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A Randomized Clinical Trial of Acceptance and Commitment Therapy and the Duluth Model Classes for Men Court-Mandated to a Domestic Violence Program

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Objective: This is the first randomized controlled trial to compare Acceptance and Commitment Therapy (ACT) with the Duluth Model curriculum, which took place in community-based corrections for the treatment of men convicted of domestic violence. ACT is a third-wave cognitive–behavioral approach that utilizes experiential methods to foster psychological flexibility. The Duluth Model curriculum is an educational approach grounded in feminist theory that focuses on changing attitudes toward women and unlearning power and control motivations. This trial was preregistered at ClinicalTrials.gov (*registration number: NCT03609801*). ***Method:*** This study included 338 men who were court-mandated to complete a domestic violence program after being convicted of assault against a female partner. Participants were randomized to complete the 24 sessions of the ACT program or the Duluth Model Men's Nonviolence Classes. Outcomes included criminal justice data (domestic violence charges, other violent charges, and nonviolent charges) incurred during the 1 year following program dropout or completion, and victim reports of intimate partner violence (IPV; aggression, controlling behaviors, and stalking/harassment). ***Results:*** In intent-to-treat comparisons to Duluth, ACT participants did not show a difference in domestic assault charges at 1 year posttreatment ($p = .44$). ACT participants acquired significantly fewer violent charges ($p = .04$) and nonviolent charges ($p = .02$) compared to Duluth participants. Data from victims indicated that victims of ACT participants reported significantly fewer IPV behaviors than victims of Duluth participants on the Conflict Tactics Scale ($d = .78$), the Controlling Behaviors Scale ($d = .66$) and the Stalking Behavior Checklist ($d = .71$) at 1 year posttreatment. ***Conclusions:*** An ACT-based group intervention delivered in community corrections reduced violent and nonviolent criminal charges compared to the Duluth classes. Domestic violence charges did not differ between groups but victim reports indicated that ACT participants engaged in fewer IPV behaviors.

What is the public health significance of this article?
This study suggests that Acceptance and Commitment Therapy (ACT) is an effective treatment for domestic violence among men court-ordered to complete a batterers intervention program.

Keywords: domestic violence, ACT, Duluth, corrections, principles of effective intervention

Domestic violence against women is a major public health concern in the United States and worldwide, and has been identified as a significant human rights issue (Joachim, 2000). Domestic violence, also called intimate partner violence (IPV) or partner abuse, has been defined as "physical violence, sexual violence, stalking and psychological aggression (including coercive tactics) by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner)" (Breiding et al., 2015, p. 11). Data from the 2011 National Intimate Partner and Sexual Violence Survey indicate that over 10 million women in the U.S. experience IPV each year by a current or former partner, and more than one in five women have experienced severe IPV in their lifetime. IPV has negative consequences for victims, relationships, and children who witness IPV, including acute and chronic mental and physical health problems, as well as health risk behaviors such as smoking, substance use, and decreased preventative care use (e.g., Black, 2011; Coker et al., 2002). Given the high prevalence of IPV and the consequences and costs of IPV, it is critical to address this problem.

Theoretical Framework of Batterers Intervention Programs

Because incarceration is costly and contributes to an already overcrowded and overburdened justice system, since the late 1970s most states have mandated participation in batterer intervention programs (BIPs) for men who have been charged with assault against an intimate partner. Providing an alternative to incarceration,

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thousands of BIPs have been implemented in criminal justice agencies across the United States to improve victim safety and prevent the reoccurrence of violence. Many current BIPs are based on feminist theory and the Duluth Model, wherein the primary origin of male-to-female violence is conceptualized to be patriarchal ideology and societal sanctioning of men's power and control over women (Pence et al., 2011). This view posits that men who batter are immersed in a culture that supports relationships of dominance, which leads to the belief that they have a legitimate right to dominate women.

The Duluth Model was developed by the Domestic Abuse Intervention Project (DAIP) of Duluth, Minnesota and includes BIPs for the men convicted of domestic abuse (called "men's nonviolence classes"), as well as a larger coordinated community response system that includes arrests for domestic violence, sanctions against noncompliance to court orders, support and safety planning for victims, and referral to other agencies with collaborative approaches (e.g., family court, child protection services, alcohol and drug treatment, mental health treatment). A Duluth Model men's nonviolence program operates on the belief that "men who batter their female partners are acting out of a context of entitlement that has its roots in a history of male individual, group, and institutional control over women" (Pence et al., 2011, p. 32). In the men's nonviolence classes, psychoeducational, and engagement techniques are used to change beliefs and promote accountability. The activities include dialog, vignettes, and role-playing, as well as utilization of the power and control wheel and control logs to identify abusive and controlling behaviors.

Other BIPs for justice-involved court-mandated men have emerged based on cognitive behavioral therapy (CBT), which focuses on establishing a therapeutic relationship, cognitive restructuring, modification of core beliefs and schemas, emotion management, behavioral skills training, and the prevention of relapse and recurrence. CBT-based programs adopt the perspective that IPV is caused by cognitive distortions about self and partner and a lack of skills to appropriately manage emotions and communicate in a healthy and respectful way. These CBT programs have continued to develop over the last several decades and have been implemented widely (e.g., Murphy & Eckhardt, 2005; Wexler, 2006). It is important to note that many BIPs adhering to the traditional feminist approach, such as the Duluth model, often label themselves as "CBT" in their orientation as well, and many programs utilize a combination of both approaches.

Effectiveness of Batterers Intervention Programs

Most published studies have found that BIPs result in limited reductions in recidivism. A meta-analysis conducted by Babcock et al. (2004) demonstrated that, on average, a man who has been arrested, sanctioned, and completed an intervention program (Duluth, CBT, or a combination of both) is just 5% less likely to perpetrate physical aggression toward a female partner than a man who has only been arrested and sanctioned. This included both official police reports as well as partner reports, with follow-up length averaging 6 months to 1 year posttreatment. In another meta-analysis of court-mandated BIPs, the mean effect for official reports of domestic violence from experimental studies showed modest benefit, whereas the mean effect for victim reported outcomes was zero (Feder & Wilson, 2005). Similarly, a Department of Justice report concluded that, based on available research, BIPs are unlikely to protect most victims, and that the small effects of BIPs do not differ based on the type of program (Klein, 2009).

In the most recent systematic review of court-mandated BIPs, Wilson et al., (2021) noted that the overall effect for repeat offending across both randomized and quasirandomized studies was not statistically significant. The authors concluded that there is insufficient evidence to determine that any BIP is effective at reducing reassault, and the authors called for experiments of new BIP approaches. The most optimistic conclusion is that BIPs have a modest impact on reducing repeat domestic violence. Moreover, the effect sizes of BIPs are much smaller than the effect sizes of other behavior change programs such as substance abuse treatments (e.g., Dutra et al., 2008) and offender rehabilitative programs (e.g., Landenberger & Lipsey, 2005). Nevertheless, BIPs remain one of the few viable alternatives to incarceration for individuals convicted of domestic violence. It is clear that more needs to be done to identify practices that produce stronger treatment effects.

