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Reactions to Dating Violence Research: Do Difficulties with Distress Tolerance Increase Negative Reactions?

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Abstract

Recent research has begun to examine whether participants in dating violence studies perceive any benefit from the research and/or experience emotional distress as a result of having participated. Such information is important for Institutional Review Boards (IRBs) and researchers in determining ethical and appropriate protections for participants. In the current study, we examined participants' reactions to answering questions on dating violence victimization and perpetration utilizing a sample of female college students ($N = 282$). We also examined whether distress tolerance was associated with research reactions and moderated the relation between reports of victimization/perpetration and negative emotional reactions to the research. Findings demonstrated that negative emotional reactions to the research did not differ between individuals with or without previous dating violence. Further, distress tolerance had a main effect, but not a moderating effect, on negative emotional reactions to research participation. Implications of these findings for future research and IRBs are discussed.

Keywords

Dating violence; victimization; research reactions; distress tolerance

Dating violence is a prevalent problem among young adults. Research on dating violence has increased substantially in recent years, which has led to a better understanding of the causes and consequences of aggressive behavior among dating couples. Although research in this area is growing, it has been our experience that Institutional Review Boards (IRBs) are often concerned that asking individuals to answer questions about their previous violence experiences will place them at risk for emotional distress. Empirical research is needed on the reactions of participants in dating violence studies as it would inform

researchers and IRBs as to whether this concern is warranted. To date, we are aware of only two studies that have examined research reactions of dating violence research participants (Edwards, Probst, Tansill, & Gidycz, in press; Shorey, Cornelius, & Bell, 2011). In the current study, we intended to extend previous research by examining the positive and negative research reactions of female undergraduate students to answering dating violence victimization and perpetration questions, and to examine whether distress tolerance impacted (moderated) reports of emotional distress as a result of research participation.

Dating Violence

Research has consistently demonstrated that each year approximately 20–30% of female college students experience physical aggression and 70–90% experience psychological aggression (Shorey, Cornelius, & Bell, 2008). The majority of this research also indicates that violence is bi-directional in nature, such that individuals are often both perpetrators and victims of violence (Bell & Naugle, 2007; Cornelius, Shorey, & Beebe, 2010; Shook, Gerrity, Jurich, & Segrist, 2000). Some research suggests that females may be more likely to perpetrate physical aggression in dating relationships than their male counterparts (Archer, 2000). However, females are also more likely to sustain injuries as a result of their victimization experiences (Archer, 2000); and research has demonstrated that female victims of dating violence, both physical and psychological, experience a number of negative health outcomes such as depression, anxiety, and substance use (Kaura & Lohman, 2007; Shorey, Rhatigan, Fite, & Stuart, 2011; Shorey, Sherman, et al., 2011; Straight, Harper, & Arias, 2003). Thus, it is clear that females' experiences with both dating violence perpetration and victimization are important topics of investigation.

Dating Violence Research Reactions

As with most trauma-based research, a concern that is often raised by IRBs, both in our experience and reported in the literature (Shorey, Cornelius, et al., 2011), is that individuals who participate in dating violence research may become emotionally distressed as a result of being asked questions about potentially traumatic events (i.e., violence). Consistent with this, Newman and Kaloupek (2004) stated it is likely a universal concern of IRBs that asking individuals to recall potentially traumatic events may produce emotional harm to participants. Unfortunately, there is a dearth of empirical research on reactions to trauma-related research generally, and dating violence research specifically. Research with vulnerable populations such as female domestic violence victims, individuals previously exposed to childhood abuse, and other trauma exposed populations, often report benefits to answering questions about interpersonal trauma, with only minimal negative outcomes, such as emotional distress, identified (e.g., DePrince & Freyd, 2004; Griffin, Resick, Waldrop, & Mechanic, 2003). Research also suggests that answering questions about previous abuse does not appear to result in more distress than other survey research that asks about other, non-abuse questions that may be perceived as distressing (Cromer, Freyd, Binder, DePrince, & Becker-Blease, 2006). Moreover, a failure to ask about abuse experiences may be more harmful in the long-term than asking about abuse (Becker-Blease & Freyd, 2006). However, without empirical research examining whether participants become distressed following dating violence research participation, IRBs are left to make their decisions on the ethics of research projects based on personal opinions and subjective data (Carter-Visscher, Naugle, Bell, & Suvak, 2007). Having objective data on research reactions will provide IRBs with important information on the risks and benefits of dating violence victimization and perpetration research so they can best protect research participants, which is particularly important for vulnerable populations such as individuals exposed to violence (Logan, Walker, Shannon, & Cole, 2008). Therefore, there is a need to examine the research reactions of dating violence study participants.

