health outcomes (Freyd, Klest, & Allard, 2004). Given the tacit assumption that asking about trauma such as sexual assault and incest increases the risk of harm to participants, researchers risk failing to gather information critical to women’s experiences. Such failure to collect information critical particularly to women raises questions of justice.

Importance of Trauma Research and Benefits to Society. In evaluating the cost-benefit ratio of trauma research, we can first look to the benefits to society. Over the last twenty-five years, researchers have increasingly examined the prevalence and effects of exposure to trauma on humans. In the early 1980s, researchers and health care professionals assumed that trauma exposure was a relatively rare experience, as reflected in the Diagnostic and Statistical Manual of Psychiatric Disorders (DSM), 3rd edition, definition of a trauma as an event outside the
realm of usual human experience (APA, 1980). Following a decade of research, the phrase “outside the realm of usual human experience” was removed in the 4th edition of the DSM in the face of evidence that many more people are exposed to traumas than had been estimated prior to rigorous study (APA, 1994). For example, a 1997 study using a representative, random sample of Americans revealed that 72% of participants reported exposure to at least one trauma in their lifetimes (Elliott, 1997). Research was essential to the uncovering of more accurate rates of trauma exposure and to gaining a better understanding of the range of responses people have to such exposure. Exposure to trauma, particularly interpersonal violence by a trusted other, has been shown to be related to many very significant social and health problems including suicidality, substance abuse, HIV-risk, and criminality (Widom, 1994; Cahill, Llewelyn, & Pearson, 1991; Putnam, 2003; Fergusson, Horwood, & Lynskey, 1996). These empirical findings make clear that research on trauma is important to science and society.

Examining Costs and Benefits for Individuals Participating in Trauma Research. Among the studies that have sought to examine participants’ responses to being asked about trauma are two seminal studies conducted in medical settings. 330 women (from an initial randomly selected sample of 500 women) enrolled in an HMO completed self-report measures that assessed distress and interpersonal victimization history (e.g., physical, sexual abuse, emotional neglect) (Walker, Newman, & Koss, 1997). At the end of the survey, participants were asked three questions to assess benefit, expected upset and regret. Participants generally reported participation in the study was positive and only a small number indicated they were more upset than they would have expected. The majority of participants reported that they would have completed the survey even if they had known how they would feel. In a larger sample of 1,174 women, questionnaire data was collected on maltreatment history (Newman, Walker, & Gefland, 1999). Participants were asked to complete three questions that assessed benefit, expected upset and regret. A subsample of 265 women were asked these questions again 48 hours after participation via phone interview. The majority of participants reported that participation was a positive experience. The majority of participants reported that they did not regret participation, though a subset of women with histories of maltreatment underestimated how upset they would feel by participating. Only minor fluctuations in responses were seen at 48-hour follow-up, which the authors argued suggested the cost-benefit ratio of this research was relatively stable.
More recently, Griffin, Resick, Waldrop, and Mechanic (2003) assessed the impact of research participation on 107 female survivors of interpersonal violence. Participants were asked to rate distress, interest, confusion, difficulty, and emotional numbing after completing a 2-day assessment. The participants rated participation as very positive and interesting. Responses to participation did not vary by PTSD status. Johnson and Benight (2003) examined responses to participation in 55 women recruited from domestic violence shelters. Participants completed a battery of questionnaires, which included three questions to assess whether they gained something positive from the experience, whether they were more upset than expected and whether they would have agreed to participate if they knew in advance what the experience would be like (items were taken from the Response to Research Participation Questionnaire). Forty-five percent of participants reported they gained something positive, 25% indicated they were more upset than anticipated and 6% indicated they would not have elected to participate if they knew what the experience would be like.

In a comprehensive review of this literature, Newman and Kaloupek (2004) concluded that most individuals participating in trauma-related research make favorable cost-benefit appraisals about participation and a minority report experiencing negative emotions (Newman & Kaloupek, 2004). How researchers assess and define negative emotions has varied across studies, raising the issue of what researchers define as distress and how participants are asked about these feelings. In addition, existing research does not address whether the upset experienced by participants differs from that encountered in daily life (an issue of evaluating minimal risk), nor whether the degree of upset reflects intensification of typical symptoms or involves uncharacteristic responses for the individual (Newman & Kaloupek, 2004). Further, the observation of reported distress or negative emotion does not indicate harm per se; that is, distress cannot be uniformly assumed to be harm in that it may be, for example, transitory or comparable to emotions experienced in daily life.