Principles of Effective Intervention

Researchers have called for experimental studies to examine the potential impact of new BIP approaches, including those that emphasize evidence-based practices (Babcock et al., 2016; Cannon et al., 2016). There is now a well-established body of research known as the "what works" literature, which indicates that correctional programs adhering to principles of effective intervention (PEI; Bonta & Andrews, 2017) are the most effective at reducing recidivism. Although BIPs are often implemented in correctional or criminal justice agencies, these programs are not as rigorously implemented as general correctional programs and could incorporate the "what works" literature as one way to improve their results (Day et al., 2009). One such approach has been to incorporate risk-needs-responsivity principles (RNR; Andrews & Bonta, 2010). The RNR model is a theoretical framework for understanding how to best intervene with justice-involved individuals and is the prominent approach for guiding practical decision-making regarding correctional practices and programs.

According to the RNR model, the *risk* principle states that the intensity of treatment should be matched to the client's risk level, with high-risk clients receiving the most intensive services. The *need* principle states that effective programs should target criminogenic needs or needs that are crime producing, such as the client's psychological, social, and emotional functioning linked to the development and continuation of criminal behavior (e.g., antisocial attitudes, antisocial peers, substance abuse, unemployment). The *responsivity* principle refers to how service providers can maximize the client's ability to learn from the rehabilitative intervention and states that effective programs should be (a) cognitive behavioral in nature (i.e., general responsivity), and (b) tailored to the learning style, cognitive ability, motivation, personality, and cultural background of the client (i.e., specific responsivity). Studies of the criminogenic needs of men convicted of IPV have supported the use of PEI, such that these men have greater overall criminogenic needs than general justice-involved men (e.g., Hilton & Radatz, 2018). Similarly, scholars and practitioners transitioning programs to a PEI framework have reported favorable preliminary results (e.g., Stewart et al., 2014).

A New Approach

Throughout the last decade, a credible evidence base has been established for the application of acceptance and mindfulness treatments across a broad range of populations. One such treatment, Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), is a cognitive behavioral approach that focuses on promoting behavior change consistent with personal values. Based on a contextual theory of language and cognition known as relational frame theory (RFT; Barnes–Holmes et al., 2001), ACT makes use of a number of strategies such as acceptance, mindfulness, and value-directed behavioral change strategies in order to increase psychological flexibility. Psychological flexibility is the ability to choose prosocial and value-based behavior, even if psychological barriers (e.g., anger, shame, maladaptive beliefs, etc.) are present. A lack of psychological flexibility is linked to avoidance of emotional experiences and impulsivity, and aggressive behavior in particular (e.g., Bell & Higgins, 2015; Grom et al., 2021; Reddy et al., 2011; Shorey et al., 2014). Thus, an ACT model of IPV posits that the primary mechanism by which the treatment decreases aggression is by increasing psychological flexibility. Preliminary evidence indicates an ACT approach is effective in reducing aggressive behavior in a community sample (Zarling et al., 2015) and in criminal justice samples (Zarling et al., 2019, 2020).

Based on the evidence reviewed above, an ACT-based BIP for individuals convicted of domestic violence was developed via a partnership between researchers, clinicians, and criminal justice practitioners (for details of this partnership, see Zarling & Scheffert, 2021) at the Iowa Department of Corrections (DOC). It is based heavily on ACT principles with a specific focus on feasibility and transferability to the correctional setting. For example, it can be facilitated by correctional staff and utilized with open (i.e., rolling admissions) groups. In contrast to the Duluth Model and traditional CBT-based BIPs, the target of the ACT-based intervention is building psychological flexibility. Moreover, the ACT program integrates PEI and RNR principles; thus, psychological flexibility is fostered within the context of addressing antisocial patterns, criminal thinking, unhelpful peer relationships, substance abuse, poor family relationships, and lack of meaningful work/school/leisure activities (Bonta & Andrews, 2017).

ACT increases psychological flexibility by focusing on skills such as present moment awareness, acceptance of difficult emotions or thoughts, decrease in believability of (or attachment to) thoughts, perspective-taking, identification of values, and committed action in service of values. In contrast to techniques focusing on psychoeducation and directly changing the content of one's beliefs, ACT focuses instead on experiential learning and changing one's *relationship* with one's beliefs, thoughts, and emotions. Whereas traditional programs might focus on teaching men to change the thoughts they have about their female partners, ACT focuses on teaching men how to choose behavior that is values-consistent, even in the presence of those thoughts. For example, instead of examining how one's thoughts about women originated or replacing the thought "She shouldn't treat me this way" with a more positive or egalitarian thought, ACT encourages behaving with respect toward one's partner even when having that thought. The ACT model does not teach or require that the content of participants' thoughts *have* to change in order for behavior to change, only the way that they *respond* to their thoughts. There is little focus on examining the origins of the content of one's beliefs, as this tends to cause more entanglement with one's thoughts and increase their salience.

Importantly, ACT places participants' personal values front and center, and values are used as the motivator for behavior change. Almost all BIP participants report prosocial values, the most common being their children and their family. Therefore, the ACT curriculum includes discussions, exercises, and skills building to encourage connection with those values and to identify specific behaviors in service of those values (e.g., respectful and loving actions). The facilitators encourage participants to share examples of situations that occur in their relationships, and then to evaluate their behavior in that situation; for example, to ask himself, "Was my behavior in service of control, or was it in service of my values?" ACT then involves specific skills practice to help make that valued behavior possible. For more information about the implementation of ACT in correctional settings, see (Zarling & Scheffert, 2021).

The Present Study

Based on the current state of ACT implementation and evidence, and drawing upon criteria set by treatment development experts (e.g., Carroll & Nuro, 2002; Everitt & Wessely, 2004), the ACT intervention is now at the stage that requires a randomized controlled trial for this population. The purpose of the proposed study is to fill a critical gap in knowledge by determining the efficacy of two different BIPs—ACT and Duluth—in a randomized controlled trial (RCT). The use of RCT allows a direct comparison of the ACT and Duluth interventions, and their ability to reduce IPV and domestic violence recidivism. Specifically, the present study will investigate three central questions:

1. Do the Duluth and ACT interventions differentially impact IPV behaviors in the 1 year follow-up period, as indicated by reports from victims?
2. Do the Duluth and ACT interventions differentially impact domestic violence charges in the 1 year follow-up period, as indicated by criminal justice data?
3. Do the Duluth and ACT interventions differentially impact the number of other criminal charges accrued in the 1 year follow-up period, as indicated by criminal justice data?

Based on the preliminary findings of nonexperimental studies of ACT and Duluth (Zarling et al., 2019), and because ACT includes PEI, we hypothesized that ACT would yield lower rates of recidivism, in addition to fewer victim-reported IPV behaviors, at 1 year follow-up.