To date, we are aware of only two studies that have examined females' reactions to participating in dating violence research. Using a sample of male and female undergraduate students, Shorey, Cornelius, and colleagues (2011) examined whether reports of physical and psychological dating violence perpetration and victimization were related to positive and negative reactions to research participation. Results showed that female victims of each form of dating violence did not report more negative emotional reactions from their research participation than non-victims. In contrast, female victims of physical aggression did report more perceived drawbacks to their research participation than non-victims, such that they thought the questions asked were too personal, the procedures took too long, or they found the study inconvenient. However, female perpetrators, relative to non-perpetrators, reported experiencing more beneficial reactions to research participation, such as gaining personal insight into themselves and their behavior. Edwards and colleagues (in press), also using a sample of female undergraduate students, demonstrated that only 7.7% of participants became emotionally upset as a result of research participation, which included answering question on victimization experiences. Thus, these studies, while preliminary, provide evidence that the majority of females with a history of dating violence do not become seriously emotionally distressed as a result of research participation and perceive personal benefits. These findings are consistent with research on other populations who have experienced trauma, such as battered women, which has demonstrated that women report their research participation to be valuable, rather than upsetting (e.g., Griffin et al., 2003).

Still, additional research is needed to replicate and extend the findings of Shorey, Cornelius, and colleagues (2011) and Edwards and colleagues (in press). For instance, it is possible that there are factors that influence the research reactions of individuals who have perpetrated or been victimized by dating violence, making it more or less likely that they may become upset when answering sensitive questions. In particular, we believe it is possible that individuals with poor distress tolerance may become more upset by their research participation than individuals with good distress tolerance. Distress tolerance can be defined as "the capacity to experience and withstand negative psychological states" (Simons & Gaher, 2005; p. 83). Individuals with low distress tolerance are more likely to report that their distress is unbearable or intolerable, are more likely to be ashamed of their distress and believe they cannot cope with it, and have a difficult time regulating their distress once present (Simons & Gaher, 2005). Further, individuals with low distress tolerance are more likely to employ maladaptive coping responses (e.g., substance use, avoidance) in response to distress (Leyro, Zvolensky, & Bernstein, 2010). As stated by Leyro and colleagues (2010), one's perception and emotional reactions of situations may vary depending on one's ability to tolerate distress. Given the theoretical and empirical literature on distress tolerance, it seems plausible that individuals with low distress tolerance may be more likely to perceive questions about dating violence victimization and/or perpetration as upsetting and/or intolerable, which may result in increased negative emotional reactions to research participation. That is, distress tolerance may be directly related to negative research reactions and may also moderate the relation between dating violence victimization and/or perpetration and emotional reactions to research participation.

Current Study

Therefore, the current study examined the research reactions to answering questions on psychological and physical dating violence perpetration and victimization in a sample of female undergraduate students. We focused exclusively on females due to the high prevalence of their victimization and perpetration of dating violence and potential for negative outcomes due to their experiences with dating violence. We also examined whether distress tolerance moderated the relation between dating violence perpetration and victimization and negative emotional reactions to research participation. We chose to focus

on the effect of distress tolerance on negative emotional reactions specifically due to the concern of IRBs about research participants becoming distressed, as well as the conceptual link between distress tolerance, dating violence, and negative emotional reactions. Based on previous research we hypothesized that (1) victims and non-victims, and perpetrators and non-perpetrators, would not differ in research reactions to participation. We also hypothesized that (2) distress tolerance would have a main effect on negative emotional research reactions, such that individuals with greater distress tolerance would report less negative emotional reactions to research participation. Finally, we hypothesized that (3) distress tolerance would moderate the relation between victimization and perpetration and emotional reactions to research participation. Specifically, the relation between victimization/perpetration and negative emotional reactions would be stronger for individuals with poorer distress tolerance, and weaker for individuals with better distress tolerance.