As a first step in the process of answering the questions raised by Newman and Kaloupek (2004), we investigated participants’ ratings of distress compared to day-to-day life, as well as the relative importance they perceived of the research given their distress. We examined undergraduate and community samples tested at two sites (University of Denver and University of Oregon) who were involved in a diverse set of studies that included, for example, laboratory cognitive or writing tasks. In each case the research teams for the primary research included one of the authors of this paper as a collaborator. The research teams agreed to
add these three questions so that the data could be collected for the current project. In all studies, participants were asked to complete a trauma history questionnaire. At the end of the study, participants were asked three questions to assess the cost-benefit ratio of their responses to being asked about trauma history. The questions were designed to assess (a) the relative distress of trauma questions compared to day-to-day life, (b) the relative importance of trauma research, and (c) the participant’s rating of how good of an idea this research is given ratings of distress and importance.

**METHODS**

*Participants.* Four hundred and sixty-eight undergraduate students (Age $M$: 20.4; $SD$: 3.0) from the University of Denver (DU) and the University of Oregon (UO) participated; 73.5% of participants were female. Undergraduate participants received either extra credit (DU) or partial credit towards a research requirement (UO) for their participation. One hundred and forty-nine community participants (Age $M$: 38.7; $SD$: 12.3) participated; 64.0% of participants were female. Community participants received $35 for their participation in a two-hour session that was the 4th and final of a longitudinal study in Oregon and $25 for a one-session study in Colorado.

*Materials.* The Brief Betrayal Trauma Survey (Goldberg & Freyd, 2004) is a 12-item self-report measure that assesses self-reported trauma history using behaviorally defined items. Items include exposure to non-interpersonal trauma (e.g., natural disaster), witnessing violence and direct interpersonal trauma (e.g., physical, sexual abuse). For each item, participants were asked if they experienced the event before or after age 18.

Three questions were asked in pencil and paper format to assess the cost benefit ratio for participants: *(Question 1)* For the questionnaires that asked about different personal life events, please rate whether you found answering the questions to be more or less distressing than other things you sometimes encounter in day-to-day life (1–much more distressing; 2–somewhat more distressing; 3–neutral; 4–somewhat less distressing; 5–much less distressing). *(Question 2)* For the questionnaires that asked about different personal life events, please rate how important you believe it is for psychologists to ask about these types of events in order to study the impact of such experiences (1–definitely not important; 2–somewhat not important; 3–neutral; 4–somewhat impor-
For the questionnaires that asked about different personal life events, please consider both your experience answering the questions, and your feelings about how important it is we ask the questions, and then rate how good of an idea it is to include such a measure in psychology research (1–very bad; 2–somewhat bad; 3–neutral; 4–somewhat good; 5–very good). In the interest of space, we will refer to Question 1 as “distress question,” Question 2 as “importance question,” and Question 3 as “goodness question.”

Procedure. Undergraduate participants were recruited through the undergraduate human subject pool at the University of Denver and University of Oregon. Following informed consent procedures, participants generally took part in one-hour studies that involved laboratory tasks. At the end of the experiment, all participants were asked to complete the BBTS either on the computer or in paper and pencil format. During debriefing, undergraduate participants were given the three questions described above in paper and pencil format. Community participants were recruited in the Eugene/Springfield area (Oregon) or the Denver metro area (Colorado). In Oregon, participants were recruited using fliers posted on bulletin boards in various community locations that stated that adults dealing with chronic pain and/or chronic health problems were needed for a psychological research study. These participants completed the BBTS about one hour into the two-hour session as part of a packet of measures. The three questions about their experiences followed the BBTS. In Colorado, participants were recruited by flyers based on self-reported trauma history. Participants completed one session that included administration of the BBTS and the three questions. In all cases, the experimenters did not watch the participants complete the three questions in order to insure privacy and to decrease participant attempts to please the experimenter. Please see http://www.du.edu/~adeprince/ethicrefs.html for a listing of the larger projects from which these data were drawn.

RESULTS

Reported Trauma History. All community participants and 410 undergraduate participants reported experiencing at least one item on the BBTS. One hundred and eighteen (79%) community participants and 209 (45%) undergraduate participants reported directly experiencing at least one event that involved interpersonal violence (e.g., physical or sexual assault). Seventy (47%) community participants and 138 (30%)
undergraduate participants indicated either physical or sexual abuse before the age of 18. See Table 1 for frequencies of reports for each item on the BBTS.