Method

Participants and Procedure

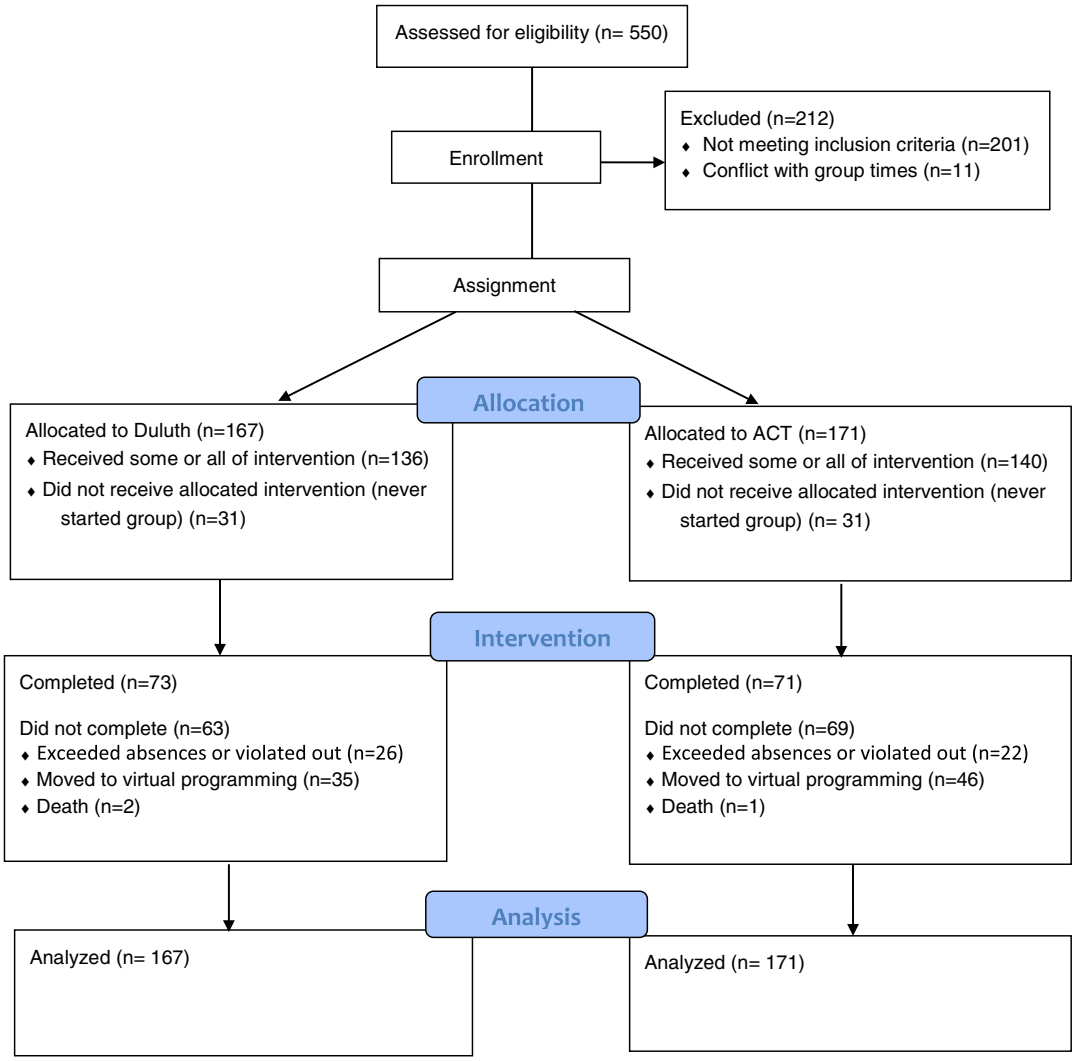
This study's design was preregistered; see a copy of the preregistration in the supplemental material. The study was approved by the Iowa State University Institutional Review Board. Deviations from the original study protocol occurred due to the coronavirus disease (COVID-19) pandemic. Recruitment ended abruptly and earlier than planned due to commencement of lockdowns; all in-person programming (both ACT and Duluth) ceased on March 13, 2020.

Study participants who were enrolled in programming at that time had a pause in programming until virtual delivery could be implemented, which was approximately 4 months later. Therefore, the present study only includes men who were randomized prior to March 2020, which did include 81 men who were moved to virtual programming. Figure 1 depicts participant flow through the study. Data from this study have not been published elsewhere.

The initial pool of possible study participants included adult men court-mandated to complete BIP in Iowa's 5th Judicial District Department of Correctional Services from mid-2018 to early 2020. After sentencing by a judge, the potential participants met with a staff member in correctional services for an intake appointment. During this meeting, the individual was interviewed and assessed for severe mental illness, learning disabilities, language barriers, or any other factor that would make them unsuitable for a group intervention (if so, they were referred to outside providers to complete the court-order for BIP). It was at this time that potential participants were also assessed on risk level and the intensity level of their supervision was determined.

As depicted in Figure 1, there were 550 men who were deemed appropriate for BIP group and thus assessed for study eligibility, which included no prior domestic assault convictions, their current domestic assault was against an intimate partner, they had no prior participation in ACT or Duluth programming, and they were on probation. Men who had a previous conviction for domestic assault were excluded for a few reasons. First, this ensured a homogenous sample of individuals who are "first time offenders" and had not previously participated in a BIP. Second, men who have a second or third conviction of domestic assault at this location are court-mandated to participate in a more intensive intervention (36 sessions instead of 24), and the present study only involved the 24 session program. Third, excluding these men, who are higher risk, also

Figure 1
CONSORT Diagram



Note. CONSORT = Consolidated Standards of Reporting Trials; ACT = Acceptance and Commitment Therapy. See the online article for the color version of this figure.

ensured following the risk principle as closely as possible (i.e., not mixing low- and high-risk individuals in the same group program).

A total of 212 men were excluded, leaving a final sample of 338 men that were eligible to be randomized. Constrained randomization with permuted blocks of 12 was used to achieve ongoing balance in numbers between the two treatment conditions. Randomization and assignment to condition was done by a DOC staff secretarial member who was trained by the first author and had no involvement in ACT or Duluth groups. To implement randomization, 12 small envelopes were enclosed within one large envelope, with each small envelope containing a card with the one of the numbers from 1 to 12. When an individual was ready to be randomized, a member of DOC administrative staff picked one of the 12 small envelopes. Then the staff member opened the envelope and found the corresponding number on the master randomization list, which included 6 ACT numbers and 6 Duluth numbers. This small envelope was then discarded. After the first 12 were randomized, the same procedure was started over with 12 new envelopes, and so on.