Method

Participants

Participants were 282 undergraduate females, 18 years of age or older, from a large public southeastern university. The mean age of participants was 18.43 ($SD = 1.02$; Range = 18–28). The majority of participants were non-Hispanic Caucasian (84.1%), followed by African American (8.8%), Hispanic (2.5%), and “other” (e.g., Asian American, Indian; 3.3%). Four participants did not indicate their ethnicity. Academically, the majority of participants were Freshmen (76.3%), followed by Sophomores (16.3%), Juniors (6%), and Seniors (1.4%). At the time of the study, 32.2% of participants were in a current dating relationship. The mean number of months participants had been in a dating relationship was 10.58 ($SD = 12.41$; Range = 1–58). For participants not currently in a dating relationship, 48.7% ($n = 138$) indicated they had been in a dating relationship in the previous 12 months. Two hundred participants (70.7%) indicated they had one dating partner in the previous 12 months, 11.3% had two dating partners in the previous 12 months, 2.1% had three dating partners, 1.5% had four or more partners, and 14.5% did not have a dating partner. No question was asked concerning lifetime dating history. The majority of participants indicated that their sexual orientation was heterosexual (97.9%).

Measures

Demographics—Participants completed a brief demographics questionnaire that asked about their age, relationship status, academic level, ethnicity, and sexual orientation.

Dating violence—The Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used to assess dating violence experiences in the previous 12 months. Specifically the psychological and physical aggression perpetration and victimization subscales were used. Participants indicated, using a 7-point scale ($0 = \text{never}$ to $6 = \text{more than 20 times}$), the number of times each form of aggression occurred with their current, or most recent, dating partner in the previous 12 months. Scores for each CTS2 subscale were obtained by taking the midpoint for each response (e.g., “4” for a response of “3 to 5 times”) and then summing the items for each subscale, with scores ranging from 0 to 25 for each item (Straus, Hamby, & Warren, 2003). Higher scores on the CTS2 indicate more frequent aggression perpetration/victimization. The CTS2 is one of the most widely used measures of violence against intimate partners and has demonstrated good reliability and validity across multiple samples (Straus et al., 2003). For the current study, internal consistency estimates were .66 (psychological perpetration), .66 (psychological victimization), .82 (physical perpetration), and .90 (physical victimization). Due to positive

skew for each CTS2 subscale, log transformations on each subscale were performed prior to data analyses.

Distress tolerance—The Distress Tolerance Scale (DTS; Simons & Gaher, 2005) was used to examine participant's distress tolerance. The DTS contains 15-items that are rated on a five-point scale (*1 = strongly agree to 5 = strongly disagree*), with higher scores indicating a better ability to tolerate distress. A total score is generated by taking the mean of all items. Example items include "There is nothing worse than feeling distressed or upset" and "I'll do anything to stop feeling distressed or upset." The DTS has demonstrated good validity and internal consistency (Simons & Gaher, 2005). For the current study, the internal consistency of the DTS was .94.

Research reactions—The Reactions to Research Participation Questionnaire (RRPQ; Newman, Willard, Sinclair, & Kaloupek, 2001) was used to assess participant's reactions to participating in the current study. The RRPQ is a 23-item self-report measure that examines five dimensions of research reactions. These five dimensions include: Participation Factor (PF; cost-benefit ratio), Personal Benefits (PB; insight into one's self), Emotional Reactions (ER; did the study raise emotional issues or cause distress), Perceived Drawbacks (PD; i.e., were the questions too personal; was the study too long), and Global Evaluation (GE; i.e., faith in confidentiality and personal respect during study). Each item is rated on a five-point scale (*1 = strongly disagree; 5 = strongly agree*), and higher scores on each subscale indicate more positive research experiences. For example, a high score on the ER subscale indicates *less* negative emotional reactions; a high score on the PD subscale indicates *less* perceived drawbacks to the study. The RRPQ is a widely used measure of research reactions, has been used in previous research on dating violence (Shorey, Cornelius, et al., 2011), and has demonstrated good internal consistency (DePrince & Chu, 2008). In the current study, internal consistency for each subscale was .87 (PF), .95 (PB), .88 (ER), .78 (PD), and .97 (GE). The RRPQ was the last measure participants completed.