Responses to Answering Trauma Questions. The mean (SD) response to the distress question was 2.9 (1.0) and 3.0 (1.1) for community and undergraduate responses respectively, where 3 was neutral. The mean (SD) response to the importance question was 4.5 (.9) and 4.3 (1.0) for community and undergraduate responses respectively, where 5 was very important. The mean (SD) response to the goodness question was 4.4 (.8) and 4.3 (.7) for community and undergraduate responses respectively, where 5 was very good.

To assess the cost-benefit ratio, participants’ perceptions of distress were compared to both importance and goodness. Paired samples t-tests revealed that both community and undergraduate participants rated the importance of the topic significantly higher than the distress [community: $t(147) = -15.1, p < .001$, Cohen’s $d = 1.7$; undergraduate: $t(467) = -19.1, p < .001$, Cohen’s $d = 1.2$]. Participants also made significantly higher ratings in their assessment of goodness compared to the relative distress [community: $t(145) = -15.0, p < .001$, Cohen’s $d = 1.7$; undergraduate: $t(466) = -21.1, p < .001$, Cohen’s $d = 1.4$]. The effect sizes for these differences are large.

### Table 1. BBTS Items and Frequency of Responses

<table>
<thead>
<tr>
<th>Trauma Type</th>
<th>% Community Participants Reporting Before Age 18/18 and Older</th>
<th>% Undergraduate Participants Reporting Before Age 18/18 and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural disaster.</td>
<td>24.2/30.9</td>
<td>19.9/7.5</td>
</tr>
<tr>
<td>Motor vehicle or industrial accident.</td>
<td>31.5/45.0</td>
<td>23.7/14.1</td>
</tr>
<tr>
<td>Witness death of someone close.</td>
<td>29.5/33.6</td>
<td>21.4/17.3</td>
</tr>
<tr>
<td>Witness death of someone not close.</td>
<td>25.5/43.0</td>
<td>38.5/34.8</td>
</tr>
<tr>
<td>Witness someone close attack a family member.</td>
<td>31.5/23.5</td>
<td>18.6/8.3</td>
</tr>
<tr>
<td>Attacked by someone close.</td>
<td>32.2/36.9</td>
<td>12.0/6.4</td>
</tr>
<tr>
<td>Attacked by someone not close.</td>
<td>26.8/24.2</td>
<td>9.2/7.5</td>
</tr>
<tr>
<td>Sexual abuse by someone close.</td>
<td>30.9/27.5</td>
<td>21.6/18.4</td>
</tr>
<tr>
<td>Sexual abuse by someone not close.</td>
<td>26.8/30.2</td>
<td>14.7/10.7</td>
</tr>
<tr>
<td>Emotional or psychological mistreatment by someone close.</td>
<td>59.7/64.4</td>
<td>34.0/26.3</td>
</tr>
<tr>
<td>Death of own child.</td>
<td>2.7/12.8</td>
<td>.2/2</td>
</tr>
<tr>
<td>Traumatic event not covered.</td>
<td>22.8/32.9</td>
<td>41.2/29.9</td>
</tr>
</tbody>
</table>
We examined responses for those participants who rated Question 1 as either a 1 or a 2, indicating that they found answering questions about trauma history more distressing than other things encountered in day-to-day life. Eight (5.4%) community and 30 (6.4%) undergraduate participants indicated that the questionnaire was much more distressing than other things encountered in day-to-day life; 41 (27.5%) community and 117 (25.0%) undergraduate participants indicated it was somewhat more distressing. Of these 196 participants, 195 made higher ratings for the importance and goodness questions, indicating that these participants overwhelmingly rated the importance of this research higher than the relative distress. The one individual who did not endorse higher ratings reported a 1 for the importance question and did not respond to the goodness question. Looking at the goodness question, 402 (85.9%) undergraduate and 124 (83.2%) rated this items a 4 (somewhat important) or 5 (very important).

Do males and females differ in their responses to being asked about trauma history? Among community participants, men and women differed only in response to question 3 (goodness question); women made higher goodness ratings compared to men ($t(144) = -2.4, p < .05; Cohen's d = .33$). Among undergraduate participants, men ($n = 123$) and women ($n = 341$) differed in their responses to the three follow up questions. Men reported the questions were less distressing compared to things encountered in daily life than women; $t(462) = 2.0, p < .05; Cohen's d = .15$. However, women reported they believed it was more important for psychologists to study this issue than men; $t(462) = -2.4, p < .05; Cohen's d = .25$. In addition, women made higher goodness ratings than men; $t(461) = -2.6, p = .01; Cohen's d = .22$. See Table 2 for means. Effect sizes for these differences were small.