All study participants were enrolled in ACT or Duluth for the first time and were on probation. All participants engaged in probation and case management activities as usual alongside their participation in ACT or Duluth. Table 1 provides information on the sample. Participants ranged in age from 18 to 66, with a mean age of 33.84 years. The majority of the men identified as White non-Hispanic (61.8%), and 29% identified as Black, 5% as Hispanic, and 3.8% as Asian. On average, participants were assessed to be moderate to high risk for recidivism and a level 3 or "high normal" level of supervision (this equates to one meeting with their probation officer per month). ACT and Duluth participants did not differ on any of these characteristics.

Treatment Conditions

The BIP requirement at this location for individuals convicted of their first domestic violence offense is 24 sessions. Sessions for both ACT and Duluth were held once per week for 90 min. All group sessions were held in the same building and were led by one male and one female facilitator. There were four ACT groups and four Duluth groups running in parallel (i.e., each ACT group ran at the same day and time as a Duluth group) in order to eliminate any confound with day of the week or time of day. These eight groups had ongoing enrollment (i.e., when a participant completed or dropped out, a new person was added) with 10–15 members in each group at a time. The ongoing enrollment allowed the participants to join at any session, which meant not all participants received the intervention sessions in the same sequence.

Both programs were delivered by facilitators qualified in each of the treatment modalities who had experience working with correctional populations; four ACT facilitators and four Duluth facilitators. ACT groups were led by facilitators trained in ACT who completed the DOC's requirements (i.e., attendance at a 3-day workshop followed by coaching/supervision during the first 24 sessions). Duluth groups were led by facilitators who successfully completed DAIP's training requirements, which included attending the 3-day "Creating a Process of Change for Men Who Batter—Comprehensive Training" in spring 2018 in order to get the most recent version of the curriculum and training. Each facilitator only led groups in their respective condition, and had not been trained in the other program. Duluth facilitators tended to be older with more work experience in corrections (average years of experience = 20 years, range 5–35 years) compared to ACT facilitators (average years of experience = 8 years, range 2–15). Otherwise, demographics and education levels were similar (i.e., bachelor's degree).

The general approach to domestic violence in the community in which this study took place is consistent with the coordinated community response components from the Duluth Model approach, including consequences for further acts of violence, increased sanctions for repeat offenses, and collaboration with law enforcement, the courts, and victim services. Moreover, victim safety and confidentiality is the first priority and taken very seriously, and every effort is made to keep victims informed of participant's program status, including if he is no longer attending BIP. Acts of violence or intoxication are grounds for removal from BIP and are reported to participant's probation officer. Rules and policies were the same for men in both treatment conditions; the only difference was the curriculum used. Thus, the present study is a comparison of the BIP class component only, and not an evaluation of the Duluth Model approach as a whole.

Table 1
Demographics and Descriptive Statistics of Main Variables

Variable	Total sample (N = 338) %/*M* (*SD*)	ACT (N = 171)	Duluth (N = 167)	t or χ^2
Age (range: 18–66)	33.83 (10.76)	34.69 (11.14)	32.96 (10.31)	$t(336) = 1.48$
Race/Ethnicity				
White non-Hispanic	61.8	63.2	60.5	$\chi^2(3) = 3.25$
Black	29.0	30.4	27.5	
White Hispanic	5.3	3.5	7.2	
Asian	3.8	3.0	4.8	
IRR risk score (range: −1 to 16)	6.35 (3.36)	6.34 (3.37)	6.36 (3.35)	$t(334) = -.04$
1 Year recidivism				
DV charges	10.7	9.3	12	$\chi^2(1) = .61$
Violent charges	11.2	7.6	15	$\chi^2(1) = 4.60^*$
Nonviolent charges	24.3	18.7	30	$\chi^2(1) = 5.80^*$
Number of charges (range: 0–27)	1.19 (3.16)	.94 (2.79)	1.50 (3.49)	$\chi^2(1) = 8.61^{**}$

Note. ACT = Acceptance and Commitment Therapy; IRR = Iowa Risk Revised; DV = domestic violence.
$^* p < .05$. $^{**} p < .01$.

Acceptance and Commitment Therapy (ACT)

ACT focuses on a strong and empowering working alliance with participants and building a collaborative and trustworthy environment, with the facilitators ideally responding to the participants from an accepting, defused, and value-directed stance. The curriculum is based primarily on experiential learning, with an emphasis on being in the present moment, avoiding struggle, and viewing resistance as part of the process. Session content often begins with values identification and the Matrix, which is used throughout all sessions. The Matrix is an interactive exercise based on RFT and functional contextualism to help participants get better at noticing and sorting all aspects of their experience; the goal is to identify and discriminate their experiences as sensory experiences or mental experiences, and their behavior as either in service of their values (toward moves) or in service of avoiding unwanted mental experiences (away moves; see Polk et al., 2016 for more information about the Matrix). The Matrix is an engaging and collaborative process-based tool used in all sessions to practice ACT concepts simply and keep the focus to the ACT skills instead of common distractions (e.g., arguing, lecturing, excessive problem-solving).

Skill building components of the curriculum focus on awareness of internal experiences; learning new ways to respond to emotions; identifying and stepping back from problematic thoughts; awareness of behaviors in service of values versus behaviors in service of control/avoidance; and identifying steps for behavior change. Sessions focused on relationship skills include role plays and practicing respectful and healthy relationship behaviors, such as speaking and listening effectively. The remaining sessions include applying ACT skills to content relevant to this population, such as masculinity (e.g., defusing from rigid beliefs about what it means to be a man), fatherhood (e.g., identifying the kind of parent one wants to be), and trauma history (e.g., awareness and acceptance of adverse experiences and how they impact life now). Finally, substance use/abuse is a topic covered specifically in 2 sessions, but the influence of substances and how they impact behaviors and values are discussed in every session.

The Duluth Model's Men's Nonviolence Classes (Duluth)

DAIP's nonviolence group program "Creating a Process of Change for Men Who Batter" was used (Pence et al., 2011). The curriculum is instructive and aims to challenge the men's belief that they are entitled to authority over women, as well as the denial or minimization associated with abusive behavior. Psychoeducational strategies, dialog, and critical self-reflection are employed to identify, investigate, challenge, and change participant beliefs about women. The process of dialog, based on Paulo Freire's educational methodology, is central to facilitating classes. The process is to ask problem-posing questions in a way that draws out the collective experience and critical thinking of the people in the room about an aspect of men's violence against women. The facilitators aim to create an atmosphere that is open and respectful of the men, their experience, and their thinking, but also challenging.

Four primary teaching tools are used including the Power and Control Wheel to describe battering behaviors, the Control Log to identify the belief systems that support those behaviors, the Equality Wheel to describe the changes needed for men who batter, and the Equality Log to further investigate the themes from the Equality Wheel. Utilizing these tools, in addition to videos, vignettes, and role plays, ten key themes are addressed: nonviolence, nonthreatening behavior, respect, trust and support, honesty and accountability, responsible parenting, shared responsibility, economic partnership, sexual respect, and negotiation and fairness. The focus is on changing beliefs, rather than teaching skills, as skills cannot be used until underlying beliefs are changed.