Procedures

Participants were recruited through an online survey website used specifically by the psychology department at the university where the study was conducted. All students in introductory psychology classes can participate in research to earn credit towards their class. Interested students read a brief description of the current study, which stated that they would be asked to answer questions about themselves and their intimate relationships, and that they must be 18 years of age or older in order to participate. If interested in the study, students were instructed to follow a web-link that took them to a secure survey website to complete the study questionnaires. Students were first provided with an informed consent, which they completed online, and then were provided with standardized instructions for the measures described above. Upon completion of the questionnaires, students were provided with the names, email addresses, and telephone numbers of the researchers in case they had any questions or were experiencing distress as a result of the study, and a list of local referrals for domestic violence and counseling resources. All procedures were approved by the Institutional Review Board (IRB).

Results

All analyses were conducted using SPSS version 18.0. All participants were included in all analyses because of minimal missing data. All available data were used for each participant and no participant's data were imputed for analyses. Bivariate correlations, means, and standard deviations of study variables were first examined and are presented in Table 1. All violence variables were strongly associated with each other. Distress tolerance was

negatively and significantly associated with physical perpetration, physical victimization, and psychological victimization. That is, greater distress tolerance is associated with less physical perpetration and psychological and physical victimization. The only violence subscale correlated with research reactions was psychological perpetration, which was negatively associated with PD. That is, as psychological aggression perpetration increased in frequency, perceived drawbacks increased (lower scores indicate more drawbacks). Distress tolerance was positively associated with ER. Because higher scores on the ER subscale indicate less negative emotional reactions, this indicates that increased distress tolerance was associated with *less* negative emotional reactions to the research.

We next categorized individuals into victims and non-victims, and perpetrators and non-perpetrators, of each form of aggression. This was done in order to compare victims/perpetrators to non-victims/perpetrators on research reactions. Consistent with previous research on dating violence (Bell & Naugle, 2007; Cornelius et al., 2010; Rhatigan & Street, 2005; Shorey, Cornelius, et al., 2011), individuals were considered a perpetrator/victim of each form of aggression if they endorsed at least one item from each respective subscale on the CTS2. From the overall sample, 53.9% were victims of psychological aggression, 14.6% were victims of physical aggression, 60.1% were perpetrators of psychological aggression, and 21.6% were perpetrators of physical aggression. Next, we conducted *t* tests to compare aggression groups on research reactions, the results of which are presented in Table 2. As displayed, perpetrators and victims of each form of aggression did not differ from their non-perpetrator and non-victim counterparts on any of the RRPQ subscales. We also ran all analyses (i.e., correlations, *t* tests, regression) without individuals who did not have a dating partner in the previous 12 months and analyses were consistent with these individuals removed.

Finally, we examined whether distress tolerance moderated the relation between dating violence (perpetration and victimization) and negative emotional reactions (ER) to research participation. Continuous scores for violence (perpetration and victimization) were used in these analyses. Multiple regression analyses were used to test the possible moderating effect of distress tolerance. Predictor variables (violence and distress tolerance) were mean centered to aid in the interpretation of moderated effects and reduce multicollinearity among variables (Aiken & West, 1991). Next, the main effects of predictor variables were entered into the regression model predicting ER. After main effects were examined, two-way interaction terms were added to the model (Aiken & West, 1991). These interaction terms were computed by multiplying the centered scores of the predictor variables. If significant interactions were identified, predictor variables were probed at low (-1 *SD*) and high ($+1$ *SD*) levels (Aiken & West, 1991).

As displayed in Table 3, for each main effects model ($F = 3.46$, $p = .03$; $R^2 = .16$ for perpetration; $F = 3.62$, $p = .03$; $R^2 = .16$ for victimization), only distress tolerance was associated with ER. That is, as distress tolerance increased, respondents also reported less negative reactions to the research. Victimization and perpetration were unrelated to ER in the main effects models. When two-way interactions were added to the models ($F = 2.88$, $p = .04$; $R^2 = .17$ for perpetration; $F = 2.70$, $p = .05$; $R^2 = .17$ for victimization), the interaction terms did not significantly predict ER, but the main effect of distress tolerance still significantly predicted ER. Thus, moderation was not present and only main effect models are interpreted (Aiken & West, 1991).

Discussion

Dating violence is a prevalent problem among young adults, and researchers have been increasingly focused on addressing this topic. Despite this increased research focus, IRBs

are often hesitant to approve research on this topic, as possible emotional distress may result from answering questions related to violence. Thus, empirical research that examines the reactions of participants to answering study questions about dating violence victimization and perpetration is needed. The current study replicated and extended the research on this topic. Namely, we examined differences in research reactions among undergraduate female victims/non-victims and perpetrators/non-perpetrators of dating violence. We also examined whether distress tolerance impacted research reactions and whether it moderated the relation between dating violence perpetration and victimization and negative emotional reactions to research participation. Our findings are consistent with previous research (Edwards et al., in press; Shorey, Cornelius, et al., 2011) and demonstrate that answering questions about dating violence is not emotionally distressing for the majority of participants.