Did participants who reported traumas that have been thought of as more sensitive, such as assault, find the trauma questions more distressing? To evaluate whether responses to being asked about trauma varied by reported trauma history, two sets of comparisons were made. First, participants who reported any interpersonal violence were compared to those who reported no interpersonal violence. See Table 2 for means. Among both community and undergraduate participants, the interpersonal violence group reported that it was more important that psychologists study trauma than the no interpersonal violence group [community: $t(147) = -1.8, p = .08; Cohen's d = .25$; undergraduate: equal variances not assumed; $t(445) = -2.8, p < .01; Cohen's d = .22$]. Effect sizes for these differences were small.
Second, participants who reported sexual or physical abuse before age 18 were compared to those who did not. See Table 2 for means. Among community participants, a difference approached conventional significance for the distress question, such that the abuse group reported the questions were more distressing than things encountered in day-to-day life compared to the no-abuse group; \( t(146) = 1.9, p = .05; \) Cohen’s \( d = .32. \) The groups did not differ in responses to Questions 2 and 3. Among undergraduate participants, the abuse group reported the research was more important (question 2) compared to the no-abuse group (equal variances not assumed); \( t(328) = 2.0, p < .05; \) Cohen’s \( d = .14. \) The groups did not differ in response to questions 1 and 3. Effect sizes for these differences were small.

**DISCUSSION**

In the current sample, 100% of community participants and 87.6% of undergraduate participants reported experiencing one or more traumatic
events. In spite of the vast majority of participants reporting exposure to trauma, they rated questions about trauma history to be neutral on average compared to other things encountered in day-to-day life. Further, participants rated the importance of the topic significantly higher than the distress, as well as made higher ratings for how good of an idea it is to include such measures in research compared to the distress; the effect sizes for both of these differences were large. A minority of participants (37%) reported that the questions were more distressing than other things encountered in day-to-day life. In all but one case, these participants indicated that the relative importance and goodness of the research outweighed that distress. Looking at the data both in terms of average responses and individual responses, there is overwhelming evidence that the cost-benefit ratio for asking about trauma history is stable.

These data inform considerations of minimal risk insofar as we have begun the process of comparing responses to other things encountered in daily life. However, these data are limited in that we did not use the same phrasing utilized in the federal definition of minimal risk (specifically, the terms “harm or discomfort”). The extent to which “distress” in this research is consistent with or different from “discomfort” remains unclear; for example, “discomfort” applies more readily to physical discomfort, such as in the case of blood draws or other medical procedures. Future research should assess participants’ perceptions of harm compared to other things encountered in day-to-day life. Further, the question of whether distress reflects intensification of typical symptoms or involves responses uncharacteristic for these individuals (Newman & Kaloupek, 2004).

While cultural taboos suggest that asking about trauma may be particularly upsetting for survivors of abuse and interpersonal violence, we did not find evidence that this is the case for survivors in our sample. Among the community participants, an effect approached significance such that participants with a reported history child physical or sexual abuse rated the questions as more distressing than those without such histories. Participants who reported interpersonal violence in both the community and undergraduate samples made higher ratings on the importance question than the non-interpersonal violence group. Among undergraduate participants, those with histories of interpersonal violence or abuse did not rate the questions as more distressing than others in the sample, though they did rate this research as more important. For all of these differences, effect sizes were small; this calls into question the real world significance of the observed statistical differences between groups. Taken together, these findings confirm a stable cost-ben-
efit ratio for asking about trauma even when comparing groups with trauma histories that have been considered particularly sensitive.

Implications and Future Directions. The current research does not provide information about the relative distress caused by other types of research questions, such as questions about finances or other psychological issues, such as body image. As we gain a better understanding of responses to trauma questionnaires both in terms of distress compared to day-to-day life and benefits, we must also examine the same relative risks and benefits in other research domains. For example, a minority of participants may also find that answering questions about finances or psychological symptoms (e.g., self-esteem) is more distressing than other things encountered in day-to-day life and/or is less important to participants than trauma research. We are currently investigating this set of issues.

These results do not support the pervasive belief that asking about trauma is itself likely to be harmful. Rather, participants indicate that they appreciate the importance of these questions in psychological research. While trauma research has proven beneficial to science and society, and this research indicates participants do not find the questions harmful, future research is needed to evaluate the extent to which answering trauma history questions may be directly beneficial to participants. An equally important question for future investigation is the extent to which not asking about trauma history may be directly and indirectly harmful to research participants (Becker-Blease & Freyd, 2004).

REFERENCES