Victim Participants and Procedure

When contacting victims, a trauma-informed approach was used and their safety and confidentiality was prioritized first and foremost. Male participants did not have knowledge of any victim participation (unless she chose to share with him), no identifying information was attached to the victims' data, and we honored any victim request not to be contacted. Of the 338 participants who were randomized, 260 of their female victims' contact information was available. A victim liaison who works for the DOC contacted these victims on three separate occasions: When the study participant (i.e., the victim's partner or ex-partner) attended his first BIP session (pretreatment), after his program end date (posttreatment; when he successfully completed BIP or when he dropped out), and 1 year after his end date (follow-up). At these times, the liaison checked in with the victim and provided referrals and resources as needed. At the first contact (when the study participant began BIP), the victim was asked if she would be willing to participate in a survey about his behaviors. If so, she was emailed a link to a Qualtrics survey which was linked to the study participant's ID number. At the 1-year follow-up date, if the victim indicated that she had any contact with the study participant within the last year, she was asked if she would be willing to participate in the survey again. If the victim reported that she had no contact with the study participant within the past year, she was not sent the survey. The victims were paid $25 in the form of an e-gift card.

Attempts were made to contact all 260 victims. At initial contact, 183 victims were able to be reached, 60 had phone numbers that were disconnected or incorrect, 10 were incarcerated and unable to be contacted, five had the same number as the study participant so were not contacted, and two were deceased. Of the 183 reached, 98 agreed to participate and completed the first survey. At the 1-year follow-up, 136 victims were able to be contacted. Of those 136, 47 declined to participate in the survey, 32 reported that they had no contact with the study participant for a year (or more) so they were not sent the survey, and 57 completed the survey. Of those 57 women, 28 were victims of Duluth participants and 29 were victims of ACT participants.

Demographic characteristics were obtained from the 98 victims who participated in the pretreatment survey. Their average age was 31.97 (ranged from 18 to 64) and most had a high school diploma or more (93%). Victims identified their race as White (78.4%), Black (16.8%), Hispanic (5%), and Asian (1%). At pretreatment, victims were asked to indicate which best described their relationship with the male participant: 38% were married, 21.5% indicated no relationship, 20% indicated coparenting, 16.5% were dating, and 4% were divorced from the participant. About two-thirds (65.8%) of the women reported that they have children with the participant, with an average of 1.88 shared children. At pretreatment, 30% had a

no contact order in place. None of these variables were significantly different between groups.

At 1-year follow-up, the age, education, and race of the 57 who completed the survey were similar to those at the pretreatment survey but relationship status shifted for respondents. Thirty-four percent of the victims reported that coparenting best described their relationship with the participant, 31% were dating the participant, 21.2% were married to the participant, 11.5% indicated no relationship with the participant, and 2% were divorced from the participant. About 70% of the women reported that they have children with the participant. Only 10% still had a no contact order in place at the 1 year follow-up. However, women who indicated that they had no contact at all with the participant during the 1 year follow-up time period were not sent a survey to complete (and this could have been because of a no-contact order), so overall fewer of the victims were in a relationship with the male participant at the follow-up. Again, none of these variables were significantly different between groups.

Data Collection

Victim Reports

Conflict Tactics Scale-2 (Straus et al., 1996). The Conflict Tactics Scale-2 (CTS-2) is a measure of the frequency of physical aggression (12 items), verbal aggression (8 items), sexual aggression (7 items), and injury (6 items). A total score was also calculated as the sum of all 33 items. Victims rated how often their partner engaged in these IPV behaviors a 7-point scale from 0 (*never*) to 6 (*20 times or more*) in the previous year. Composite scores were calculated by adding the midpoints for each response category across tactics (e.g., the midpoint 4 for 3–5 times), as recommended by Straus et al. (1996). Good internal consistency and discriminant validity have been found for all the subscales (Straus et al., 1996). Alpha for the present study for the total scale was .94 at pretreatment and .96 at follow-up.

Controlling Behaviors Scale (Graham–Kevan & Archer, 2003). The Controlling Behaviors Scale (CBS) is a 24-item measure that was developed specifically to assess controlling behaviors targeted in the DIAP's Duluth Model intervention, including economic abuse, coercion and threats, intimidation, and isolation tactics. Items included "He threatened to leave you or commit suicide," "He limited your activities outside of the relationship," and "He felt suspicious and/or jealous of you." Victims indicated the occurrence and frequency of these controlling acts on a 5-point scale ranging from 0 (*never*) to 4 (*always*) in the past year. Alpha was .97 for victim reports in previous studies (Graham–Kevan & Archer, 2003). Alpha for the present study was .95 at pretreatment and .94 at follow-up.

The Stalking Behavior Checklist (Coleman, 1997). The Stalking Behavior Checklist (SBC) assesses a variety of unwanted harassing and pursuit-oriented behaviors. The 10-item Harassing Behavior subscale was used in the present study, which includes items reflecting nonviolent acts such as unwanted calls, texts, or visits, as well as items about intrusive behavior such as hacking into personal emails or texts belonging to the victim, being followed, etc. Each item is rated on a 5-point frequency scale, ranging from 0 (*never*) to 4 (*once a day or more*) in the past year. Coefficient Alpha for the Harassing subscale was .90 in previous studies (e.g., Mechanic et al., 2008). Alpha for the present study was .90 at pretreatment and .86 at follow-up.

Administrative Data

The Iowa Corrections Offender Network (ICON) provides seamless tracking of correctional clients between community placements and prisons within Iowa.

ICON also collects information for all steps in the case planning process: identification of risk and needs; intervention and programmatic information; and reentry case planning. All data on BIP participants are entered as part of normal operations. Data for this study included participants' age, race, risk-assessment score (see below for more information), program participation record (start and end date), number of sessions attended, and completion status. Criminal charges incurred during the 1 year follow-up period were obtained from the DOC's research director (who was not aware of participants' treatment assignments) and included the date of charges and the charge type (e.g., domestic assault, assault, child abuse/neglect, operating while intoxicated, robbery, drug, etc.). The scope of criminal charges obtained was only for state-level offenses.

Recidivism was defined as any new charges incurred during the 365 days following each participant's program end date. Each participant's end date was determined based on if they successfully completed (date of completion), did not complete (date of dropout), or if they were enrolled when in-person programming ended due to COVID-19 (date of last session attended). Despite different end dates, all participants had a 365-day time frame during which any charges they incurred were collected. The use of charges instead of convictions represents a "wider net" estimate of recidivism, as the client may not have been convicted of these charges or may have eventually pled guilty to a lesser charge. Recidivism was coded as 0 = no recidivism; 1 = recidivated for each category: Domestic assault charges, other violent charges (e.g., assault, robbery, child abuse/neglect, harassment), and nonviolent charges (e.g., possession of illegal substance, operating while intoxicated, public intoxication). Total number of charges was also obtained. Of note, technical violations or revocations were not included as a measure of recidivism. Successful completion was defined as attendance at 24 sessions. Completion status was coded 0 = noncompletion and 1 = completion.