Correlational findings from the current study showed that the only violence subscale that was associated with research reactions was psychological aggression perpetration. Specifically, increased frequency of perpetrated psychological aggression was associated with more perceived drawbacks to research participation. The perceived drawbacks subscale assesses whether participants believed the study was too long, whether the study was boring, and if the questions were too personal (Newman et al., 2001). Psychological aggression is a detrimental form of aggression in intimate relationships (O'Leary, 1999), and it is possible that being asked to recall one's use of this form of aggression raised uncomfortable memories for participants, leading to more perceived study drawbacks. Distress tolerance was only associated at the bivariate level with emotional reactions to research participation, such that lower distress tolerance was associated with more negative emotional reactions (e.g., experienced intense emotions during the research, the research raised emotional issues; Newman et al., 2001) to research participation. Overall, the correlation analyses provide evidence that dating violence experiences are not generally associated with positive or negative research reactions.

Our first hypothesis was supported, such that neither victims and non-victims, nor perpetrators and non-perpetrators, differed on emotional or any other research reaction. Previous research showed that female victims of physical dating violence perceived more drawbacks to research participation than non-victims (Shorey, Cornelius, et al., 2011). Our sample of female college students reported slightly less physical victimization than the Shorey, Cornelius, and colleagues (2011) study, and this could be one reason why differences in research reactions were found across these studies. In fact, our sample reported less violence perpetration and victimization across all CTS2 subscales than the Shorey, Cornelius et al. (2011) study. Future research is needed to clarify the discrepancy between these two studies. Nonetheless, these findings are important because they demonstrate that having a history of dating violence does not increase negative reactions following research participation, which has important implications for IRBs and the proper informed consent of research participants (discussed below).

We also examined whether distress tolerance impacted research reactions and moderated the relation between dating violence victimization and perpetration and emotional reactions to research participation. That is, we wanted to know whether reports of dating violence perpetration/victimization would be more strongly associated with negative emotional reactions for individuals with poorer distress relative to individuals with greater distress tolerance. Results did not support our hypothesis that distress tolerance would serve as a moderator of this relationship. Although participants with lower distress tolerance had more negative reactions to the study, their history of dating violence victimization or perpetration did not further influence their reactions. Thus, individuals who are generally less able to tolerate distress will likely be at greater risk for negative research reactions, which would be consistent with the general principles of distress tolerance (Simons & Gaher, 2005).

However, researchers should be aware that not all emotional distress is necessarily problematic, and that some participants may view their participation, when accompanied with negative emotions, as cathartic. Future research should examine participants' views on their emotional reactions to dating violence research, including whether they found it cathartic or troubling.

Implications for IRBs and Informed Consent

In conjunction with previous research (Edwards et al., in press; Shorey, Cornelius, et al., 2011) the current study provides important information for IRBs and carries implications for the proper informed consent and protection of female undergraduate participants when investigating dating violence victimization and perpetration. First, IRBs should be informed that empirical research has demonstrated that female undergraduate students largely perceive their research participation as neutral, that some may find personal benefit to research participation (Shorey, Cornelius, et al., 2011), with only a minority experiencing increased emotional distress or perceiving drawbacks to their research participation. In addition, there is no empirical support for the concern that answering questions on previous relationship aggression causes marked emotional distress, and this should be disseminated to IRBs. This does not mean that it is not possible for a participant to become distressed, and proper protections should be in place if this were to occur. Rather, when aggregated across participants, it is unlikely that self-report questions on previous experiences with dating violence will lead to negative emotional reactions that warrant intervention. Findings from the current study suggest that distress tolerance may be a better indicator of whether participants will become emotionally upset, and researchers could consider screening individuals on distress tolerance and either exclude them from studies or provide them with additional protections/referral sources.