The Iowa Risk Assessment Revised (Prell, 2016) is a validated static risk assessment tool utilized by the DOC and assesses the potential for future violence among probation and parolees, and also serves as a screener for general recidivism. This measure has been validated in internal examinations (e.g., Fineran & Loynachan, 2019). The violence subscale scores were used for the present study, which is intended to predict the likelihood of conviction for any new violent crime within the first thirty months of supervision. The assessment's 13 items include current age, sex, age at first conviction, prior probation/parole supervisions, current and prior offenses, prior probation/parole revocations, gang membership, and community stability factors (including employment status and length of time at current employment, drug and alcohol use, and housing stability), each with different scoring. For example, alcohol or drug use is coded as none (0 points) to frequent abuse (2 points); employment is coded as satisfactory for 1 year or longer (0 points) to unemployed or unemployable (2 points). Total possible scores range from −1 to 17. The higher the score, the higher the client's risk and

the more likely the client is to reoffend. Only total risk scores were obtained for this study (not individual items), so coefficient alpha is not available. The scores on this measure are one source of data used to identify the appropriate level of supervision for the client (levels 1–5), with higher scores indicating more intense levels of supervision (e.g., more frequent meetings with a probation officer). The risk scores obtained for this study represent pretreatment risk.

Treatment Adherence and Facilitator Competence

To assess each program's implementation, 20% of ACT sessions and 20% of Duluth sessions were randomly selected to be rated for adherence and competency. Two research assistants coded these sessions for treatment adherence and facilitator competence. One coding form was created based on the two treatment conditions in this study, which includes five items of Duluth adherence (e.g., engage participants in critical self-reflection, facilitate examination of participants' beliefs about women) and five items of ACT adherence (e.g., facilitate experiential learning of ACT skills, model present moment awareness, acceptance, and defusion). To check treatment integrity, the raters specified to what extent the adherence indicators were evident during the session. An adherence score for each session was calculated by adding up the adherence items that correspond to that particular treatment, and subtracting any evidence of the opposing treatment. Facilitator competency/proficiency was rated on a scale of 1 (*incompetent*) to 5 (*expert*).

Data Diagnostics and Analysis Plan

Analyses were completed using IBM SPSS Statistics Version 26. Analyses were conducted with the full intent-to-treat (ITT) sample that included all 338 men that were randomized to treatment conditions. We used three sets of analyses to examine differences between the ACT and Duluth groups on criminal justice data and victim-reported outcomes. First, we used descriptive statistics to evaluate the percentages and relative odds of dichotomous outcomes (e.g., charges vs. no charges) for each group. Comparisons between groups examining occurrence were done using chi-square tests, as well as binary logistic regressions. Second, we used *t* tests to examine between-group differences in victim reports of physical aggression, psychological aggression, sexual aggression, and injury, as well as controlling behaviors and stalking behaviors. Third, the continuous outcome variables of the number of charges were analyzed using negative binomial regression analysis, due to the low mean values for the 1-year period of observation and the large variation in the scores relative to the means.

The sample size in the present study was smaller than expected due to the study ending prematurely, and therefore power to detect between-group differences was low for some of the criminal justice outcomes (.20 for domestic violence charges, .69 for other violent charges, and .80 for nonviolent charges). Power for the victim-reported outcomes was higher (.55–.90). We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the study. Data and study materials are not available at this time, as the evaluation of virtual programming is still ongoing.

Results

Treatment Attrition and Missing Data

Overall, completion rates did not differ between ACT and Duluth, $\chi^2(1) = 1.39$, $p = .24$, with 43.7% of men randomized to Duluth completing the full 24 sessions and 41.5% of men randomized to ACT completing the full 24 sessions. These completion rates are lower than would be expected because participants who had to discontinue in-person programming due to the COVID-19 pandemic were counted as noncompleters. Overall, for noncompleters, the number of sessions attended ranged from 0 to 22 with a mean of 4.79 ($SD = 6.47$). For ACT noncompleters, it was 4.95 ($SD = 6.79$) and for Duluth noncompleters, it was 4.64 ($SD = 6.22$) and this difference was nonsignificant.

When considering only pre-COVID-19 attrition, 56% of participants completed, with 57% completing ACT and 55% completing Duluth. This difference was not statistically significant. The number of sessions attended is a bit lower, with a range from 0 to 22 and a mean of 3.19 ($SD = 5.19$). For ACT noncompleters, it was 3.33 ($SD = 5.62$) and for Duluth noncompleters, it was 3.07 ($SD = 4.83$) and this difference was also nonsignificant. These numbers more accurately represent the attrition that occurred prior to the interruption due to the pandemic.

Criminal justice data were collected on all 338 participants who were randomized, and there were no missing data on those variables. For the victim reports at 1-year follow-up, less than 1% of the data were missing. One victim's data were an extreme outlier (e.g., total score on the CTS was 519), so her data were removed from analysis. This was a victim of a Duluth participant, so the final numbers were 29 victims from ACT participants and 27 victims from Duluth participants.

Treatment Adherence and Competence

The checklists for both groups showed good internal consistency (coefficient alphas: ACT = .82, Duluth = .84). The average rating on the ACT adherence scale for ACT facilitators was 3.97 and the average rating on the Duluth scale for Duluth facilitators was 4.13. There was little evidence of the opposing treatment showing up in session (an average of only .20 Duluth items were present in ACT sessions and an average of .23 ACT items in Duluth sessions). Finally, facilitator proficiency scores were acceptable, with ACT facilitators scoring an average of 3.20 on proficiency scales and Duluth facilitators scoring 3.51. Overall, this pattern of results shows that the ACT and Duluth conditions were distinct and implemented in accord with their respective treatment protocols.

Criminal Justice Outcomes

As shown in Table 1, during the 1 year following up the intervention, there was not a significant difference between ACT and Duluth in terms of number of participants who acquired a domestic violence charge, $\chi^2(1, N = 338) = .61$, $p = .43$. Significantly fewer ACT participants acquired other violent charges, $\chi^2(1, N = 338) = 4.60$, $p = .03$, and the odds of being charged with a violent crime were higher ($OR = 2.14$, $p = .04$) for Duluth participants. There were also differences in incidence of nonviolent charges, with 18.7% of men in ACT versus 30% of men in Duluth being charged with nonviolent offenses, $\chi^2(1, N = 338) = 5.80$,

p = .01. The odds of Duluth participants being charged with a nonviolent offense were higher than men in the ACT group (OR = 1.86, p = .017). Finally, the results of the negative binomial regression analysis indicated ACT and Duluth participants differed significantly on the average number of charges in the 12 month follow-up period, Wald $\chi^2(1) = 8.61$, p = .003. See Table 2 for regression results.

Victim Reported Outcomes

Pretreatment scores on the CTS, CBS, and the SBC did not differ between victims of ACT participants (N = 55) and victims of Duluth participants (N = 43). Pretreatment scores were not significantly correlated with 1-year follow-up scores. See Table 3 for the differences between groups on each of the measures at 1-year follow-up. Victims of ACT participants reported significantly lower scores on the CTS (total scale), CTS physical aggression scale, CBS, and SBS than victims of Duluth participants. Scores on the CTS verbal aggression scale, CTS sexual aggression scale, and CTS injury scale did not significantly differ between groups. The percentage of victims reporting the male participant engaging in *any* behavior on each of the subscales is also reported in Table 3.

Discussion

This study is the first randomized controlled trial of an ACT program for individuals convicted of domestic violence, and one of very few comparisons of two active treatments for this population. This is also the first randomized controlled trial of ACT examining criminal behavior as an outcome. The study was of high methodological quality and included baseline comparability of groups and the use of intent-to-treat analyses. The use of victim reports in addition to criminal justice outcomes is an improvement on the preliminary research examining ACT for domestic violence (Zarling et al., 2019). Contrary to hypotheses, men assigned to ACT did not evidence lower rates of domestic violence recidivism at 1-year follow-up compared to men in Duluth. However, significantly fewer men who participated in ACT incurred other violent charges and nonviolent charges compared to men who participated in Duluth. This indicates that although there were not significant differences in domestic violence charges between ACT and Duluth participants, significantly fewer ACT participants engaged in other criminal behaviors such as assault, robbery, and drug-related offenses during the 1-year posttreatment. These results are consistent with previous studies of the impact of ACT on other violent and nonviolent charges, and add to the growing literature on the potential benefits of RNR-informed programs for individuals convicted of domestic violence.

Table 2
Summary of Regression Analysis for Treatment Group Predicting-Types of Recidivism at 1-Year Posttreatment

Predictor	*B*	*SE B*	e^B	*p*
DV charges	.276	.355	1.32	.436
Violent charges	.761*	.361	2.14	.035
Nonviolent charges	.619*	.259	1.86	.017

Note. SE = standard error; DV = domestic violence. Logistic regression with a binary treatment variable. (1 = ACT and 2 = Duluth) predicting a binary outcome (0 = no charges and 1 = one or more charges within 1 year after treatment).
* $p < .05$.

Data from the female victims of the male participants revealed that the victims of ACT participants reported significantly fewer IPV behaviors at the 1-year follow-up compared to victims of Duluth participants. According to victim reports, the number of aggressive, controlling, and stalking behaviors were considerably lower among those in the ACT group compared to those in the Duluth group (between-group d = 0.78, 0.66, and 0.71 for aggression, controlling behaviors, and stalking, respectively). The difference also shows up in overall rate of victims who report *any* of those behaviors occurring, with significantly fewer victims of ACT participants reporting that any physical assault had occurred in the last year. Thus, the results of the study indicate that ACT can have a positive impact on reducing the incidence and frequency of IPV behaviors.

The differences between the ACT and Duluth conditions are not due to confounding by baseline severity (i.e., risk level) or delivery of treatment. Individuals assigned to ACT or Duluth did not differ on baseline demographic or other variables, and they did not differ in their rate of attrition. Also, the two treatments were delivered with fidelity and competency, as judged by independent raters. These results indicate randomization and treatment implementation was successful; thus, allowing for reliable conclusions on the predictor effect of group assignment on the outcomes studied here. More specifically, we can be reasonably confident that the content of the ACT program accounted for the lower rates of recidivism and victim-reported IPV for participants in that treatment condition.

ACT focuses on building participants' psychological flexibility via experiential learning. This is done by guiding participants to identify their personal and freely chosen values, becoming aware of emotions, thoughts, or other experiences that contribute to behavior not in service of their values, and then various skills to help participants make different choices in service of their values (e.g., acceptance and defusion). In contrast, the Duluth curriculum is primarily focused on identifying power and control motives, and teaching men how to change beliefs related to women and violence. The ACT curriculum does address possible power and control motives via discussions about healthy relationships and toxic masculinity. For example, participants are encouraged to identify behaviors that are not workable for healthy relationships and are asked how rigid beliefs and attempts to control can show up in their behavior. But the ACT program's primary strategy to address this issue is to have participants notice if this is consistent with their values, and to develop skills to engage in values-consistent behavior in the presence of these thoughts (i.e., psychological flexibility). In Duluth classes, the strategy is to change those thoughts, and the focus is relatively specific to thoughts related to power and control over women (i.e., cognitive modification).

Clinical Implications

According to the PEI, correctional programs should adhere to the RNR model. Both the ACT and Duluth programs in this study followed the risk principle, but the ACT program was designed to more comprehensively target criminogenic needs and responsivity factors. Some of the most robust criminogenic needs include

Table 3
Victim Reports at 1-Year Follow-up

Variable	Total sample ($N = 56$) M (SD) %	ACT ($N = 29$) M (SD) %	Duluth ($N = 27$) M (SD) %	$t(54)$ or $\chi^2(1)$	p	Cohen's d
CTS total score (range: 0–110)	21.53 (23.17)	13.24 (16.69)	30.44 (26.01)	$t(54) = -2.96$	.004	.78
% Any	80.36	72.41	88.89	2.40	.121	
CTS physical aggression (range: 0–30)	3.86 (6.59)	1.62 (3.50)	6.25 (8.18)	$t(54) = -2.79$	.007	.74
% Any	39.29	24.14	55.56	7.25	.007	
CTS verbal aggression (range: 0–66)	14.64 (15.49)	10.93 (15.41)	18.63 (14.84)	$t(54) = -1.90$	.063	.51
% Any	76.79	68.97	85.19	2.06	.151	
CTS sexual aggression (range: 0–39)	1.94 (6.38)	.38 (1.05)	3.63 (8.90)	$t(54) = -1.95$	.056	.51
% Any	25.00	17.24	33.33	1.93	.165	
CTS injury (range: 0–16)	1.02 (3.07)	.31 (1.49)	1.78 (4.04)	$t(54) = -1.82$	.073	.48
% Any	16.07	6.90	25.93	3.75	.053	
CBS total score (range: 0–83)	19.03 (18.97)	13.24 (15.47)	25.26 (20.65)	$t(54) = -2.48$	.016	.66
% Any	83.93	75.96	92.59	2.90	.088	
SBS total score (range: 0–27)	4.00 (5.84)	2.07 (3.03)	6.07 (7.33)	$t(54) = -2.71$	.009	.71
% Any	58.93	48.28	70.37	2.82	.093	

Note. ACT = Acceptance and Commitment Therapy; CTS = Conflict Tactics Scale; CBS = Controlling Behaviors Scale; SBS = stalking behavior checklist; % Any = % who endorsed any items on this scale.

antisocial attitudes and values, antisocial peer associations, substance abuse, lack of self-control, and self-management skills. Despite consistent findings that individuals convicted of IPV recidivate at high rates for non-IPV crimes, rarely have BIPs incorporated a focus on criminogenic needs. Thus, it is possible that the participants in ACT had lower rates of non-IPV criminal charges because ACT focuses more generally on one's overall self and behavior through developing psychological flexibility (i.e., values identification, acceptance, defusion, and committed action), and applying psychological flexibility to the aforementioned risk factors. Thus, these skills could generalize to a wider array of criminogenic needs and more effectively address the heterogeneity of men convicted of domestic violence than the Duluth program, which is more specifically focused on power and control in relationships.