The current study is also the first known study to demonstrate that difficulty tolerating distress is associated with more negative research reactions, specifically increased negative emotional reactions. While this finding should be considered preliminary until replicated, it may have important implications for researchers who conduct studies on violence and other trauma-related topics. Researchers could screen individuals on their distress tolerance skills prior to asking trauma-related questions, which may provide some insight into which participants may become most distressed during the research process. Participants with low distress tolerance could be provided with feedback on this and informed that the study may be particularly upsetting for them, allowing them to make the most informed decision possible on whether or not to participate. Furthermore, additional resources and protections could be in place for individuals with the lowest distress tolerance skills. For instance, this study had participants complete all self-report measures through an online survey website, which did not allow for a researcher to assess participants' emotional well-being throughout the course of study, or allow participants to ask a researcher questions during the study unless they were to call the researcher. It might be beneficial for individuals with low distress tolerance to complete studies on sensitive topics with a trained researcher present who can help to diffuse any strong emotional reactions or help participants seek immediate assistance if needed. Still, it is important to note that not all distress is necessarily "bad" and that some participants may view their participation as cathartic and beneficial despite some relatively minor emotional distress. In fact, previous research has demonstrated that, while some participants view their research participation as more distressing than they originally believed it would be, they would still participate had they known in advance how much distress they would experience (Newman, Walker, & Gefland, 1999). Thus, some distress from research participation should not automatically be conceived of as "bad" and this information could be disseminated to IRBs and research participants.

Limitations and Directions for Future Research

The current study has several limitations that should be considered when interpreting its findings. First, the majority of participants were non-Hispanic Caucasians, which limits the generalizability of findings to more diverse samples. The reliance on a convenience sample of undergraduate college students, who self-selected into the study, further limits of the generalizability of findings. It is possible that a sample with more severe violence exposure may report different research reaction outcomes than a college student sample. Our assessment of dating violence and research reactions relied solely on self-report measures, and future research should consider implementing interview modalities when assessing these constructs. Qualitative investigations of research reactions could provide additional insight into the risks and benefits of research participation from the perspective of the participant. In addition, the internal consistencies for the psychological aggression subscales were low. Our method for classifying individuals into perpetrators and victims of dating violence, while the most common method reported in the literature, may have been overly inclusive and different approaches for classifying individuals may have produced different results. The cross-sectional nature of the current study precludes the determination of causality among study variables, and longitudinal research is needed to determine whether violence questions predict emotional distress after completion of the study. Although no participants contacted us following the study to report any distress, this does not eliminate the possibility that participants became distressed after completion of the study. Future work should examine whether research reactions predict whether participants choose to participate in follow-up assessments in longitudinal investigations. For instance, it is possible that participants who perceive more benefit and personal insight from their research participation would be more likely to complete follow-up assessments, whereas participants who perceive more drawbacks and experience emotional distress may be less likely to complete follow-up assessments. Future research should also assess social desirability, as this may have impacted reports of dating violence and research reactions in the current study.

Despite the above limitations, the current study adds to a growing body of literature on the research reactions of participants to answering potentially distressing questions. In addition, this is the second study to demonstrate that female victims and perpetrators of psychological and physical dating violence do not differ in their research reactions when compared to their non-violent peers. Moreover, one's ability to tolerate distress did not impact the relation between dating violence and research reactions, but did have a main effect on negative emotional reactions. These findings have important implications for IRBs and researchers in the field of dating violence. That is, IRBs should be informed that research indicates that answering questions on dating violence is not perceived to be distressing to most participants, regardless of one's history of dating violence, and may only be perceived as distressing for individuals with the lowest distress tolerance skills. Participants should be informed that they are unlikely to experience emotional distress due to research participation, but should also be provided with the appropriate resources should they experience any negative reactions.

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Table 1

Bivariate Correlations, Means, and Standard Deviations among Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Psychological Perpetration	---	.48***	.93***	.35***	-.12	-.08	-.06	-.09	-.12*	-.07
2. Physical Perpetration		---	.49***	.80***	-.14*	-.01	-.02	-.04	-.04	-.03
3. Psychological Victimization			---	.39***	-.14*	-.07	-.07	-.09	-.11	-.06
4. Physical Victimization				---	-.15*	-.02	-.05	-.07	-.05	-.03
5. Distress Tolerance					---	.04	-.03	.15*	.00	.03
6. RRPQ-PF						---	.69***	.14*	.64***	.84***
7. RRPQ-PB							---	-.10	.54***	.66***
8. RRPQ-ER								---	.28***	.18**
9. RRPQ-PD									---	.64***
10. RRPQ-GE										---
<i>M</i>	6.98	1.82	6.75	1.40	49.61	15.73	14.54	13.78	20.81	20.26
<i>SD</i>	13.02	10.32	13.46	10.85	14.55	4.41	4.66	4.77	4.87	5.94

Note: RRPQ = Research Reactions Participation Questionnaire; PF = Participation Factor; PB = Personal Benefits; ER = Emotional Reactions; PD = Perceived Drawbacks; GE = Global Evaluations. Means (*M*) and Standard Deviations (*SD*) for the CTS2 scores are based on raw, untransformed, scores.