Finally, responsivity strategies differed between the two programs. The responsivity principle refers to programming that is cognitive behavioral in nature and tailored to the learning style, cognitive ability, motivation, personality, and cultural background of the client. Although it is often labeled "CBT" in practice, it is debatable whether Duluth nonviolence classes are facilitated in line with therapeutic CBT principles. ACT follow RNR's responsivity recommendation to apply a cognitive–behavioral approach to rehabilitation. However, additional aspects of the responsivity principle (i.e., sensitivity to the personal characteristics of the individual that would render them more receptive to certain kinds of strategies or interventions) may be better addressed in ACT. For example, a unique aspect of ACT is that the participants identify their own values and then are guided to set values-based goals for their life. Additionally, the skills of acceptance and defusion are taught as ways to facilitate values-based action for each particular person, and in group exercises are tailored to be personally relevant to the extent possible. Participants are then encouraged to utilize these skills outside of group in real-life situations. Thus, ACT might produce greater effects because the skills taught are (a) broadly yet personally applicable, and (b) match participants' current contexts and challenges. This is a responsivity strategy consistent with a strengths-based approach, trauma-informed treatment, and motivational interviewing, all of which have shown promise in other studies of BIPs (e.g., Kistenmacher & Weiss, 2008; Lee et al., 2007; Lehmann & Simmons, 2009; Taft et al., 2016). The Duluth programming is more "one size fits all" and less personalized to the particular values and goals of the participant.

In sum, the theories on which the programs are built are fundamentally different. The approach in the Duluth non-violence classes is based on the assumption that thoughts are causal to behavior and that beliefs must change before behavior can change, whereas the ACT approach does not assume that beliefs have the ability to cause behavior above all else, and encourages and guides positive behavior change and choices regardless of one's beliefs. Although addressing sexist beliefs and examining one's attitudes that support dominance over others is a worthy goal, and should be addressed in interventions targeting gender-based violence, it remains an empirical question whether this particular focus in group BIPs is the most effective path to reducing violence toward women. Either way, this does not weaken the case for implementing widespread structural and institutional changes, including within the criminal justice system, that will reduce violence and discrimination toward women and other marginalized populations.

Limitations

Using an RCT design in a naturalistic setting created some tensions between research and practice, which contributed to both the strengths and limitations of the study. The results should be interpreted in light of several weaknesses. First, attrition was high, with over 60% of the ITT sample not completing the full program to which they were assigned. Although not ideal, retention is generally difficult in BIPs (e.g., Olver et al., 2011), and the pandemic also caused in person programming to end prematurely for almost a quarter of the sample. Relatedly, there was a smaller overall sample size than had been planned due to the pandemic, which resulted in the study being underpowered for the domestic violence criminal charge outcome. Thus, future studies with larger samples should attempt to replicate these findings before definitive prescriptive recommendations are made. Still, the fact that the current results closely mirrored prior findings in terms of criminal justice outcomes across ACT and Duluth (Zarling et al., 2019) suggests some degree of replicability and consistency across samples.

A second weakness concerns representativeness of the sample. All participants were men who did not have prior domestic assault convictions; excluding men who had a previous history of domestic assault convictions was done to ensure adherence to the risk principle and uniformity in previous BIP participation. Therefore, the results may not be applicable to "repeat offenders" or those who are very high risk. Third, we did not collect data on any other treatments or programming that participants may have been engaged in, such as substance use treatments or individual therapy, or any effects that may have been due to their specific probation officer. It is possible that outside treatments could have been influential in some participants' behavior change; however, there is no reason to believe that this would have been systematically different between treatment conditions. Fourth, we failed to measure program allegiance of our facilitators, although confounding influences from facilitator allegiance were deemed unlikely given that the facilitators were all invested in the program they were delivering and had never facilitated the other program.

Finally, the data from victims should be interpreted in light of the fact that only 16% of victims completed the 1-year follow-up survey. Victim safety, confidentiality, and their choice not to be contacted were taken very seriously. Also, tracking change in victim reports was complicated by different relationship contexts—whether they stayed with the male participant or not, whether they had contact in the past year or not, and whether they are engaging in coparenting their children. Consistent with prior research (e.g., Kelly & Westmarland, 2015), about half of the victims reported being in a relationship with the male participant at pretreatment but only about one-third at follow-up. Victims reported a significant decrease in abusive behaviors from pretreatment to follow-up across both conditions, but it is important to keep in mind that the relationship contexts changed over the 18–20 months that passed from pretreatment to 1-year follow-up. Thus, even though relationship status of victims did not differ between groups at follow-up, the relationship dynamics at play make the pretreatment and follow-up data not directly comparable, and why our results focused on comparing the victim reports at follow-up. The data reported from the victims of the target DV offense indicate that ACT is promising for reducing abusive behaviors, but we do not have the ability to generalize this to any new female partners of the male participants.

Summary and Future Directions

Over the last two decades, there have been calls for BIPs to focus more on evidence-based practices, incorporate principles of effective interventions (PEI) for correctional programs, and determine how to maximize the impact of these programs (e.g., Babcock et al., 2016; Radatz et al., 2021). The present study adds to the literature on BIPs by studying an ACT-based program utilizing PEI, and by directly comparing this program to another active treatment in real-world conditions. Although the study was not powered to detect outcome differences on domestic violence charges between the two groups, victim reports indicate that participants in ACT engaged in fewer IPV behaviors 1-year posttreatment, and fewer ACT participants were rearrested for non-IPV crimes.

There are many tasks for future research on ACT with this population, including examining the mechanisms of change according to the underlying theory. Research has yet to find definitive evidence in support of any processes responsible for success in domestic violence treatments. For example, analyzing mediators of treatment success will be important in determining whether it is an increase in psychological flexibility that leads to success (ACT's theory of change), versus a decrease in sexist thoughts or reduced acceptability of violence toward women (Duluth's theory of change), or both. This issue will be thoroughly examined in a subsequent article focused on the processes of change that occurred for the participants in this RCT. Furthermore, future evaluations should be conducted across multiple sites and with varied samples to help speaking to the generalizability of ACT in reducing criminal recidivism and decreasing IPV behaviors. For example, evaluations that include higher risk individuals with a history of previous domestic violence, as well as individuals of various gender identities and sexual orientations.

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