* $p < .05$,

** $p < .01$,

*** $p < .001$

Table 2

Differences between Perpetrators/Non-Perpetrators and Victims/Non-Victims on Research Reactions

	Perpetrators <i>M (SD)</i>	Non-Perpetrators <i>M (SD)</i>	<i>t, p</i>
Psychological			
RRPQ-PF	15.37 (4.38)	16.21 (4.44)	-1.56, .12
RRPQ-PB	14.29 (4.59)	14.84 (4.77)	-.97, .33
RRPQ-ER	13.49 (4.68)	14.25 (4.87)	-1.30, .19
RRPQ-PD	20.44 (4.84)	21.30 (4.92)	-1.43, .15
RRPQ-GE	19.94 (6.07)	20.66 (5.77)	-.98, .33
Physical			
RRPQ-PF	15.65 (3.99)	15.76 (4.53)	-.16, .87
RRPQ-PB	14.48 (4.17)	14.56 (4.80)	-.12, .90
RRPQ-ER	13.72 (3.97)	13.80 (4.98)	-.12, .90
RRPQ-PD	20.55 (4.60)	20.88 (4.95)	-.46, .64
RRPQ-GE	20.19 (5.43)	20.28 (6.09)	-.10, .92
	Victims <i>M(SD)</i>	Non-Victims <i>M(SD)</i>	<i>t, p</i>
Psychological			
RRPQ-PF	15.43 (4.20)	16.03 (4.66)	-1.13, .26
RRPQ-PB	14.30 (4.48)	14.74 (4.89)	-.78, .43
RRPQ-ER	13.31 (4.61)	14.32 (4.96)	-1.75, .08
RRPQ-PD	20.34 (4.77)	21.33 (4.97)	-1.66, .09
RRPQ-GE	20.05 (5.86)	20.48 (6.11)	-.58, .56
Physical			
RRPQ-PF	15.68 (4.23)	15.77 (4.40)	-.13, .89
RRPQ-PB	14.26 (4.80)	14.61 (4.61)	-.44, .66
RRPQ-ER	13.43 (3.96)	13.79 (4.89)	-.44, .66
RRPQ-PD	20.32 (4.73)	20.85 (4.88)	-.63, .53
RRPQ-GE	20.04 (5.91)	20.34 (5.90)	-.29, .76

Note: RRPQ = Research Reactions Participation Questionnaire; PF = Participation Factor; PB = Personal Benefits; ER = Emotional Reactions; PD = Perceived Drawbacks; GE = Global Evaluations.

Table 3**Multiple Regression Analyses Predicting Emotional Reactions (ER) to Research Participation**

Predictors	Psychological Victimization <i>B(SE), p</i>	Physical Victimization <i>B(SE), p</i>
Step 1		
Victimization	-.07 (.22), .24	-.05 (.43), .41
Distress Tolerance	.14 (.02), .02	.14 (.02), .02
Step 2		
Victimization	-.07 (.22), .22	-.01 (.50), .86
Distress Tolerance	.14 (.02), .02	.15 (.02), .01
Victimization × Distress Tolerance	-.02 (.02), .67	.06 (.03), .35
Tolerance		
Predictors	Psychological Perpetration <i>B(SE), p</i>	Physical Perpetration <i>B(SE), p</i>
Step 1		
Perpetration	-.07 (.22), .20	-.02 (.36), .69
Distress Tolerance	.14 (.02), .02	.15 (.02), .01
Step 2		
Perpetration	-.08 (.23), .17	.07 (.42), .80
Distress Tolerance	.14 (.02), .02	.15 (.02), .01
Victimization × Distress Tolerance	-.05 (.01), .41	.08 (.02), .19
Tolerance		

Note: Step 1 involved only estimating main effects. Step 2 involved adding the interaction term into the model.